

# **SHAFAGRO LIMITED**

**P.O BOX 1381 KIDAMALI IRINGA, TANZANIA**

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**BUSINESS PLAN FOR DAIRY FARMING AGROBUSINESS ENTAILING GROWING OF 1000 DAIRY COWS IN MILK,  
PROCESSING AND SELLING OF FRESH MILK AT ON KIDAMALI FARM IN IRINGA DISTRICT TANZANIA.**

**PREPARED ON SEPTEMBER,2020.**

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## **LIST OF ABBREVIATIONS**

ASDS: Agriculture Sector Development Strategy

IRR: Internal Rate of Return

PVIF: Present Value Interest Factor

CFO: Chief Financial Officer

IT: Information Technology

Prod Manager: Production Manager

Opr Manager: Operations Manager

HR Manager: Human Resources Manager

TMR: Total Mixed Ration

CEO: Chief Executive Officer

CV : Curriculum Vitae

UK: United Kingdom

UAE: United Arab Emirates

ROA: Return on Assets

ROE: Return on Equity

NPM: Net Profit Margin

## **1.0 EXECUTIVE SUMMARY**

### **1.1 Introduction**

The objective of this Business Plan is to explain, analyze and or evaluate different aspects of the proposed business of dairy farming with ultimate goal of processing, and sale of fresh dairy milk by Shafa Agro Ltd. The relevant aspects of the business incorporated herein include but not limited to organization set up, nature of business, business location, management of business, farming methods and processing methodologies or technology of fresh milk production, Dairy farming industry overview, and target markets assessment. Other factors include the various items and aspects of costs required to establish the proposed business. Also the business plan contains operations which are divided into treasury operations accounting, treasury, and human resources. Shafa Agro Ltd is primarily concerned with mixed farming businesses in particular dairy farming for fresh milk production, processing, and sale of same

The company is currently operating at a small scale a dairy farming business at Kidamali Farm located in Iringa district in Iringa region. It is on the basis of the current small scale of farm operations Shafa Agro Ltd is proposing to expand its dairy farming business using mainly externally generated funds comprising of long term loan to the tune of Tshs 42 Billion The company plans to scale up the farming operations by growing improved cow breeds of Holstein type starting with 1000 cows in milk. Furthermore the company plans to construct new buildings and infrastructures, installing new modern milking and cooling equipment, mechanizing the farm using tractors and state of the art farm implements to cultivate the land for planting of high quality fodders which will be used to feed the grown cows in milk, and installing modern silos for storage of maize grains which are used for preparing maize silages for feeding the herds of cattle also installing a modern milk processing factory.

As a result, the company's prospects are mostly dependent on the how efficiently and effectively it will grow the intended cows for production of high output of fresh milk hence its choice of Total Mixed Ration (TMR) cows system under the and the zero grazing (cow housing ) system.

This business plan spans for 5 years starting year 2021 in which the company forecasts to grow its products' volume consistently while keeping selling prices and cost inputs at pace with inflation rates of the country at a given time. It is the ambition of Shafa Agro Ltd to grow in a systematic and consistent manner. In pursuit of that goal the company is envisaging to operate the proposed dairy farm spearheaded by competent Board of Directors who are widely and extensively experienced in dairy industry coupled with a team of dedicated and motivated employees. It is the company's plan to run a network of distribution agencies throughout Iringa region and in those regions close to Iringa such as Dar es salaam, Morogoro etc.

The company has currently a small team of Board of Directors. However plans are underway to expand the list of the members who will be drawn from relevant sectors of the economy including the dairy subsector, finance, law and business in general.

## **1.2 The Market Assessment**

The market assessment shows that there is considerable market opportunities for processed fresh milk driven by the country's population of about 55 million people who currently drink less quantity of milk of 49 litres of milk per capita compared to the regional standard of 74 litres per capita creating a potential of 25 Litres per capita. The fact is that the Tanzania population are considerably and increasingly becoming aware of the importance of drinking fresh milk for health purpose thus creating an opportunity for higher demand for fresh milk. The increasing awareness of quality and safe healthy food on the part of the populace is bringing changes on

the lifestyles of majority of the population. The above factor helps to hype consumption of quality and safely processed fresh milk for health reasons. Apart from the local market both the Mainland Tanzania and Zanzibar, there is huge market potential in the international sphere which includes South Sudan, Burundi, Comoro, and DRC countries.

Shafa Agro Ltd has identified its major competitors to include ASAS Dairies Ltd and Tanga Fresh Ltd. However since there are enormous demand potentials as a result of existing gap between actual milk drinking per capita and the desired milk drinking per capita the company envisages no considerable risk in this area. The company plans to expand its distribution agency network to market its products. Shafa Agro Ltd will ensure it is guaranteed of supply of quality raw milk during the planned period of 5 years and beyond from its own operated Kidamali Farm coupled with employment of improved breeds of Holstein cows which are reputed for higher productivity which in turn has a consequence of lowering unit cost of production which can lead to lowering selling price hence making company's products more competitive in the market .

### **1.3 The Human Resources**

Initially according to the plan, the company will employ a total of 23 staff of different categories headed by one Managing Director and an Operations Manager about 60 casual laborers. Thereafter consistent with growth of business the company will add more staff over time. The company will have in place a staff evaluation policy, staff retention policy and appropriate training programs aimed at enhancing capacity of staff to deliver competitive products and services. In addition it will make use of casual labor in those labour intensive operations.

#### **1.4 Compliance**

The company complies and will continue to comply with all relevant laws including but not limited to Land laws, Labour and Employee Relations laws, Tax laws, social security laws and other enabling laws pertinent to operations and business in general.

#### **1.5 Dairy farming and other Operations**

It is proposed that the company will indulge in the state of the art production technology involving application of modern machineries and equipment and mechanization of the farm using tractors and farm implements in cultivation of fodders and maize for feeding the cows not forgetting use of irrigation technology to water the fodder plants among others. All suitable methods of harvesting, processing, and storage of fodders and hays including storage of maize grains will be applied. Similarly the processing of raw milk will follow modern principles and technology through a planned raw milk processing factory. It is also under the plan that the existing 963 hacters of Kidamali Farm in Iringa district will be put in use sustainably consistent with the available resources at company's disposal. The company will endeavor to train its staff in the areas of dairy farming, production and processing technology, marketing and storage taking advantages of relevant courses offered in the training institutes and universities which are available within the country. The company is planning to forge strong relations with other farmers across the country and outside the country in order to promote capacity building among its core staff.

## 1.6 Risk Analysis

Due to vulnerability of dairy fresh milk production, processing and marketing activities to various risks, the company has identified relevant risks and devised measures to curb or mitigate the risks accordingly. The following main risks have been identified namely; Operational risks covering perishability of milk , weather risks, pest risks, storage, production technology and risks associated with internal controls. Others risks are mainly market risks which are attributable to changing selling price from the projected prices caused by competitors undercutting prices or falling demand hence negatively affecting revenue.

## 1.7 Regulatory Requirements

The Company is duly licensed to carry on the business of mixed farming and has also been registered by TRA and has been issued with the TIN as a registered tax payer. It is also in good standing with other regulatory authorities of the country.

## 1.8 Summary of Financial Analysis

In general the financial projections which constitute the statement of Financial position, Income Statements and Statement of Cash flow indicate that the business will generate a net loss of **TZS 1.7 Billion** for the first year (2021) thereafter consistently growing to **TZS 5.4 Billion** for the fifth year (2025) representing an increase of about 1014%. Similarly the net profit margin is projected at negative 10.45% in the first year (2021) growing consistently to 20.6% in the fifth year (2025) while the Net assets are projected to grow from **TZS -0.63 Billion** at end of first year (2021) to **TZS 12.8 Billion** at end of the fifth year (2025) equivalent to an increase of approximately 2132% suggesting that the business is profitable and financially viable which when combined with other positive qualitative factors make this business plan financially, technically, socially and economically feasible.



## **2.0 Background and Company Organization**

### **2.1 Introduction**

The report is concerned with the Plan to develop a modern Dairy Farming business at Kidamali Farm located at Iringa district in Iringa region with a view to producing raw milk, processing, packing and selling the processed fresh milk. The planned dairy farming is being promoted and carried out by Shafa Agro Limited. This business plan is contemplating to grow or keep 1000 Cows in Milk with all the followers with ultimate goal of producing fresh or raw dairy milk process, pack and sell it economically and practically on commercial basis on Kidamali Farm, Iringa District, Tanzania. The Kidamali farm area is approximately 963ha in size.

The overall sales are projected to be impacted in addition to volume growth by escalating selling price of milk by 4% per annum in tandem with the inflation rate of the country.

Shafa Agro Limited is a private Limited Company by shares. The principle activities of the company consists of mixed farming and cropping which include but not limited to dairy farming, poultry farming, fish farming and crop farming. Shafa Agro Ltd is also one of the associate company of SHAFI GROUP Dubai, a company with an annual turnover of more than 500million US Dollars, and deals in Hotels services, Investment in construction, Block factory, Crusher factory, imports of consumable goods, dairy farming, Dairy processing and processing of fruits and vegetables and also have Real Estate business all over African countries, UAE, UK, USA and Dubai head office.

Other activities of the company are as contained in the Objective section of the Memorandum and Articles of Association (MEMART) of the company annexed hereto.

Shafa Agro Ltd was incorporated under the Company Act Cap 2002 in Tanzania vide a Certificate of Incorporation no 138874257 effectively 2<sup>nd</sup> March 2019. The company was also registered with the Tanzania Revenue Authority as a tax payer and issued with a Tax Identification number (TIN) number 138-874-257. The Company is owned by two shareholders as indicated in the table 1 below

**Table 1: List of shareholders of Shafa Agro Ltd**

<b>S/N</b>	<b>Name</b>	<b>% of shareholding</b>	<b>Nationality</b>
1	Abdoshamakh Nasser Ahmed	80%	Tanzanian
2	Mohammed Abdoshamakh Nasser	20%	Tanzanian

Both company members are highly competent and experienced individuals in dairy farm business and versatile with various aspects of the dairy industry. The head office of the company is located at at Kidamali Farm in Iringa district with a registered postal address of P.O Box 1381 Kidamali Iringa Tanzania.

## **2.2 Vision**

It is the Vision of Shafa Agro Ltd to be the preferred company, which is focused on enhancing nutrition and food security in order to meet customers demand both nationally and internationally in the agribusiness and other agriculture related products while providing a reasonable return to shareholders.

### **2.3 Mission**

The following is the mission of Shafa Agro Ltd “dedicated to ensure that society lives are enriched with good health through use of high quality dairy milk and other natural agro-products produced by Shafa Agro Ltd.

### **2.4 Core principles**

There are five primary indicators by which the success of Shafa Agro Ltd will be measured:

1. Collaboration Coefficient,
2. High Quality dairy milk products,
3. Low cost dairy milk products,
5. Provision of Good services

### **2.5 Keys to Success**

The primary keys to the success of Shafa Agro Ltd are as follows:

1. Product originality and quality,
2. Varieties and reasonable prices,
3. Constant research of industry trends to keep abreast of market needs,
4. Good Management,
5. Products delivery on time,

6. Professional customer service,
7. Minimizing Expenses and Maximizing Profits,
8. Constant evaluation of strengths and weaknesses with adjustments to be reviewed

## **2.6 Strategic Overview**

Shafa Agro Ltd is planning to carry on a dairy farming business with a focus on growing high productive and quality cows in milk, production or processing and distribution of fresh dairy milk. Based on the feasibility study conducted in mid of year 2018 by Derrylin Agricultural Services (DAS) with the assistance of ADC Design & Construction (Pty) LTD, for the potential development of a dairy farm on Kidamali Farm, in the Iringa District, Tanzania, It was found and finally determined that the use of Total Mixed Ration System (TMR) would be a suitable method to achieve that goal. In addition use of Holstein cow which are known to be high producers of milk will also enable the company achieve higher productivity of milk hence grow its business profits.

Bearing the above strategic objective and based on same feasibility study, the use of Holstein dairy cows entails higher consumption of water and feed as the Holstein cows apart from being higher [producers of milk they are higher consumers of water and feed. Consequently the company has in its plan to enhance the production of suitable fodders and reliable supply of water to meet the water and feed requirements for the planned dairy farming.

The company plans to make use of zero Grazing (Housing) TMR system rather than Open Camps method to grow the cows in milk due to the fact that more advantages lie with the Zero grazing system compared to Open Camp system. The major factor that has influenced the company plan to adopt a zero grazing system include but not limited to the following; scarcity of land available to undertake open camp system, and the uncertainty of the water requirements for pasture under the Open Camp system. According to the feasibility study Kidamali Farm has a warmer climate with temperatures around 5° warmer than the Iringa climate data, and therefore the climate would lean to animals that have access to shade during the day. An Open camp

system would not be suitable as it cannot provide shade to animals and thus causing higher temperatures to ruin the animals' productivity

The study has proven that leaning the farm towards a zero grazing system is a suitable option as the data indicate that the water requirements for a TMR system have been met, and this system would allow the farm to grow their cow numbers again in the future if required. The company also proposes to build a milk processing factory and install modern processing as well as packaging machinery, construct raw materials storage facilities, as well as storage facilities for processed or finished goods. In addition the company will purchase and operate distribution cold room trucks, ordinary distribution vans as well as install selling point refrigerators within distribution agents' network.

