

# **FEASIBILITY STUDY**

**FOR**

**CASHEWNUT PROCESSING PROJECT**

***Prepared by:***

***TANZAMER AGRIBUSINESS LIMITED***

***P.O. BOX 14113,***

***Dar-es-salaam***

## **1.0 EXECUTIVE SUMMARY**

### **1.1 INTRODUCTION**

Tanzania is one of the major cashew-producing countries in Africa. Major cashew-growing areas in Tanzania include Mtwara -71%, Lindi 18%, Coast 8%. Ruvuma, and Tanga are minor producers. Cashew nuts are an important source of income for over 400,000 households in South-Eastern part of Tanzania who rely on cashew production to meet household income and food security

According to FAO, the production increased from 225,106 metric tons in 2019 to 232,681 metric tons in 2020. The cashew industry generates 10%-15% of the country's foreign exchange. cashew nuts exports from Tanzania amounted to nearly 825 billion Tanzanian shillings equivalent to 356.5million dollars in 2020. But the industry has challenges that face small-scale cashew nut processors such as use of inefficient local processing tools, less availability of appropriate equipment and machine for processing, lack of money to acquire new technology, and lack of investment and working capital., lack of market information on kernel, lack of reliable training facilities, Therefore the introduction of modern processing equipment, and improvement of domestic and international cashew nut market is highly commendable .

### **1.3 Mission Statement**

The company mission is to serve Cashewnuts export market with enthusiasm and integrity by maintaining highest quality standards and by providing the highest quality product. We will value our relationships with customers and hope to communicate our appreciation to them through our outstanding, guaranteed product quality, personal service, and

efficient delivery. Our commitment to our would-be customers and the country of Tanzania will be reflected through honest and responsible business

### **1.3 THE PROJECT**

The company is carrying