## **2.7 Organization**

The company will continue to run its operations from Kidamali Farm in Iringa district while maintaining its relationship with its associate company Shafa Investments Tanzania Ltd which has its head office at Dar es salaam which is regarded as the economic hub of the country. Shafa Agro Ltd is managed and will continue to be managed by a team of experienced managers and agriculture experts, and a team of highly competent and dedicated engineers and staff. These will be responsible to run the company with the overall guidance of an equally competent and dedicated Board of Directors and also plans to compose the board of directors with experienced individuals drawn from finance, agriculture, manufacturing, Micro finance and business industry.

In accordance with best industry practices the company's Board of Directors will not exceed seven members, including a Chairperson. The Board will continue to be tasked as it is now with the overall responsibility for the direction, supervision and monitoring of the performance of the company. It will be responsible for approving all policies, recruit senior management and evaluate management's performance and compliance, approve budgets and business plans, delegate authority, review internal reports and ensure that all

pertinent laws, regulations, regulatory authorities directives are observed. The Board of Directors will establish standing committees which shall include:

### **2.7.1 Board Executive Committee**

The committee is expected to consist of the Chairperson of the Board of Directors, the Managing Director, and other two Directors. Reporting to the Board of Directors, this committee shall have the power and responsibility of (a) monitoring results achieved by management in comparison to the objectives as reflected in the annual budget and business plan, (b) the implementation by management of policies established by the Board of Directors, (c) to review, approve/disapprove, modify terms and conditions applicable to products development as recommended to it by the management of the company; (d) to monitor products reports which are to include summarizing of daily/weekly transactions for all types of products; and review and make recommendation to the Board of all policies regarding product activities such as:

- Product 's policies and procedures e.g production technology, storage etc
- Credit limits
- Risk management strategies and procedures
- Review of products budget and business plan.

### **2.7.2 Board's Audit Committee**

This committee shall consist of not less than three and not more than five Directors; one of whom must have an accounting expertise. The Committee should report directly to the Board. The internal audit functionally will report to the audit committee

The committee shall review and recommend to the full Board;

- (a) policies and procedures with respect to internal audit and internal control;
- (b) policies and procedures to safe guard the company's assets
- (c) and monitoring of compliance by the company with regulatory requirements and any other statutory compliances; and review external auditors report.

### **2.7.3 Board of Directors**

The current Board of Directors consists of the following individuals.

Abdoshamakh Nasser Ahmed - Tanzanian, Chairman

Mohammed Abdoshamakh Nasser - Tanzanian, Member

#### **2.7.4 Management Team (Capacity of the Project)**

The capacity of Shafa Agro Ltd to successfully steer forward the proposed dairy farming and milk processing at Kidamali Farm hinges mainly on the capacity of its management team. The company boasts of a competent and widely experienced team of management who will be in charge of daily operations of the business. The key personnel of the management team of the company is composed of the following to mention a few.

**Mr. Franz Homsek**

**Position: General Manager**

Mr Franz Homsek is a graduate in Bachelor of Science in Agriculture from Republic of South Africa. He boasts of significant experience in management of dairy farming including but not limited to milking routine, veterinary science, artificial insemination and animal feeding, breeding and animal health in general. He previously managed a herd of 2500 Cows through a 60 point Delaval. His other experience covers managing staff, Shed hygiene Rosters and general Maintenance, feeding of calves and recording of all cow information. His detailed CV is available upon request.

**Mr. Nityananda Shahoo**

**Position: Director of Finance**

Mr Nityananda Shahoo is a graduate from India and has varsity international experience in business analysis and financial planning including strategic planning. He is also widely experienced in project management, budgeting, auditing, cost accounting, financial accounting, materials management and financial management in general. He is also well versed with import/export trade. His detailed CV is available upon request.

**Mrs. Loamie Homsek**

**Position: Dairy Manager**

Loamie Homsek is a graduate in Bachelor of Agriculture from University of Free State in Namibia. She is highly experienced in carrying out veterinary clinical research activities including dairy farming activities. Her detailed CV is available upon request.

### **3. 0 Project Description and Location**

#### **3.1 Project Location:**

The project or business is located at Kidamali Farm no 217 in Iringa district , Iringa region. The Company's Postal address is P.O.BOX 1381 Kidamali Iringa; Email: [info@shafatanzania.co.tz](mailto:info@shafatanzania.co.tz) .

#### **3.2 Project Description**

##### **3.2.1 Description of projected activities**

The company plans to grow 1000 cows in milk of Holstein species at the Kidamali Farm under the Zero grazing TMR System. Under the said TMR system the Holstein Cows in Milk will be fed with a well formulated mixed ration of animal feed with a view to attain higher productivity of milk which will ultimately enhances profitability. TMR contains all the feeds and nutrients the dairy cow needs to effectively and efficiently feed in a profitable way. In addition the company will construct a modern milk processing factory with installed efficient processing and packaging machinery no less than construct or erect storage facilities for raw materials and finished goods. It will also purchase and operate four (4) distribution cold room trucks, twenty five (25) ordinary distribution vans and two

maize hauling trucks. It will also purchase and install about 200 selling points refrigerators. In order to implement the above plan and achieve the TMR system the company will undertake the following specific activities

- (i) Planting of 100 Hectors of land for Alfa Alfa folder which is estimated to yield 2000 tons of alfalfa fodder per annum at estimated total cost of USD 146,500 equivalent to Tshs 342,810,000 (refer to section 13 of this report for details of costs)
- (ii) Planting of 124 Hectors of land with Rhodes Hay which will yield 1533 tons of the Hay per annum at estimated total cost of USD 116,994 equivalent to Tshs 409,485,960.00(refer to section 13 of this report for details of costs)
- (iii) Planting of 223 hactres of land with yellow maize silage at estimated total cost of USD 279,076.92 equivalent to Tshs 653,038,822.80 (refer to section 13 of this report for details of costs)
- (iv) Erecting Buildings and Infrastructures excluding cow housing at estimated cost of USD 4,942,307.58 equivalent to TZS 11,564,999,737.20 (refer to section 13 of this report for details of costs).
- (v) Establishing Complete Cow housing at estimated cost of USD 2,461,538.46 equivalent to TZS 5,759,999,996.40 (refer to section 13 of this report for details of costs)
- (vi) Mechanization of farm through use of tractors and Equipment at estimated cost of USD 1,384,692.31 equivalent to TZS 3,240,180,005.40 (refer to section 13 of this report for details of costs)
- (vii) Purchase of 1000 herds of livestock estimated at USD 2,083,330 equivalent to TZS 4,874,992,200 (refer to section 13, Capital expenditure for cost details )
  
- (viii) Importation and installation of maize milling equipment estimated at a costs of USD 850,000 equivalent to Tshs 1,989,000,000 and construction of finished goods storage Warehouse both costing USD590,000 equivalent to Tshs 1,380,600,000 plus a supervision cost of USD 32,000 equivalent to Tshs 74,880,000 making an estimated Total cost of USD 1,472,000 equivalent to Tshs 3,444,480,000 (refer to section 13, Capital expenditure for cost details )
  
- (ix) Importation and installation of maize silos System that will be used for storage of raw materials which is maize grains for preparation of maize silage and other animal feeds. The silos system will have an estimated capacity of storing at least 3000 Metric Tons of the maize grains. The Silos Project will consist of Silo Structure and machinery estimated at cost of USD 825,000 equivalent to Tshs 1,930,500,000, Silo Foundation at estimated cost of USD 444,820 equivalent to Tshs 1,040,878,800 and the estimate cost of Supervision at USD 36,000 equivalent to Tshs 84,240,000 arriving at a Total cost of USD 1,305,820 equivalent to Tshs 3,055,618,800.. The silos system be imported from overseas. The Silo system will have the following specifications among others 48' Dia-10 Rings, 4.00'' wide Corrugation Standard Stiffened 40 Series Bin with Galvanized Horizontal Conveyors with a 10' Dump Hopper and a 10'' Bend . In addition it will include Bucket

Elevator Cleaner, Bucket Elevator Dryer, and Ring Top Dry Autoflow Grain Dryer and a Motor Control Center to mention a few. ((refer to section 13, Capital expenditure for cost details)

- (x) Establishment of a Dairy milk processing Factory building with installed processing machinery and packaging machinery estimated as follows Construction of a Factory USD 810,0000 equivalent to Tshs 1,895,400,000 with associated Operating expenses of USD 200,000 equivalent to Tshs 468,000,000 and machineries at cost of USD 1,190,000 equivalent to Tshs 2,784,600,000 plus Installation cost at USD 50,000 equivalent to Tshs 117,000,000 making a total cost of USD 2,250,000 equivalent to Tshs 5,265,000,000
- (xi) Purchase of two heavy duty trucks estimated at a cost of TZS 175 Million which will be used for transportation or haulage of maize grains from collection centers to the Silos for storage.
- (xii) Purchase of 4 distribution cold room trucks estimated at a cost of Tshs 225 Million each totaling Tshs 900 Million
- (xiii) Installation of 200 selling point refrigerators estimated at a cost of Tshs 2.5 Million each totaling Tsh 500 Million.
- (xiv) Purchase of 25 milk distribution vans estimated at cost of Tshs 30 Million each totaling Tshs 750 Million
- (xv) The project will also involve irrigation of the land on which the Rhodes Hay, Alfa Alfa fodder and maize silage will be planted. The proposed irrigation will entail use of Centre pivot irrigation as it is considered the most effective method with regard to this project (see Figure 1 below). The advantage of this method of irrigation is that it is easy to manage, produces light sprays avoiding soil impaction, and releases efficient and even water spread which increases crop yields

Figure 1: pictures showing Centre Pivot Irrigation method



- (xvi) Another activity of the project will involve Manure handling. Manure Handling is an important role in an intensive dairy operation and the advantage of a housing layout (Zero Grazing system) is that the manure is easily captured, processed and can be used as bedding for the cows before getting distributed on the lands, adding organic matter to the soils and improving. In addition Manure reduces fertilizer costs, increases crop yields, also increases the soils ability to retain moisture.
  
- (xvii) After the cows are adequately fed they will be milked using milking equipment as indicated in the figure 1 below. The proposed milking system is use of Rotary Parlour. Rotary parlour is the most efficient milking system and allows cows of various sizes to be mixed easily, the disadvantage of a rotary is the capital cost is higher, as is the construction site due to the expanse of the shed. Service costs on a rotary are also higher than a rapid exit, however rotary parlours are more popular with large herds.

Figure 2: Cow milking equipment, a rotary parlour



- (xviii) After milking the cows, the milk will be processed through cooling it off and storing it in 20,000 liters bulk tanks and finally packed in carton or bottle containers or equipment ready for sale to the market.

### **3.2.2 TMR Process**

TMR cow feeding consists of the following process

TMR is fed out to the cows via a mixer wagon, the products such as hay, lucerne and silage are added to the mixer wagon according to the set volumes required per mix and then the meal is also added.

The wagon will cut the hay and the lucerne into lengths of approximately 5cm and all the feed ingredients will be well mixed ensuring that the cow is receiving a totally balanced energy/ protein ration with each mouth full.

The moisture in the silage and the stalk length eliminate the cows sorting out the lucerne leaf and the meal from the ration.

Below is a basic TMR ration mix

The cows that are in their 1<sup>st</sup> 100 days of milk or are remaining above 35 litres will receive a higher value of concentrates and if a girl drops in production, she will change groups and be fed on a more cost effective ration accordingly.

<u>Holstein Cows In Milk</u>		<u>TMR</u>						
<u>Product</u>		<u>kg per cow</u>	<u>Moisture %</u>	<u>Moisture kg</u>	<u>DM kg</u>	<u>value (in USD)</u>	<u>Total (in USD)</u>	<u>Total (Tshs)</u>
Yellow Maize Grown		2	10.00%	0.2	1.8	0.15	0.30	702.00
Yellow Maize Purchased		5	10.00%	0.5	4.5	0.23	1.15	2,691.00
High Protein Concentrate		7	10.00%	0.7	6.3	0.50	3.50	8,190.00
Maize Bran		2	10.00%	0.2	1.8	0.25	0.50	1,170.00
Rhodes		4	10.00%	0.4	3.6	0.06	0.24	561.60
Alfalfa		7	15.00%	1.05	5.95	0.15	1.05	2,457.00
Maize Silage		20	70.00%	14	6	0.04	0.80	1,872.00
		<u>47</u>		<u>17.05</u>	<u>29.95</u>		<u>7.54</u>	<u>17,643.60</u>

Below is the cost of the ration versus the price of the milk, milk over feed (MOF) is the margin over the feed cost, or the Gross Profit per cow p/day

Average TMR price p/kg	\$0.16	Tshs 374.40
Dry Matter Price p/kg	\$0.25	Tshs 585.00
Cost p/cow p/day	\$7.54	Tshs 17,643.60
Cost Per Litre on 30 Lt Average	\$0.25	Tshs 585.00

### Milk processing and Distribution costs per liter

	USD	Tshs	% of Production
Labour cost	0.1	234.00	40%
Packaging materials	0.05	175.50	30%
Distribution & marketing	0.05	117.00	20%
Water & Electricity	0.05	58.50	10%
<b>Total processing &amp; delivery cost</b>	<b>0.25</b>	<b>585.00</b>	
Feed cost	0.25	585.00	
Feed + Processing & delivery cost	0.5	1170.00	
Average Milk Price		3000.00	
<b>Margin over feed, Processing &amp; distribution</b>		<b>1830.00</b>	

### 3.2.3 Project or Business Implementation Status & Implementation schedule

At the time of writing this report the company has in place a Feasibility Study report which was conducted in mid 2018 which indicates that the project is feasible economically, technically, financially and socially etc. It has further indicated or suggested that the best method to grow the intended herds of cows estimated at 1000 cows in milk is zero grazing TMR system since it offers more advantages compared to the Open camp system.

In addition currently there is an existing farm land (956 Hactres) and a few infrastructures at the Kidamali Farm which consist of a few farm buildings and various farm machinery and equipment covering tractors and its implements, planters, rippers, flat bed trailers and trucks. The above assets support the current small scale dairy farming involving 200 cows in milk at the Kidamali Farm. It is proposed that the company will build on the existing land, machinery and infrastructures to develop the farm by erecting new buildings and infrastructures, installing new modern machineries and equipment plus other facilities required for a modern dairy farm as explained in section 3.2.1 above.

The following is the **Project Implementation Schedule**

	<b>Activity</b>	<b>Time frame</b>
1	Importation of machinery, equipment & materials	November -December 2020
2	Construction of farm buildngs, factory building, infrastructures, silos and finished goods and raw materials storage facilities	January - March 2021
+3	Planting of fodders	January -February 2021
4	Installation of machinery, farm equipment, milking equipment & milling equipment	February -March 2021
5	importation and placement of cows in mik in the farm	March - April 2021
6	importation/purchase of distribution trucks, hauling trucks and point of sale refrigerators	March - April 2021
7	Operationalization of farming & milk processing	May 2021

## **4.0 Overview of Dairy Farming industry in Tanzania**

### **4.1 Situation Analysis of Dairy Farming in Tanzania**

#### **4.1.1 Sector contribution to GDP**

Demand for **milk** in **Tanzania** has grown over the past decade and is predicted to rise further driven by socio-economic changes in the country. By 2020, it is forecast that per capita consumption of milk in Tanzania will reach 100 litres per year, from a current level of 45 litres per year.

The dairy sub sector as part of Livestock sector is one of the significant sub sectors in Tanzania' Livestock sector contributes 7.6% to GDP and 30% of Livestock sector GDP comes from the dairy value chain. The dairy subsector has high potential for improving food security and welfare. Tanzania is a net importer of milk and milk products, but it has potential to increase production and possibly even exports if efficiency can be improved. The Dairy Sector in Tanzania is driven by large number of improved dairy cattle, rapid population growth, and increasing consumption. The analysis estimated that between 1993 and 2020, the annual demand for milk and dairy products in developing countries would grow at between 3.2% and 3.5% annually, implying that the demand will more than double by 2020. Demand for milk is expected to increase in Tanzania from the current average of per capita consumption of 45 liters per year to at least the level that the highest milk consuming country has attained, i.e. 100 liters per year .

#### **4.1.2 Sector output**

Tanzania has significant dairy livestock resources, which have the potential to transform the lives and incomes of smallholder farmers along the value chain. However, the milk production of local cattle is typically low (1-3 litres/animal) and the country's dairy industry is small. The majority of milk is consumed at a local level without reaching the commercial market: just 2-5% of milk produced comes from large-scale dairy farms. Tanzania's dairy sector has the potential to significantly improve food security and nutrition in the country.

Currently Tanzania produces over 2.7 billion liters of milk. Since 2008, dairy production has grown on an average of 5.3% per annum. The dairy value chain is dominated by small-scale producers primarily producing milk for domestic consumption. 90% of the milk produced is consumed at the farm level while 10% goes through collection centers.

### **4.1.3 Sector Drivers and Restraints**

The key driving factors in the growth of Tanzania Dairy Sector Market are large number of improved dairy cattle, increasing consumption and changing consumer trends while low production and high animal mortality rate are the biggest factors which negatively affects the dairy market of Tanzania.

The Government of Tanzania has prioritized the dairy sector as a driver of industrialization, food and nutrition security, and incomes. While Tanzania has a competitive advantage of a large livestock sector, opportunities within the dairy sector are still under-utilized and productivity remains the biggest challenge in the sector limiting potential growth, particularly for smallholders

The government also emphasizes on the value addition to dairy milk products in order to enhance its marketability. Value addition through processing of agro farm outputs such as milk would not only create more employment opportunities and income but also reduce rural-urban migration, especially if processing industries are established in rural areas. However, agro-processing industries in Tanzania are underdeveloped, as result of multiple effects of inadequate availability and accessibility such as rural roads, electrification, water, communication, rural finance and market infrastructure.

### **4.1.4 Market size and trends**

National milk consumption is insufficient when compared to neighbors and WHO guidelines Farmer productivity is low; as such, low volume of output leads to impaired livelihoods even with a higher farm gate price Inefficiencies across the value chain drive up viable prices for unprocessed milk and eventually processed milk, including high costs of packaging and transport, and poor infrastructure In turn, the informal economy thrives driven by a price premium in the informal trade while at low production volumes many farmers can sell all of their output through this market. Market access has that working through traders can be easier than accessing formal

markets while in terms of liquidity the informal trade offering immediate payment vs. 7-15+ days for formal trade. On the other hand weak consumption plus insufficient raw milk input supply leads to poor processor utilization driving down profitability.

There are 221 milk collection centers distributed across the country of which 173 have a cooling capacity and 64 are non operational. Only 2.7% of milk produced is processed. There are 99 milk processing units handling 862,100 liters daily, ranging from micro-processing units to large processors such as Tanga Fresh which handles 45,000 liters daily.

In addition to local production, Tanzania imports about 24 million liters of liquid milk equivalent. Dairy imports mainly originate from Kenya, South Africa and the Netherland. Local demand for unprocessed milk is low, with milk consumption per capita estimated at 49 liters, while FAO recommends per capita consumption of 200 liters Dairy cattle are concentrated around the highlands of Kilimanjaro, Arusha, Mbeya, Iringa as well as Tanga and Kagera regions.

Current consumption with per capita value of 49L Potential for additional 25 liter/capita consumption to match regional average of 74 liters per capita. Although a price floor for milk may appear appealing, output rather than yield is the greater sensitivity driver of farmer livelihoods

Although a price floor for milk may appear appealing, output rather than yield is the greater sensitivity driver of farmer livelihoods. While most traditional breeds produce less than 2L/ day, productivity for improved breeds ranges from 18 to 45L/ day which lowers per liter production costs. Feeding improvements can lead to an additional 6 to 8 L/ day but most farmers keep cows in open-range systems that are uncondusive for optimal feeding. Although absolute costs increase, improved productivity also drives down costs per liter of milk produced reflecting a stronger margin (and a good business case). On average, farmers with high yields spend c. Tsh 200,000 more per cow to get an additional 5L/day, leading to lower overall costs particularly since fixed costs like labor, building related costs, vaccines, and calf milk stay stagnant and other costs experience economies of scale (e.g., purchase of feed in bulk).

## 5.0 Products

### 5.1 Types of products

The main final product to be produced is the processed dairy fresh milk which will be packed in containers or cartons of one litre for sale to the buyers

### 5.2 Aspects of production of quality dairy milk and Sources of Input

The following section explains various factors that are necessary for quality fresh milk hence forming inputs to the production process. The said inputs will be sourced within the country many of which will be grown at Kidalamali Farm. The key factors include the following;

#### 5.2.1 Water Requirements

It is a matter of fact that Food, water and environment are the key factors in the triangle of achieving high milk yields in a dairy herd. TMR cows have the ability to produce high volumes of milk if the key factors are well managed.

The simple formula to achieve high output in TMR cows is as follows

**Genetics + Nutrition + Comfort = Profit** , where **Genetics** stands for the genetic makeup of a species of cow and in this case it is Holstein cows the better the genetics of cows the higher the milk output, **Nutrition** stands for type of feeding given to the cows, and in this case the company has planned to use the TMR feeding which is rich in nutrients and quality animal fodders and contents which enhance higher milk production, **Comfort** represents the physical conditions or environment in which the cows are kept. These include suitable cool temperatures, hygienic houses and other environment which is free of pests and diseases.

TMR cattle require higher volumes of brought in and mixed fodder, and below are the herds water requirements and relate the rations required to the hectares required. All figures are based on Holstein cows which are the higher producers and therefore the higher consumers of both water and feed.

- 1000 cow milking unit with followers would require 300 000 litres of water required p/day for all functions
- Cow cooling on extremely hot days would require a further 150 000 litres of water p/day.
- A processing factory would require 12 000 litres of water for every 20 000 litres of milk processed.
- NB: These water requirements do not include irrigation water for crops.

## 5.2.2 Feeds and Land

### (a) Ration

The following is the ration requirements for the TMR Cows

<u>Holstein CIM</u>	<u>TMR</u>				
<u>Product</u>	<u>Kg per cow</u>	<u>Moisture %</u>	<u>Moisture kg</u>	<u>DM kg</u>	<u>% of Ration</u>
Yellow Maize Grain	7	10.00%	0.7	6.3	24.23%
HPC	7	10.00%	0.7	6.3	24.23%
Alfalfa/Lucerne Hay	5	15.00%	0.75	4.25	16.35%
Rhodes	3.5	10.00%	0.35	3.15	12.12%
Brewers Grain	0	75.00%	0	0	0.00%
Maize Silage	20	70.00%	14	6	23.08%
	<b><u>42.5</u></b>		<b><u>16.5</u></b>	<b><u>26</u></b>	<b><u>100.00%</u></b>

(b) Volume of fodder requirements on a 1000 cow in milk TMR Unit

Type of Fodder	Tons per annum	Followers	Total Tons required per annum
Yellow maize grain	2,555	511	3,066
AlfaAlfa	1,825	365	2,190
Rhodes	1,277.5	255.5	1,533
Maize silage	7,300	1,460	8,760

( c) Land sizes required on a 1000 cows in milk TMR unit

Land sizes pertaining to Kidamali Farm for the purpose of growing the fodder include 100 Hectares for Alfaalfa, 124 Hectares for Rhodes and 223 hectares for maize silage. However there are more land on the farm besides the mentioned ones which can be utilized to realize the potential to grow the herd or reduce the feed costs either with more land been made available in the vicinity.

### 5.2.3: Milking and Milk Cooling Process

After the cows are adequately fed they are milked using milking machines and equipment. The following items are proposed to be included in the milking system

- Herd management system
- Automatic Cluster Removals (ACR)
- Clusters that can move enough milk off in a certain period as many clusters on the market are not ideal for high producing TMR herds
- Infrared milk metres ( no service required)
- 3 Way sort gate ( sorts cows out that are sick, on heat or need to change groups)

- Milk sweep ( pushes excess milk in the line through to the bulk tanks )
- Bulk tank volume that can cool the milk within 30minutes of milking or plate coolers
- Back up milk pump and vacuum pump
- Rotary parlours will require further back up parts

The rotary parlour is the most efficient milking system and allows cows of various sizes to be mixed easily, the disadvantage of a rotary is the capital cost is higher, as is the construction site due to the expanse of the shed. Service costs on a rotary are also higher than a rapid exit, however rotary parlours are more popular with large herds.

#### **5.2.4 Production Costs:**

Based on the market survey and production analysis, the production costs consist of the following (at current average market prices) as indicated in the Table 5 below.

**Table 5**

<u>Holstein Cows In Milk</u>		<u>TMR</u>						
<u>Product</u>		<u>kg per cow</u>	<u>Moisture %</u>	<u>Moisture kg</u>	<u>DM kg</u>	<u>value (in USD)</u>	<u>Total (in USD)</u>	<u>Total (Tshs)</u>
Yellow Maize Grown		2	10.00%	0.2	1.8	0.15	0.30	702.00
Yellow Maize Purchased		5	10.00%	0.5	4.5	0.23	1.15	2,691.00
High Protein Concentrate		7	10.00%	0.7	6.3	0.50	3.50	8,190.00
Maize Bran		2	10.00%	0.2	1.8	0.25	0.50	1,170.00
Rhodes		4	10.00%	0.4	3.6	0.06	0.24	561.60
Alfalfa		7	15.00%	1.05	5.95	0.15	1.05	2,457.00
Maize Silage		20	70.00%	14	6	0.04	0.80	1,872.00
		<b><u>47</u></b>		<b><u>17.05</u></b>	<b><u>29.95</u></b>		<b><u>7.54</u></b>	<b><u>17,643.60</u></b>

**NB**

High Protein Concentrates (HPC) contain the following ingredients namely Sunflower Oil cake, Soya Oil Cake, Wheat bran, Cotton Oil cake , Vitamins and minerals and Toxin Binders(Non clay) all rich in animal nutrients and vitamins.

From above Table 5 it is clear that the TMR cost of producing milk per cow is USD 7.54. Since our plan based on the feasibility study considers that one Holstein Cow will be producing 30 Litres on average therefore the Cost of producing one Litre of milk translates to USD 0.25. This cost when added to processing, packaging cost and delivery/distribution cost amounts to USD 0.5 per litre of milk.

**Table 6: Milk processing & Distribution cost per litre**

	<b>USD</b>	<b>Tshs</b>	<b>% of Production</b>
Labour cost	0.1	234.00	40%
Packaging materials	0.05	175.50	30%
Distribution & marketing	0.05	117.00	20%
Water & Electricity	0.05	58.50	10%
<b>Total processing &amp; delivery cost</b>	<b>0.25</b>	<b>585.00</b>	
Feed cost	0.25	585.00	
Feed + Processing & delivery cost	0.5	1170.00	
Average Milk Price		3000.00	
<b>Margin over feed, Processing &amp; distribution</b>		<b>1830.00</b>	

**NB:**

All above costs i.e Feed cost and Processing and Delivery cost have been allocated to the product cost as direct cost

## **6.0 SWOT ANALYSIS**

### **6.1 Strength**

The company boasts of the following competitive advantages which enhances achievement of its business goals namely

- Presence of industrious, competent and experienced Board members and management is an important factor that the company counts on to escalate it to greater heights of achievements.
- The company boasts of its highly improved breeds Holstein cows in milk which have high production capacity with a consequence of lowering unit cost of production
- The company boasts of its skilled, dedicated and motivated team of staff who are counted on to deliver the expected results
- The existing Kidamali Farm is located in a geographical region with relative favorable climate to successfully undertake dairy farming activities. This factor will contribute to higher productivity of the Holstein Cows

### **6.2 Weakness**

Weaknesses includes limited financial resources to undertake the very capital intensive project or business so as to cope with growing demand for fresh dairy milk products and related services.

### **6.3 Opportunities**

The company much as it is currently operating a dairy farming business at Kidamali Farm at a small scale, it is planning to expand its business in the light of emerging opportunities which if properly utilized will render more growth and other benefits to the company and the nation as whole.

The following were identified to be opportunities at the disposal of the company.

- Increased demand for dairy milk by general population partly resulting from increased awareness of consuming milk for health reasons impacts positively on the demand for company products i.e fresh or raw milk.
- The availability of suitable technology across the globe which can be either imported or home grown to enable grow the dairy Cows and processing of dairy milk stands as an opportunity to leverage on so as to enhance the milk production and business.
- Growing relationships among East Africa member states under the EAC creates a wider market for company products considering that Tanzania is the only country in East Africa with ample land for dairy farming and other related agribusinesses potentials remain abundant for future growth of the company dairy farming business. This blessing translates to the fact that if well utilized the country can become the basket donor of milk in the whole of East Africa region and this will trickle down to Shafa Agro Ltd given its strategic plan to venture into the proposed ambitious dairy farming project/business.
- Availability of suitable land and favorable weather at Kidamali which is suitable for dairy milk production stands to substantially boost production of milk and hence increased milk outputs.

#### **6.4 Challenges**

The following were found to be the main challenges faced by the company which if addressed will help improve its business and corporate social responsibility to the surrounding community and consequently enhance its relationship with members of the company and community with end result of increasing profitability of the business. Here are some of the major challenges;

- Tanzania's dairy industry is still at a relatively early stage, with the majority of production being done at a household level.

- There is currently limited expertise in dairy technology, and little use of breeding programs or technology to improve genetics and increase production.
- As part of fulfilling its corporate social responsibility to the surrounding community the company plans to a certain extent work closely with smallholders in order to create market for their raw milk products. However, since smallholder farmers with dairy cattle are spread over a wide area, it is difficult to reach them and collect their raw milk in an efficient manner.

## **7.0 MARKET PLAN & ASSESSMENT**

### **7.1 Introduction and Overview**

The market for fresh dairy milk is based on the demand for the same which is influenced by the market's attractiveness, customer and competition dynamics, and the general economic environment. Key market variables include future demand for fresh dairy milk. In addition to the local market, the projected main export destinations for the company's products include Comoros, Sudan, Burundi and Democratic Republic of Congo. The company is planning over the planning horizon of five years Year 2020/21 to 2024/25 to deal with marketing of fresh dairy milk locally and will resort to overseas markets once the local market is saturated.

### **7.2 Market Analysis**

#### **7.2.1 Market Access**

The overall market potentials for fresh dairy milk is immense in Tanzania. There are 99 milk processing units handling 862,100 liters daily, ranging from micro-processing units to large processors such as Tanga Fresh which handles 45,000 liters daily.

In addition to local production, Tanzania imports about 24 million liters of liquid milk equivalent,

Since Shafa Agro Ltd's has planned to lean on TMR zero grazing system growing the herds of the improved breeds of Holstein cow it is expected that the above factors will stand to give it a more competitive advantage over many of its would be competitors such as smallholder farmers who normally grow ordinary or indigenous breeds producing low quantities of milk as it would be able to lower the cost of production hence maximizing its profits.

The company plans to sell its fresh dairy milk to selected distributors scattered across the Iringa region and the country as a whole. It is prepared to ensure milk distributors buys the milk at affordable competitive prices. The company regards ASAS Dairies Ltd and Tanga Fresh to be the main competitors. ASAS Dairies has a milk processing plant with a capacity of processing 12,000 litres of milk daily. It is also working with smallholder cattle keepers who supply milk to it on regular basis.

### **7.2.3 Market Segmentation**

The Shafa Agro Ltd fresh dairy milk products are expected to be of high quality yet at affordable prices. While there are existing suppliers of fresh dairy milk in the market the company has made analysis and researches on this market and has seen itself as a big provider of quality fresh dairy milk in Tanzania. As said earlier there is huge potential of milk market in Tanzania considering that the country milk consumption per capita is 49 litres per capita which is low compared to regional average of 74 litres per capita, this fact coupled with ongoing efforts by the government to sensitize people to drink more milk it is definitely that the company stands to enjoy a sizable share of the market in Tanzania.

The company has made significant walk-in-sampling for its products to "Mama Lishe" & individuals, Hotels & Canteens, Shops & Supermarkets and others, each providing us with a market presence. The company is looking at developing and allocating its agents everywhere in Iringa, Dar-es- salaam and other selected regions in the country in the first phase so as to meet its customers' demands.

### **7.2.4 Competition and Buying patterns**

There are many suppliers of fresh dairy milk and similar products currently available on the market. However, there is still a lot of room for new entrants to arise. By positioning ourselves at the higher end of the market, we expose ourselves to consumers

trying to get out of the channel, who continue to use a product that they have long forgotten while they buy. By not trying to compete head on, we will be selling our products consistently and increasingly. With entrance into some of the larger companies' value chains we expect to broaden our customer base considerably.

### **7.2.5 Main Competitors**

The main competitor of our products include ASAS Dairies Ltd and Tanga Fresh. ASAS Dairies Ltd currently has the processing capacity to manage 12,000 litres of milk per day, producing a range of dairy products from the raw milk it receives. It also owns and operates a plastic bottle manufacturing plant where bottles are used to pack some of its milk products.

ASAS Dairies is already working with smallholder dairy farmers in the Southern Highlands region to off take and process milk. The company collects milk from smallholders in the Mbeya Region (Rungwe District) as far away as 400km from the factory in Iringa town. It has already organized smallholders into 60 groups, through which collection and production is undertaken. In order to raise awareness of the role that dairy can play in improving food security, ASAS is currently undertaking a school milk programme that aims to improve the nutrition of school-going children in Iringa. This project highlights the importance of drinking milk and provides children with milk during school days.

Our company will design its products and services to counter the competition. We hold our strength in reducing the unit cost of production thanks to the use of improved breed of Holstein Cows which are reputed for higher productivity. With lowered unit cost the company stands to enjoy a relatively higher level of profitability compared to its competitors.

### **7.2.6 Marketing Strategy**

We are focusing on the consumer first to enjoy our products and services through Agents' knowledge and exposures, and then impacting them through un-met and met- milk products as well as places to supply and provide related customer services. We will also be sharing links with our customers to exchange expertise.

Furthermore the competitive strategy will involve adopting the following

- Establishing an attractive corporate image
- Developing more competitive products
- Commission payments to our sales person

- Promoting company's products

### **7.2.7 Promotion Strategy**

The long-range goal is to gain enough visibility to leverage the product into other distribution sites within Iringa region, then to move on to other geographical regions as inquiries and distribution requests come in.

Our current contacts in our products chains are for local consumption, they all move out of this region in their normal distribution channels. It is our goal to move along with them to other regions. We will be advertising and promoting our products through social networks and offer commissions and rewards to our agents and members who promote our products through network marketing.

### **7.2.8 Distribution Strategy**

To this end we will be continually reworking our packaging for better corporate identity, providing a more attractive package, a very important ingredient in the food industry. An example is addition of company information to our labels. The company will provide selling point refrigerators to selected distribution agents which will be used to store fresh milk at the point of sale so as to enhance shelf life of milk. In addition the company will use large cold room trucks to transport fresh milk to big buyers such as institutions, bog dealers and big supermarkets in areas outside Iringa region. Similarly there will be distribution vans which will be responsible to distribute fresh milk to customers in nearby areas and within Iringa municipality.

### **7.2.9 Pricing Strategy**

We are able to price our products competitively. Even though we are subject to some impulse buying, we can provide a product to be resold at a generous mark-up for our customers and dealers, while still providing a satisfactory experience for the consumer. We will offer reasonable prices at a wholesale and retail rate in order to compete out the prices offered by our competitors. The prices will be set as a margin over feed costs, packaging/processing and distribution cost to cover operating costs and a target profit rate.

### 7.2.10 Sales Strategy

The keys to our continuing success are in the areas we are adding to our current distribution channels. This will remain our main focus for the next five years and so on. Sales calls on Shafa Agro Ltd customers including Government entities and others, will result in achieving good sales turnover, and hence the company will be profitable. We will make sure that availability of goods is constant and maintain our product quality.

### 7.2.11 Sales Forecast

We currently forecast our sales to grow at an impressive rate for the next five years starting from year 2020 because of increase in volume of milk production and many orders we plan to be receiving from customers intending to buy our products in larger volumes in future. The following Table shows Sales forecast for a period 2021 to 2025

**Table 7: Sales forecast for year 2021-2025**

S/N	Yr 2021	Yr 2022	Yr 2023	Yr 2024	Yr 2025
Sales (litres) (a)	5,400,000.00	6,237,000.00	6,548,850.00	6,876,292.50	7,220,107.13
Sales Price per litre (b)	3,000	3,150	3,308	3,473	3,647
Sales Value (a)*(b)	16,200,000,000	19,646,550,000	21,660,321,375	23,880,504,316	26,328,256,008
Livestock Sale	26,032,500	64,935,000	84,240,000	97,821,360	117,159,120
Total	16,226,032,500	19,711,485,000	21,744,561,375	23,978,325,676	26,445,415,128

Source: Feasibility study 2018 & market survey 2020 by Shafa Agro Ltd

Based on the above Table 7, the company projects sales in year two (2022) to increase by 21.4% which is a very remarkable growth. The above impressive performance is attributable to increased number of days in milk attributable to good cow husbandry and increased selling price in tandem with inflation rate. Similarly the forecast for year 2023 indicates an increase of sales by approximately 10% over that of year 2022 due to increased number of cows in milk and selling price per unit . On the other hand production volume for year 2024 indicates an increase of sales revenue by 10% compared over the sales record of to the Year 2023 attributable to increased productivity per cow owing to good nutrition provided under the TMR system. Similarly the sales revenue for year 2025 have been projected to increase by about 10% over that of year 2024 attributable to increased number of days in milk enhanced by good nutrition and the higher quality of natural genetic makeup of Holstein cows breed. It is estimated that an average of 30 litres of milk per day per cow will be produced throughout the year. The overall sales are projected to be impacted in addition to volume growth by escalating selling price of milk by 4% per annum in tandem with the inflation rate of the country.

In order to boost our sales the company will respond quickly to customer's needs and improve the products to meet their needs. The job of selling the company products will go down to the direct contact sales efforts of company's staff. The key company's strategy to reach its customers will be to integrate product development, marketing and promotional efforts. Well in-advance of implementation of a promotional campaign, all front office staff will be trained in selling techniques and attributes of the product to be promoted or marketed.

In order to build a good image of our company in a consistent way the following documents/tools will be developed:

**Marketing Strategy:** This will contain corporate brand strategy which will involve development of brand attributes and positioning statements; products strategy involving their development and differentiations; and products delivery and customer service strategy which will include staff training on customer services and customer oriented culture.

**Marketing Guide:** The guide among others will include information on promotional checklist, display techniques, important data on the company and its marketing plan. The guide will also contain the company standard for colors, logos, font etc.

## **8.0 Operations**

### **8.1 Treasury operations**

The company will adopt Treasury function as it is crucial for the medium and long-term and risk management of the company: It is critical in the short term since the company will have limited experience in investing prudently huge amounts of money in financial instruments. The company will invest the revenue funds and earn income. The company's Treasury staff will be required to demonstrate high level of skills in:

- Management of liquidity
- Interest rate risk management
- Pricing and investment

The number of money market instruments is very limited; existing ones includes commercial paper, and treasury bills. Efficient treasury operations should aim at:

- Ensuring adequate availability of funds at competitive prices
- Financial Risks are identified and managed
- Excess funds get optimum returns
- The company gets best terms in its finances
- Effective communication on the finances of the company to the Directors, regulators and Shareholders.

## **9.2 Human resources**

### **(a) Staffing levels**

The company will be managed by professionals in livestock and in particular dairy industry, finance, law and management general. It is planned that a total of 23 skilled employees of different categories will be hired in the first year of which a maximum of 4 employees will be foreigners. Progressively the company will increase its employees' level to 28 by the fifth year. In addition the company will hire an estimated 60 casual laborers to work on the farm land and raw materials and finished goods storage facilities and any other tasks of casual nature. The human resources (skilled) requirement of the company during the first five years of operations is as indicated in table 8 below.

**Table 8: Staff Requirements**

Job Title	2021	2022	2023	2024	2025
Managing director	1	1	1	1	1
Dairy Farm Manager	1	1	1	1	1
Chief Financial Officer	1	1	1	1	1
Accountant	2	2	2	3	3
Internal Auditor	1	1	2	2	2
Human Resource Manager	1	1	1	1	1
Legal Officer	1	1	1	1	1
IT Officer	1	1	1	1	1
Sales & Marketing Officer	1	1	2	3	3
Tractors & Equipment Operators	2	2	2	2	2
Administrative Driver	1	2	2	2	2
Production Manager	1	1	2	2	2
Procurement Officer	1	1	1	1	1
Engineer	1	1	1	1	1
Quality Control Officer	1	1	1	1	1
Electrical Technician	1	1	1	1	1
Water technician	1	1	1	1	1
Security Officer	1	1	1	1	1
Cashier	2	2	2	2	2
<b>TOTAL</b>	<b>23</b>	<b>23</b>	<b>26</b>	<b>28</b>	<b>28</b>

Source: Research Construct, August 2020

The manpower is expected to be recruited from the local market as there is ample skilled and experienced labor of the above categories of in the local market of Tanzania.

### **(b) Recruitment**

The recruitment process will involve advertising in major English and Swahili newspapers to ensure a maximum number of applicants for all positions. A short list will be prepared based on the type of degree or diploma awarded and work experience particularly in dairy milk farming and production and finance. In order for the company to start operations at a big scale, the recruitment team will target qualified and highly skilled staff from dairy milk industry in particular production, processing and marketing and financial sector and local labour market. Interviews for Senior Posts that include the Managing Director, Operations Manager, Chief Internal Auditor and the Finance Manager will be conducted by a panel consisting of proposed Board members and experts in dairy, agriculture, engineering, finance, and marketing. The Managing Director will be recruited ahead of other Senior officers and will participate in the recruitment of the other staff.

### **(c) Training Programs**

Shafa Agro Ltd will develop a comprehensive training program for its staff in all departments. Since training is an expensive undertaking, the company will as much as possible utilize internal sources of funds and where inevitable look for donors to finance its training programs. The training programs will be developed on the basis of addressing specific staff requirements and related needs in order to equip staff with the necessary skills/knowledge needed to perform well and enable the company to realize its goals and objectives. The trainings will also be provided to appointed distributors and agents on product development, sale and after sale services.

Shafa Agro Ltd will conduct staff training on the following areas

- Mission, Vision, ethics and philosophy of the company
- Dairy operations in particular farm operations and milk processing
- Milk production technology
- Product development

- Delinquency and risk management
- Financial Management
- Marketing and outreach techniques
- Treasury Management
- Shafa Agro Ltd. Policies
- Corporate Governance and Financial analysis for Board members
- Risk Management and Compliance
- Relationship marketing
- Managerial skills development and change management
- Any other courses relevant to dairy farming and agro business.

All newly hired staff will be required to undergo field training and attachment for a minimum of 30 days. At the completion of the attachment the staff is expected and will be tested in their ability to:

- Explain products and services provided by the company
- Explain practical procedures for recruitment of clients
- Be able to sell the products of the company

### **8.3 Staff evaluation policy**

Each year, Shafa Agro Ltd will carry out staff performance evaluation exercise and staff will be evaluated on four areas of performance;

- Employees performance in achieving company's objectives

- Employees demonstration of business related competences
- Employees potential for adopting to business growth
- Employees creativity and innovation

The Board of Directors shall introduce an Excellency Award to be granted to employees who demonstrate exceptional performance that exceeds expected job performance.

#### **8.4 Promotions/ Appointments**

The company's staff appraisal system will be linked to pay and promotions. Therefore appointments and promotions shall be based on merit as evidenced by individual knowledge, skills, appropriate experience and potential to perform at the higher level.

#### **8.5 Information technology**

Information technology is a key to support business development and increase the company's efficiency and effectiveness in providing services to its customers. During the first five year period, SHAF A Agro Ltd will strengthen automation of all its operations. Automation and availability of appropriate software will enhance the company operations.

The automation of the company is expected to achieve series of objectives that includes;

- Create competitive advantage of the company
- Create efficient management system of the company
- Improve customer service

## **8.6 Accounting Operations**

The performance of the accounting operations depends on the availability of qualified accountants, tools, accounting manuals and high level of integrity of accounting staff. In carrying out its operations the company will do the following

- Recruit highly qualified and Experienced Finance Manager/Chief Financial Officer
- Purchase and use an automated accounting system
- Develop budget monitoring and enforcement tool
- Develop and have in place fixed assets register
- Develop an Accounting Manual
- Regular in-house training for accounting and other relevant staff

## **8.7 Internal Audit and External Audit**

The company will recruit a qualified and experience internal auditor to assist the Board and Management of the company in the discharge of their oversight management and operating responsibilities through independent audit designed to evaluate and promote the system of internal control including effective and efficient operations. The Internal Audit department will expand as the company grows hence it will start as a one person department. The Audit Committee of the Board of Directors will review quarterly audit reports and report the same to the full Board. In order for the internal audit function to assist the company to achieve its objectives, the following instruments and actions will be taken into consideration

- Develop an internal audit manual
- Develop internal audit reporting system
- Develop an internal audit quality assurance system
- Train staff in company audit competencies

External auditors will be appointed by the Shareholders and perform their functions as mandated. The internal auditor has a role to provide post external audit support by monitoring compliance by management as per observations of the external auditors. The Internal Auditor is also tasked with advising the Audit Committee on recommendations and observations of the external auditors.

## **8.8 Compliance**

Dairy farming and Agro business is governed by laws and regulations which address issues such as conservation of environment, production technology, product quality, food safety, promotion of agro based industries and livestock or agricultural product development etc. In the Tanzanian context large scale mixed farming involving dairy and/or crop farming and food production and business is regulated by such laws as the Land Use Planning Act,2007, Village Land Act 1999, Land Act, 1999 R.E 2004, Tanzania Investment Act, 1997, and Land Acquisition Act ,1967 to mention a few. Additionally the Tanzania Bureau of Standards (TBS) regulates regulate the quality, and safety of food products under the relevant laws and regulations. Formerly this role was under the Foods and Drugs Authority (TFDA).

Shafa Agro Ltd is in good standing with relevant regulatory authorities and plans to continue to comply with these laws and regulations and in recognition of the above fact the company plans to have well established compliance system. Shafa Agro Ltd also will continue to comply with other statutory requirements of doing business such as Tax laws and regulations, Environmental laws, Social Security Act etc.

Shafa Agro Ltd plans to establish a compliance function monitoring plan and the function will be headed by the Managing Director. The Managing Director will assign one of the staff to closely monitor the level of compliance by the company. Quarterly compliance monitoring reviews will be conducted internally by the company. Internal audit reports, Ministry of Livestock and Fisheries examination reports and External Auditors reports will continuously be used to improve the level of compliance.

## **9.0 Corporate Governance**

The development of proper governance practices for the company is one of the prerequisites for maximizing shareholders value and achieving its mission. The Governance structure entails;

**9.1 Legal framework:** The company will apply for renewal or expansion of a license to undertake mixed farming and agro based activities, produce fresh dairy milk and processing and sale of fresh dairy milk under the relevant laws as indicated in the Compliance section of this business plan and will be required to operate in compliance with Land, food quality and safety and Business laws and regulatory requirements and other laws of the United Republic of Tanzania.

**9.2 Board Composition:** All members to the Board will be non-executive except the Managing Director. The positions of Board Chairperson, Vice Chairperson and chairpersons of Committees will be held by non-executive board members.

**9.3 Board operations:** Meetings processes, formation of committees and sub committees and delegation of authority will ensure effectiveness of the Board of Directors in creating a profitable and sustainable business.

**9.4 Shareholders control:** This will be done through Annual General Meetings which will be venue for making major decisions and shareholders representation will be observed.

## **10.0 Investments Policy**

The company will invest all excess liquidity in low risk assets. The investment policy which will be established by the Board of Directors will provide the basis for making decisions of such investments. The investment policy among others will be in such a way that any excess liquidity at any point of time will be invested prudently in low risk assets such as Treasury Bills and Bonds.

## **11.0 Risks analysis**

Risk is a measure of variability of company' business or returns from expected results or outcomes; consequently, it approximates the amount a company could theoretically lose rather than gauges the likelihood of losses. Thus, companies or businesses must assess the level of risk associated with their businesses or actions. The risks most pertinent to dairy farming that is proposed by Shafa Agro Ltd are mainly operational risks, and market risk.

Market risk, also known as price risk, is the risk that the value of a company's assets or liabilities will change as product prices, exchange rates, or other input costs vary.

Operational risk refers risks arising from operational problems such as fraud, thefts, incompetence on staff, system failure etc. resulting from nonobservance of controls or inappropriate internal control system. In addition

For those risks which are at the control of the company, Shafa Agro Ltd plans to have a clear and workable risk management strategy. In pursuing the risk strategy the company plans to establish financial regulations or Accounting manuals, Standard Operating Procedures manual Risk Management Framework, ICT Policy manual, Human Resources Manual and further appoint a Risk Management Coordinator who will be overseeing the risk management issues. With regard to risks with wider impact to the income, the regulators of the sector and policy makers have put in place mechanism to mitigate such risks.

### **(b) Market Risk**

Market risk is the possibility that the value of assets or liabilities will change because of ups or downs in their prices. The volatility of prices or returns on dairy farm products in particular fresh milk in which Shafa Agro Ltd is engaged are very inherent due to the perishability nature of the product. In order to mitigate this kind of risks the company will have in place cooling storage facilities that can keep or preserve fresh milk for longer shelf life. In recognition of this risk the company has set aside a sizable budget for purchase of milk cooling equipment (refer to section 14 -Investment & Capital expenditure of this report).

Another market risks relate to falling revenues due to reduced demand or price of milk in the market which may be caused by competitors undercutting prices or unfavorable general conditions of the economy. The company plans to mitigate this risk by having a hedging mechanism which will diversify the income earned from sales into other portfolio investment so that the returns in these

investment will cushion any losses resulting from low revenue due to falling prices or demand for commodities that Shafa Agro Ltd sells. In pursuant to this strategy the company will recruit necessary experts in particular the finance manager or outsource the same service with necessary knowledge in the aspects of financial management and portfolio management hence the functions of Treasury office under the Chief Financial Officer. The market risks associated with unfavorable foreign exchange rate or unfavorable input cost will be mitigated through hedging mechanisms such as locking purchase prices of inputs by entering into forward contracts with suppliers of inputs and foreign currency as well the functions which are the prerogatives of the Treasury office of the company.

#### . **(b) Operational Risk**

This risk results from climatic or weather changes which disrupts planting seasons and other activities in the agribusiness value chain. It also consists of noncompliance with internal controls, systems failures, and staff incompetence in discharging their responsibilities and incompatibility of technology. Since Shafa Agro Ltd plans to deal majorly in dairy farming products, operational risks also include adversity of climate or weather such as prolonged drought hence affecting growth of fodder and water supply which are important inputs to making of animal feeds (TMR) and for providing water for drinking, cleaning cow houses and for cooling off the animals and for processing of milk.

The company will mitigate this risk by adopting irrigation scheme for watering the foddors by using Center pivot method. In addition the company will build water reservoirs to store enough water for use by animals and other farming activities during dry spells when there is water shortage.

Similarly the prevalence of pests in a given season may cause negative impact to fodder growth and harvests hence negatively affecting dairy farming operations and financial returns. Pests and Termites are very significant risk to fodder because they destroy the fodder plants by eating the plant stocks. The company will ensure good pests management policy are in place and that relevant staff are properly trained on early detection of pests and how to control them as practicable as possible.

In order to minimize risks associated with incompetence or negligence of staff the company will adhere to provision of appropriate trainings both on job and developmental for its staff on constant basis. Training on other aspects of operations such as accounting, human resources, management etc will also be emphasized in order to mitigate operational risks associated with incompetence or low work skills on the part of employees.

Other significant operational risks include Climatic Changes (droughts, rains, floods etc) which affect fodder cultivation or planting operations such as delay of planting season, or inadequate rainfalls and floods with consequence of having less or no harvests which

in turn affects the quantity of fodder output. The company will make use of agricultural extension services to address all the above problems in time, also use of irrigation schemes will help mitigate risks associated with droughts spells.

Unreliability of electricity power supply which significantly affects smooth production and operations. To mitigate this risks the company will put in place a stand by generators for powering equipment and machineries as and when needed.

To mitigate operational risks the company further plans to employ and install modern and adequate machineries and equipment in its operations. This will ensure adequate production and processing capacity in tandem with demand of the market. Also provision of safety gears and observance of safety rules at work place will be done to mitigate occupational health and safety risks which are part of operational risks. The company offices will be well equipped with equipment such as printers, photocopier machine and other office furniture and fixtures, office telephone line, and internet communication facilities to make operations efficiency and secretive. There will be availability of company brochures and staff business cards particularly the marketing officers.

The company will always make sure adequate budgets are allocated to cost centers, profit centers and regional centers to cater for various office requirements, transport and communication etc.

## **12.0 REGULATORY REQUIREMENTS**

### **12.1 Business License**

The Company is incorporated under, and in accordance with, the companies Act of 2002. The Company's Memorandum and Articles of Association, as amended, will always be available for inspection at the Company's registered offices. The company is properly and duly licensed to carry on the business of mixed farming at Kidamali Iringa district. The business license no B3053937 was issued effective 20<sup>th</sup> March 2020 with expiry date of 18<sup>th</sup> March 2021.

### **12.2 Auditing**

The Companies Act 2002 requires a company to appoint independent auditors. The main objective of this law is to guide companies to appoint independent auditors that are recognized and registered by the National Board of Accountants and Auditors (NBAA). There

are currently a substantial number of audit firms registered by NBAA. The company has already appointed an auditor among the qualified auditors. The current Auditor of the company is Assad Associates of P.O Box 7286 Dar es salaam.

### **13.0 Project's Investment Cost & Financing Plan**

#### **13.1 The Proposed total Investment Cost**

The proposed total investment cost in respect of the dairy farming business consists of the Capital expenditures and working capital required for running the business amounts to approximately Tshs 43.3 Billion comprising of Capital expenditure Tshs 39.3 Billion, Working Capital Tshs 3 Billion and initial costs and contingency fund approximately Tshs 1 Billion .

#### **13.2 Financing Plan**

The total investment costs of Tshs 43.3 Billion is planned to be financed by long term loan with maturity of 10 years amounting to Tshs 42.3 Billion and shareholders' equity of approximately Tshs 1 billion. Below are key capital expenditures of the proposed dairy farming business as extracted from the feasibility study which was conducted in mid-2018.

#### **13.3 Investment Capital Expenditure**

Capital is an estimated value and includes construction, water reticulation, water storage, livestock handling, water troughs, feed bunks and bulk power and water supply.

The following costs are specific to the proposed Dairy farming business at Kidamali Farm and have been collected in order to provide a basis of projecting costs and other financial data of this business plan. Similarly the Operational expenditure, staff budget and other related costs have been used as key assumptions in projecting financial statements of the business plan.

**Table 9: Capex for Tractors & Implements**

<b>Tractors and Implements</b>	<b>Units</b>	<b>Unit Price in USD</b>	<b>Total in USD</b>	<b>Total in Tshs</b>
Tractor 4x4 125kw Cab	2	115,384.62	230,769.23	539,999,998.20
5 Tine Ripper	2	7,692.31	15,384.62	36,000,010.80
Off Set Hydraulic Discs	2	11,538.46	23,076.92	53,999,992.80
Kongskilder with Hydraulic Opening	1	11,538.46	11,538.46	26,999,996.40
Tractor 85kw 4x4	4	42,307.69	169,230.77	396,000,001.80
6 Row Maize Planter	1	15,384.62	15,384.62	36,000,010.80
Manure/ Lime/Fertiliser Spreader	1	26,923.08	26,923.08	63,000,007.20
Crop Sprayer ( Boom Type 2500lts)	1	9,230.77	9,230.77	21,600,001.80
Fine Seed Planter	1	103,846.15	103,846.15	242,999,991.00
Fertiliser Spreader (6600lt)	2	615.38	1,230.77	2,880,001.80
12mt Boom Sprayer	4	3,076.92	12,307.69	28,799,994.60
Trailed Mower	1	13,846.15	13,846.15	32,399,991.00
Slasher	4	26,923.08	107,692.31	252,000,005.40
PTO Driven Hay Rake	1	4,615.38	4,615.38	10,799,989.20
Wheel Hay Rake	1	19,230.77	19,230.77	45,000,001.80
Forage Harvester	1	10,769.23	10,769.23	25,199,998.20
1.2 Mt Round Bailer with nett option	1	50,000.00	50,000.00	117,000,000.00
Square Bailer	1	3,461.54	3,461.54	8,100,003.60
Flat Bed Trailer 4 wheel	2	3,846.15	7,692.31	18,000,005.40
Flat bed Trailer 2 wheel	2	3,846.15	7,692.31	18,000,005.40
Maize Tipper Trailers	4	7,307.69	29,230.77	68,400,001.80
Combine Harvester ( Silage Type)	1	346,153.85	346,153.85	810,000,009.00
TLB	1	50,000.00	50,000.00	117,000,000.00
12 Cube Mixer Wagon	2	57,692.31	115,384.62	270,000,010.80
<b>Total</b>			<b>1,384,692.32</b>	<b>3,240,180,028.80</b>

**Table 10: Capex for Dairy Milking & Cooling Equipment**

<b>Milking and Cooling Equipment</b>	<b>Unit</b>	<b>Unit Price (USD)</b>	<b>Total(USD)</b>	<b>Total (Tshs)</b>
Point Rotary Parlour	66	9,330.00	615,780.00	1,440,925,200.00
20,000Lt Bulk Tanks	2	92,000.00	184,000.00	430,560,000.00
100 KVA Generator	1	40,000.00	40,000.00	93,600,000.00
Plate Cooler	1	54,166.67	54,166.67	126,750,007.80
Activity Metre Repeating Receiver	10	2,300.00	23,000.00	53,820,000.00
Activity Metre Electronic Tags	1000	73.00	73,000.00	170,820,000.00
<b>Total For Equipment</b>			<b>989,946.67</b>	<b>2,316,475,207.80</b>

**Table 11: Capex for Buildings & Infrastructures**

<b>Building &amp; Infrastructures</b>	<b>USD</b>	<b>Tsh (ex rate Tshs 2340/USD)</b>	<b>\$2,340</b>
Dairy Milk Parlour 66 unit rotary -Complete steel handling facilities/spray race/full roof	730,769.23	1,709,999,998.20	
Complete Cow housing	2,461,538.46	5,759,999,996.40	
Heiffer paddocks 6-23 months-Open Paddock system	307692.2	719,999,748.00	
Calf Facility 0-6months , Crate and pen system	269230.77	630,000,001.80	
Maternity and sick and lazy facility	115,384.62	270,000,010.80	
Feed Station, silage bunkers, storage shed	1,384,615.38	3,239,999,989.20	
Small buildings and structures, Bio security/Fence/workshop/staff canteen/Refuse	653,846.15	1,529,999,991.00	
Bulk earthworks for Dairy complex	423,076.92	989,999,992.80	
Main Access roads to and from Dairy complex to main road	153,846.15	359,999,991.00	
Bulk electrical system (incl feed processing & 850 Kva Transformer & Complex reticulation )	365,384.62	855,000,010.80	
Bulk water storage (not Dam only emergency 2100cubic meters)	250,000.00	585,000,000.00	
Manure handling facility( collection/separation/pump liquids to fields/compact maker)	288,461.54	675,000,003.60	
	<b>7,403,846.04</b>	<b>17,324,999,733.60</b>	

**Table 12: Capex for Cow Housing Equipment**

Housing Equipment Required	Unit	Unit Price(USD)	Total(USD)	Total (Tshs)	2340
Cow Swinging Brushes	16	920.00	14,720.00	34,444,800.00	
Cooling Fans	32	2,300.00	73,600.00	172,224,000.00	
			<b>88,320.00</b>	<b>206,668,800.00</b>	

**Table 13 Capex for Livestock**

	Units	Unit Price	Total (USD)	Total(Tshs)
Livestock	1000	2,083.33	<b>2,083,330.00</b>	<b>4,874,992,200.00</b>

**Table 14: Working Capital for Yellow maize silage preparation**

Yellow Maize Silage	Ha		TOTAL(USD)	Total (Tshs)
Yellow Maize Seed (Silage Variety)	223		24,530.00	57,400,200.00
Fertiliser 4:3:4+ Zinc	223		50,175.00	117,409,500.00
Calcitic Agricultural Lime	223		80,280.00	187,855,200.00
Spray Program	223		31,591.67	73,924,507.80
Diesel	223		6,968.75	16,306,875.00
Harvest and Packing Cost	223		71,806.00	168,026,040.00
Silage Inoculant	223		7,325.00	17,140,500.00
Slage Plastic (8x300	223		6,400.00	14,976,000.00
Total Coast Excluding Labour			<b>279,076.92</b>	<b>653,038,822.80</b>

**Table 15: Working Capital for Alfa Alfa planting & Preparation**

<b>Planting Requirements for Alfalfa</b>	<b>Ha</b>		<b>Total(USD)</b>	<b>Total (Tshs)</b>
WL711 Lucerne seed	100		40,833.33	95,549,992.20
Crop Sprays	100		7,291.67	17,062,507.80
Fertiliser Super Phosphates	100		36,666.67	85,800,007.80
Fertiliser potassium Phosphate	100		9,375.00	21,937,500.00
Diesel	100		2,333.33	5,459,992.20
Electricity	100		50,000.00	117,000,000.00
			<b>146,500.00</b>	<b>342,810,000.00</b>
<b>Table 16: Working Capital for Planting Rhodes Fodder</b>				

<b>Planting of Rhodes Requirements</b>	<b>Ha</b>	<b>Commodity</b>	<b>Total (USD)</b>	<b>Total (Tshs)</b>
Rhodes Seed	124		31,000.00	72,540,000.00
Crop Sprays	124		7,750.00	18,135,000.00
Fertiliser 4:3:4+Zinc	124		18,600.00	43,524,000.00
Fertiliser LAN	124		8,556.00	20,021,040.00
Agricultural Calcitic Lime	124		44,640.00	104,457,600.00
Diesel	124		64,448.00	150,808,320.00
			<b>116,994.00</b>	<b>409,485,960.00</b>

**Table 17: Capex for Silos System**

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	<b>COST OF THE SILOS SYSTEM</b>	<b>Cost in USD</b>	<b>Cost in Tshs</b>
1	Silos structure & machinery system consisting of two 48' Dia - 10 Rings, 4.00" Wide Corrugation Standard Stiffend 40 Series Bin, One 24' -8 Ring 4" Wide Corrugation Standard 40 Series Wet Bin, several Galvanized Horizontal Conveyors, Bucket Elevator Dryers, Bucket elevator Cleaners, and Ring Top Dry Autoflow Grain Drying System.	850,000.00	1,989,000,000.00
2	Silo Foundation	480,820.00	1,125,118,800.00
	<b>TOTAL</b>	<b>1,330,820.00</b>	<b>3,114,118,800.00</b>

**Table 18:**

**Dairy Processing Factory**

	<b>USD</b>	<b>Tshs</b>
Machinery (Processing & packaging Buildings)	810,000.00	1,895,400,000.00
Buildings	1,190,000.00	2,784,600,000.00
Installation of machinery	50,000.00	117,000,000.00
<b>Total</b>	<b>2,050,000.00</b>	<b>4,797,000,000.00</b>

**Table 19: Milling Equipment**

	<b>USD</b>	<b>Tshs</b>
Equipment & machinery	825,000	1,930,500,000
Warehouse	621,573	1,454,480,000
<b>TOTAL</b>	<b>1,446,573</b>	<b>3,384,980,000</b>

**Table 20: Distribution Trucks, Hauling trucks and Selling Point equipment**

	<b>Units</b>	<b>Tshs</b>
Refrigerated (cold room) Trucks (20 Tons)	4	900,000,000.00
Milk Distribution Vans	25	750,000,000.00
Selling Point Refrigerators	200	500,000,000.00
Maize grain Hauling trucks	2	175,000,000.00
<b>TOTAL</b>		<b>2,325,000,000.00</b>

**Table 21 : Capital Expenditure/Cost Summary**

<b>S/N</b>	<b>Nature of Cost</b>	<b>Amount(Tshs)</b>
1	Tractors & Implements	3,240,180,028.80
2	Buildings & Infrastructures	17,371,050,207.20
3	Cow Housing Equipment	206,668,800.00
4	Livestock	4,874,992,200.00
5	Milling Equipment & Warehouse	3,384,980,000.00
6	Dairy Factory (building & machinery)	4,797,000,000.00
7	Distribution & Hauling trucks & Selling Point refrigerators	2,325,000,000.00
8	Silo Foundation	1,125,118,330.00
9	Importation and installation of silos structure & machinery	1,989,000,000.00
	<b>TOTAL</b>	<b>39,313,989,566.00</b>

## **14.0 Financial Data & Analysis**

### **14.1 Financial Data**

The proforma Financial data used in this plan is based on the data collected from the feasibility study which was conducted in Mid 2018 by Derrylin Agricultural Services (DAS) with the assistance of ADC Design & Construction (Pty) LTD which were commissioned by Shafa Investment Tanzania which is an associate of Shafa Agro Ltd to undertake the same.

Shafa Agro Ltd was formed in 2<sup>nd</sup> March 2019 and currently operates at a significant scale and possesses assets and liabilities including fixed assets, has a number of staff on board, and the necessary capital enough to enable the company maintain operations at the current level and a gradual growth by capitalizing its earned profits.

**Capital:** Shafa Agro Ltd is currently capitalized at the tune of TZS 705.5 Million (as per Audited accounts at 31<sup>st</sup> December 2019) and plans to continue to capitalize its operations using internally generated funds as indicated in the projected financial statements annexed to this business plan text.

The following is a summary of statement of Comprehensive Income for year ending 31<sup>st</sup> December 2019 and Statement of financial position of the company as at 31<sup>st</sup> December 2019. According to the Audited Statement of comprehensive Income (Table 14 below), Shafa Agro Ltd has made progress in terms of increased profitability by 534% from the year 2017 to 2019. Similarly its assets base has grown significantly by about 164% from the position of year 2018 to that of year 2019. Regarding the Return on Investment, the company has maintained an average return of Investment of 2.85% between year 2018 and 2019. This impressive trend appears to be a result of good management of business and committed leadership in steering the company for growth which in turn can be counted for future prospects of the company

**Table 22: Statement of Financial Position as at 31.12.2019**

ASSETS	TZS
Non-current Assets	
Property plant & Equipment	1,125,158,948
Biological assets	510,479,270
Current Assets	
Inventory	55,921,500
Other receivables	3,202,000
Cash & Cash Equivalents	71,732,300
	74,934,300
<b>TOTAL ASSETS</b>	<b>1,766,494,018</b>
EQUITY & LIABILITIES	
Share capital	250,000,000
Retained Earnings	(363,955,775)
Advance towards share capital	819,500,000
Long term Loan	946,777,102
CURRENT LIABILITIES	
Trade & Other Payables	114,172,691
	114,172,691
<b>TOTAL EQUITY &amp; LIABILITIES</b>	<b>1,766,494,018</b>

Source: Shafa Agro Ltd Audited Financial Statement as at 31/12/2019

**Table 23 Statement of Comprehensive Income for year 2019**

	TZS
Revenue	8,517,600
Direct and Other related costs	(309,856,975)
	(301,339,375)
Add Other income	26,339,510
	(274,999,865)
Operating Expenses	
Administrative Cost	(866,887,780)
Financial Cost	(2,267,132)
	(88,955,910)
Loss before tax	363,955,775
Less: Tax charge for the year	
Loss for the year	363,955,775

Source: Shafa Agro Ltd Audited Financial Statement for year 2019

#### **14.4 Dividends Policy:**

The declaration of dividends by the Board of Directors will depend on the performance of the company and shareholder approval. It is planned that a dividend payout policy of not less than 40% will be adopted.

**14.5 Depreciation:** The following rates have been used to compute depreciation expenses.

Item	Applicable Rate
	%
Computer & Office Equipment	33.3
Furniture & Fittings	12.5
Buildings, plants & Infrastructures	5
Milling Equipment	12.5
Dairy Factory Equipment & machinery	12.5
Silo Structures	12.5
Motor Vehicles	14.29
Cow Housing Equipment	12.5
Tractors & Implements	12.5
Electric Generator	12.5
Biological Assets	12.5

#### **14.6 Financial Analysis of Projected Financial Statements**

The purpose of the analysis of the projected financial statements is to compute financial ratios, perform trend analysis and other yardsticks that help determine whether the project/business is financially as well as commercially and economically viable in terms of liquidity, profitability, solvency and assets utilization.

The following are the key assumptions and main notes of the financial plan:

- Number of days in a month used is 30 days
- Annual growth of operating expenses other than salary and wages is 4% in line with adjusted inflation rate (that is 3.3% at beginning of August 2020 adjusted upward to 4% in the light of Covid 19 effects) for Non Food items in tandem with the National Bureau of Statistics Report for August 2020.
- Selling Price of packed and processed fresh milk at market is average of Tshs 3,000 per litre of milk in the first year (2021) thereafter escalating at 4% per annum in tandem with the inflation rate of the country
- Depreciation of fixed assets is computed on straight line basis
- Production of milk is average of 30 litres per day per cow which is equivalent to 10,950 litres per cow per annum (on a basis of 200 days in the first year and thereafter increasing by 5% per annum)
- Total number of cows to be milked per year is at average of 900 cows.
- Cost for planting of Rhodes, and Alfa Alfa fodder and cost of preparing yellow maize silage have been allocated to feed costs
- Repairs have been set at 2% of the book value of Shafa Agro Ltd.'s property, plant and equipment.
- The business will be financed by shareholders fund (equity) Tshs 1.069 Billion and Tshs 42.247 Billion long term loan (15 years) which accounts for 2.46% and 97.53% of capital structure respectively
- The interest on loan is pegged at 10% per annum
- Feed cost per litre of milk is Tshs 585.00
- Direct costs comprise Feed cost, labour, packaging, factory utility, and delivery among others as shown under the Projected Income statement

- Current liabilities (creditors) are projected to represent the operating and direct costs for one month.
- Debtors are projected to represent sales (turnover) for one month.
- Municipal levy represents 0.3% of turnover
- Salaries are escalated by 10% per annum
- No dividend distribution over the planning horizon
- Foreign Currency exchange rate is USD/TZS 2340 which is average rate prevailing on 7<sup>th</sup> September 2020
- Company assets consist of land, buildings, machineries, motor vehicles, cash, equipment and other assets financed by share capital and retained earnings of the business.
- All cash is assumed to be retained (Retained Cash profit) after payment of direct costs, fixed costs, salaries and taxes throughout the planning horizon i.e Year 2021 through Year 2025.
- This business plan horizon covers five years, (Year 2021 through year 2025)

#### 14.7 FINANCIAL PROJECTIONS

The following represent financial statements of Shafa Agro Ltd

##### SHAFAGRO LTD

##### Projected Income Statement

	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025
<b>Revenue</b>					
Litres produced	5,400,000	6,237,000	6,548,850	6,876,293	7,220,107
Milk sales	16,200,000,000	19,646,550,000	21,660,321,375	23,880,504,316	26,328,256,008
Livestock Sales	26,032,500	64,935,000	84,240,000	97,821,360	117,159,120
<b>Total Income</b>	<b>16,226,032,500</b>	<b>19,711,485,000</b>	<b>21,744,561,375</b>	<b>23,978,325,676</b>	<b>26,445,415,128</b>
<b>Direct Cost</b>					

Feed cost	3,159,000,000	3,648,645,000	3,831,077,250	4,022,631,113	4,223,762,668
Labour	1,263,600,000	1,459,458,000	1,532,430,900	1,609,052,445	1,689,505,067
Packaging	947,700,000	1,094,593,500	1,149,323,175	1,206,789,334	1,267,128,800
Utility	315,900,000	364,864,500	383,107,725	402,263,111	422,376,267
Delivery	631,800,000	729,729,000	766,215,450	804,526,223	844,752,534
Chemicals	11,945,700	12,542,400	13,169,520	13,827,060	14,518,413
Semen & AI Cost	156,211,380	164,024,242	170,585,212	188,070,190	197,473,693
Veterinary	234,318,240	246,034,152	254,106,778	264,271,049	274,841,891
Heifer & dry cow	979,916,418	1,019,113,075	1,059,877,598	1,102,272,702	1,146,363,610
<b>Total Direct Cost</b>	<b>7,700,391,738</b>	<b>8,739,003,869</b>	<b>9,159,893,607</b>	<b>9,613,703,225</b>	<b>10,080,722,943</b>
<b>Gross Margin</b>	<b>8,525,640,762</b>	<b>10,972,481,131</b>	<b>12,584,667,768</b>	<b>14,364,622,451</b>	<b>16,364,692,185</b>
<b>Operating Expenses</b>		-	-	-	-
Salaries	801,183,240	841,242,402	883,304,522	927,469,748	973,843,236
Fuel & Diesel	341,312,400	358,378,020	376,296,921	395,111,767	414,867,355
Telephone and communication	5,119,709	5,375,695	5,644,480	5,926,704	6,223,039
Stationeries & Printing	3,413,147	3,583,805	3,762,995	3,951,145	4,148,702
Local Travel	25,000,000	26,000,000	27,040,000	28,121,600	29,246,464
Electricity	68,262,831	70,993,344	73,833,078	76,786,401	79,857,857
Security	17,065,714	17,748,342	18,458,276	19,196,607	19,964,471
Insurance	25,598,570	26,878,480	28,222,412	29,633,526	31,115,202
Auditing & Legal	20,000,000	21,000,000	21,840,000	22,713,600	23,622,144
Postage	420,000	436,800	454,272	472,443	491,341
Repairs & Maintenance	51,197,117	53,245,002	55,374,802	57,589,794	59,893,386
Property tax	5,119,709	5,324,498	5,537,478	5,758,977	5,989,336
Bank charges	23,985,000	24,570,000	25,798,500	27,088,425	28,442,846
Municipal levy	48,678,098	59,134,455	65,233,684	71,934,977	79,336,245
Interest on infrastructural loan	4,167,085,030	4,032,966,463	3,884,803,929	3,721,126,842	3,540,310,625
Office Expense	12,000,000	12,480,000	12,979,200	13,498,368	14,038,303
<b>Total Operating Costs</b>	<b>5,615,440,566</b>	<b>5,559,357,306</b>	<b>5,488,584,549</b>	<b>5,406,380,923</b>	<b>5,311,390,552</b>

<b>Other Expenses</b>					
Amortized expenses	1,334,283,174	1,334,283,174	1,334,283,174		
Depreciation	3,271,371,588	3,271,371,588	3,271,371,588	3,271,371,588	3,271,371,588
<b>Profit before Tax</b>	<b>(1,695,454,567)</b>	<b>807,469,063</b>	<b>2,490,428,457</b>	<b>5,686,869,939</b>	<b>7,781,930,045</b>
Taxes	-	-	-	999,606,415	2,334,579,014
<b>Profit after taxes</b>	<b>(1,695,454,567)</b>	<b>807,469,063</b>	<b>2,490,428,457</b>	<b>4,687,263,524</b>	<b>5,447,351,032</b>
<b>NPM</b>	<b>-10.45%</b>	<b>4.10%</b>	<b>11.45%</b>	<b>19.55%</b>	<b>20.60%</b>
<b>ROA</b>	<b>-4.09%</b>	<b>1.97%</b>	<b>5.95%</b>	<b>10.45%</b>	<b>11.25%</b>
<b>ROE</b>	<b>271%</b>	<b>445%</b>	<b>93%</b>	<b>64%</b>	<b>43%</b>

**SHAFA AGRO LTD**

**Projected Balance Sheet - Year 2021 -2025**

**(CURRENCY TZS)**

	<b>Year 2021</b>	<b>Year 2022</b>	<b>Year 2023</b>	<b>Year 2024</b>	<b>Year 2025</b>
<b>Assets</b>					
<b>Current Assets</b>					
Cash	462,295,392	427,514,413	2,075,692,828	4,586,423,136	7,857,240,952
Stock/Inventory	927,629,943	4,756,167,406	8,502,859,336	12,070,602,178	15,438,604,802
Debtors	1,344,600,000	1,630,618,000	1,797,780,000	1,982,040,000	2,185,224,000
Prepaid Expenses	2,668,566,347	1,334,283,174	-	-	-
<b>Total Current Assets</b>	<b>5,403,091,682</b>	<b>8,148,582,992</b>	<b>12,376,332,163</b>	<b>18,639,065,314</b>	<b>25,481,069,754</b>
<b>Fixed Assets</b>					
<b>Buildings, Plants &amp; Infrastructures</b>	22,361,774,131	22,361,774,131	22,361,774,131	22,361,774,131	22,361,774,131
<b>Office Equipments &amp; Computers</b>	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000
<b>Furniture, Fittings</b>	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
<b>Biological Assets</b>	4,874,992,200	4,874,992,200	4,874,992,200	4,874,992,200	4,874,992,200
<b>Tractors&amp; Implements</b>	3,240,180,028	3,240,180,028	3,240,180,028	3,240,180,028	3,240,180,028

<b>Distribution &amp; milling equipment</b>	2,430,500,000	2,430,500,000	2,430,500,000	2,430,500,000	2,430,500,000
<b>Electric Generator</b>	28,000,000	28,000,000	28,000,000	28,000,000	28,000,000
<b>Housing equipments</b>	206,668,000	206,668,000	206,668,000	206,668,000	206,668,000
<b>Factory Machinery</b>	2,012,400,000	2,012,400,000	2,012,400,000	2,012,400,000	2,012,400,000
<b>Milking &amp; Cooling equipments</b>	2,316,475,207	2,316,475,207	2,316,475,207	2,316,475,207	2,316,475,207
<b>Motor vehicles</b>	1,825,000,000	1,825,000,000	1,825,000,000	1,825,000,000	1,825,000,000
<b>Total Fixed Assets</b>	<b>39,313,989,566</b>	<b>39,313,989,566</b>	<b>39,313,989,566</b>	<b>39,313,989,566</b>	<b>39,313,989,566</b>
Less: Accumulated Depreciation	3,271,371,588	6,542,743,177	9,814,114,765	13,085,486,353	16,356,857,942
<b>Total Assets</b>	<b>41,445,709,660</b>	<b>40,919,829,382</b>	<b>41,876,206,964</b>	<b>44,867,568,527</b>	<b>48,438,201,379</b>
<b>Liabilities and Owner's Equity</b>					
Current Liabilities	1,105,145,000	1,186,734,000	1,215,784,000	1,246,660,000	1,277,536,000
Total Current Liabilities	1,105,145,000	1,186,734,000	1,215,784,000	1,246,660,000	1,277,536,000
Loan Payable	40,966,519,227	39,551,580,886	37,988,480,011	36,261,702,049	34,354,107,870
Total Non Current Liabilities	40,966,519,227	39,551,580,886	37,988,480,011	36,261,702,049	34,354,107,870
<b>Total Liabilities</b>	<b>42,071,664,227</b>	<b>40,738,314,886</b>	<b>39,204,264,011</b>	<b>37,508,362,049</b>	<b>35,631,643,870</b>
<b>Owner's Equity</b>					
Paid Up Share Capital	1,069,500,000	1,069,500,000	1,069,500,000	1,069,500,000	1,069,500,000
Accumulated Surplus(Deficit)	(1,695,454,567)	(887,985,504)	1,602,442,953	6,289,706,477	11,737,057,509
<b>Total Owner's Equity</b>	<b>(625,954,567)</b>	<b>181,514,496</b>	<b>2,671,942,953</b>	<b>7,359,206,477</b>	<b>12,806,557,509</b>
<b>Total Liabilities and Owner's Equity</b>	<b>41,445,709,660</b>	<b>40,919,829,382</b>	<b>41,876,206,964</b>	<b>44,867,568,526</b>	<b>48,438,201,379</b>

**SHAFa AGRO LTD**  
**PROJECTED STATEMENT OF CASHFLOW FOR THE YEAR (TZS)**

	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025
Beginning Cash Balance	3,000,000,000	462,295,392	427,514,413	2,075,692,828	4,586,423,136
<b>Cash Inflows</b>					
Income from sale	16,226,032,500	19,711,485,000	21,744,561,375	23,978,325,676	26,445,415,128
<b>Total Cash Inflows</b>	<b>16,226,032,500</b>	<b>19,711,485,000</b>	<b>21,744,561,375</b>	<b>23,978,325,676</b>	<b>26,445,415,128</b>
<b>Cash Outflows</b>					
<b>Direct Cost</b>	<b>7,700,391,738</b>	<b>8,739,003,869</b>	<b>9,159,893,607</b>	<b>9,613,703,225</b>	<b>10,080,722,943</b>
<b>Investing Activities</b>					
New Capital Purchases					
Inventory Purchases					
<b>Operating Activities</b>					
<b>Fixed Operating cost</b>	<b>5,615,440,566</b>	<b>5,559,357,306</b>	<b>5,488,584,549</b>	<b>5,406,380,923</b>	<b>5,311,390,552</b>
Taxes	-	-	-	999,606,415	2,334,579,014
<b>Financing Activities</b>					
Loan Payments	5,447,904,804	5,447,904,804	5,447,904,804	5,447,904,804	5,447,904,804
Dividend Disbursed	-	-			
<b>Total Cash Outflows</b>	<b>18,763,737,108</b>	<b>19,746,265,979</b>	<b>20,096,382,960</b>	<b>21,467,595,367</b>	<b>23,174,597,312</b>
Net Cash Flow	(2,537,704,608)	(34,780,979)	1,648,178,415	2,510,730,309	3,270,817,816
Operating Cash Balance	462,295,392	427,514,413	2,075,692,828	4,586,423,136	7,857,240,952
<b>Closing Cash balance</b>	<b>462,295,392</b>	<b>427,514,413</b>	<b>2,075,692,828</b>	<b>4,586,423,136</b>	<b>7,857,240,952</b>

#### **14.8: Financial Analysis**

The financial plan (Annexed hereto as **Annexure A**) indicates that in Year One (Year 2021) the business will make a net loss of TZS 1.7 Billion representing approximately -10.5% net profit margin attributable to relatively low turnover due to low milk production on one part and higher interest expenses on loan as well as amortization of pre operational expenses on another part.

In Year Two (2022), there is a very remarkable improvement in operating results to net Profit of TZS 807 million which represents about 4% net profit margin attributable to increased turnover by approximately 21% and controlled fixed operating costs. The increased turnover is in turn due to increased selling price by 4% for milk products in line with inflation and increased output (volume) by 5% due to increased number of days in milk enhanced by good nutrition and husbandry of the cows under the TMR system.

In the same trajectory profits margins projections continue to exhibit a favourable trend whereby net profits in absolute terms is projected to grow to TZS 2.5 Billion in Year 3 (year 2023) representing an increase by approximately 208% compared to the results of Year Two (Year 2022). The above trend is likewise attributable to consistent increase in turnover by approximately 10%, reduced interest expenses on loan by 4% and favourable effects of relieved losses (deferred tax assets) in the amount of TZS 747 Million in Year 2023 versus TZS 242 Million relieved losses in year 2022. The increase in turnover is in turn augmented by increased selling prices of fresh milk products by 4% and increased output thanks to the TMR system adopted by the company which enhances higher output per cow coupled with higher productivity offered by the improved breed of the Holstein Cow breed.

Furthermore net profit margin in Year 2024 is projected to increase by 88% over that registered in Year 2023 due to absence of amortized pre operating costs amounting to TZS 1.33 Billion and positive effects of relieved losses (deferred tax assets) of TZS 706

Million and increased turnover by 10%. The net profit margin for year 2024 represents 19.6% of turnover. Likewise net profit margin is projected to grow by 16% in Year 2025 over the record of net profit margin in Year 2024 mainly attributable to increased turnover and decreased interest expenses on loan by 4.8%. The net profit margin for year 2025 represents 20.6% of sales or turnover.

According to the National Bureau of Statistics Report of June 2020, in the first quarter of year 2020 (January – March 2020) the value of Tanzania gross domestic product (GDP) increased by 5.7% compared to the corresponding quarter of year 2019. Given the current government efforts to improve the economy, it is optimistically expected that this growth rate will be sustained for longer period of time going beyond the year 2020. A consistent growth in net profit is an indication of good performance of the business which is also backed by economic growth of the country hence positively impacting on purchasing power of consumers of milk. On the other side, the Net Profit margins (percent of turnover) seems reasonable as it shows an upward trend rising from -10.45% in Year One (Year 2021) to 20.6% in Year Five (Year 2025) suggesting an impressive performance in terms of profitability of the business.

As regards to liquidity of the company, the financial projection indicates a healthy and increasingly stable cash position as it shows a good cash balance of approximately TZS 0.46 Billion at end of Year One (Year 2021) attributable to favourable performance of business in terms of profitability, thereafter remains slightly constant at about TZS 0.43 Billion at end of Year Two (Year 2022) and subsequently consistently growing to TZS 7.9 Billion at end of Year Five (Year 2025) which is a jump of approximately 1240% from the first year mainly attributable to increased profitability and retained cash thus guaranteeing stability in cash position. The above trend suggests that the firm's liquidity position is very healthy and that it will be able to settle its current obligations as and when they fall due.

On the Return on Equity, the projections indicate an upward trend at -2.71% in the first year, 445% in the second year (2022) due to increased profitability and a relatively small proportion of equity compared to debt in the financing hence pushing the ratio of return

to equity much higher. Subsequent to year 2023 the return on equity trends downward from 93% in year 2023 to 43% in year 2025 due to mainly increased equity as a result of internalization of profits hence pushing down the ratio. The above downward trend is also attributable to the fact that in the beginning the business projects to employ a substantial amount of debt relative to equity causing the ratio of return on equity high however as the business progresses it projects to utilize more internally generated funds to finance its operations in subsequent periods hence lowering the ratio of the return on equity progressively. On the other hand, the Return on Total Assets is projected at -4.09% in the first year and consistently rising to 5.95% in the third year and thereafter escalates to hit at approximately 11.3% in the fifth year owing to consistent increase in net profits.

The Net worth/Net Assets of the business are projected initially at TZS -0.63 Billion at end of the first year (Year 2021), considerably increasing to TZS 0.181 Billion at end of the second year due to increased profits consequently pushing up cash position which contributes to increased assets as all excess cash is projected to be retained. The Net Assets consistently is projected to rise to TZS 12.8 Billion at the end of the fifth year. The above trend is due to upward trend in cash positions which is driven by the increased profitability of the company.

Similarly the Total Assets are projected to be in the upward trajectory from TZS 41.4 Billion in year 2021 to TZS 48.4 Billion in the fifth year representing an approximately 17% growth. The growth in total assets is contributed mainly by increase in cash owing to increased profits, which are retained in the business.

From the above analysis it is obvious that the projections indicate a strong and consistent growth of the company.

### **15.0 Benefits of the Project/Business**

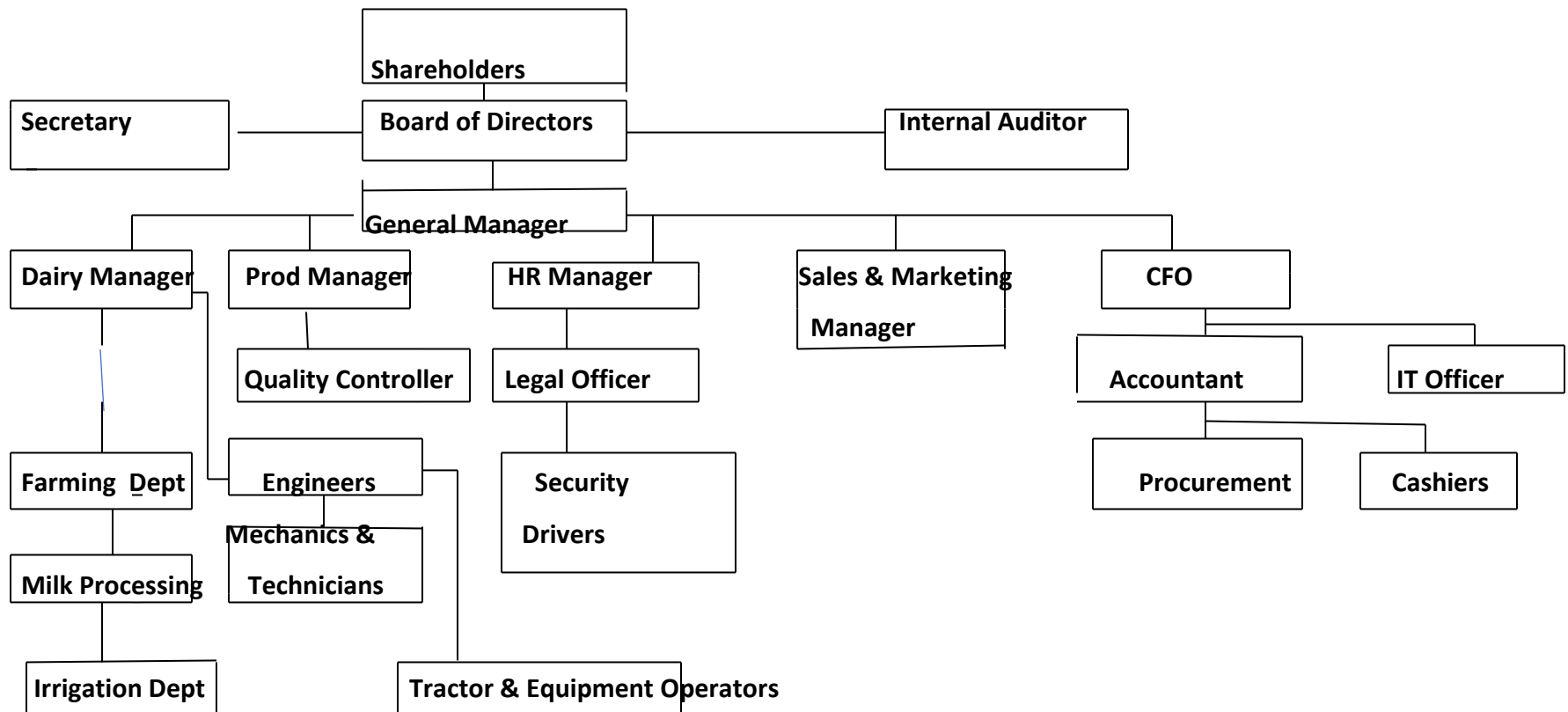
The following are the benefits associated with the business of dairy farming and milk production, processing and sale of same.

- The business will create employment to general population both skilled and unskilled cadres of staff
- Improved infrastructure such as electricity, roads will be possible within the village and communities which surround the program areas.
- The business will provide submarkets to both big traders and petty traders' products who will be supplying various goods and services such as utility, office stationeries, telecommunication services etc. to the company hence generating income to the said traders which in turn has an effect of uplifting their livelihoods and thereby contributes to poverty alleviation among the population
- Production and supply of milk by the company will provide a good source of healthy foods and thereby help build a population of healthy and energetic people
- In a long run and in the event milk will be exported to outside the country, the export of milk will generate and thereby boost the foreign currency reserve of The country.
- Increased productivity since the business will make use of professionals.
- Income that will be generated by the business will be subject to tax in the form of corporate tax, and development levies while the company will pay employment taxes out of payroll related to employees. The above taxes will accrue to central government and the local government as well thus enhancing government revenue and the economic growth.
- Increased awareness on environmental conservation thanks to awareness campaigns that will be propagated by Shafa Agro Ltd to small holders on importance of environmental conservation and modern dairy farming .

### 16.0. Organization Chart

The following is a planned organization chart or structure of Shafa Agro Ltd. (see appendix I)

#### Appendix I: SHAFAGRO LTD ORGANIZATION CHART(STRUCTURE)



## **17.0 Conclusion**

Based on the foregoing explanations and analysis it is obvious that the project is financially feasible as it indicates reasonable financial returns in terms of return on investment and return on equity as well as profitability which suggests it is sustainable and on the other hand it maximizes shareholders wealth. Furthermore the analysis indicates the company will have its total assets growing reasonably and consistently likewise the net worth growth is impressive suggesting an increase in wealth of the business hence the shareholders' wealth.

Besides being financially feasible the business is economically, technologically and socially feasible as it will provide employment opportunities to local people across the country. The business will also offer reliable market for petty traders including suppliers of stationeries, fuel and other supplies which will be used as inputs to business processes and operations hence contributing to uplifting the living conditions of people around the project or business areas and the country wide in general.

The business similarly will employ affordable and available fresh Milk production and processing technology including cultivation, storage, transport, and milling of maize grains, and processing and packing of the dairy fresh milk. Furthermore the business will pay taxes to the government and other levies to the local governments. Furthermore the business will incorporate small famers, peasants/villagers as partners/members to the business hence promoting them by way of skills development, economic empowerment and will provide other linkages to the economy in general hence boosting the economy of the communities and the country as a whole.

Based on the foregoing, It is reasonable to conclude that the products, regulatory environment, technological, economic, and social environment which have been assessed and analyzed appear to support the ongoing as well as planned activities or programs related to production, processing, packing and sale of dairy fresh milk which Shafa Agro Ltd is contemplating to undertake within five years of the plan starting Year 2021 through Year 2025. Furthermore the market assessment reveals that the size, depth and other related factors appear to support and are consistent with the plan in the target markets and therefore conclusively the project or business appears to be feasible in many material respects as detailed and explained in the foregoing paragraphs.

## **18. REFERENCE**

1. Delberg & Ministry of Livestock and Fisheries Report, Sector Analysis, Price, Cost, Revenue, Profitability & Human Capital chains in Tanzania Dairy sector, October 21<sup>st</sup> 2019
2. Derrylin Agricultural services & ADC Design& Construction, Potential Dairy Farm Investigation at Kidamali Farm Iringa Tanzania, June 20<sup>th</sup> 2018.
3. National Bureau of Statistic, 2<sup>nd</sup> Quarter of Year 2020 Report, August 2020
4. SAGCOT –Value chain Dairy, 2017
5. The Citizen news paper, Milk Production in Tanzania, May 30<sup>th</sup> 2018

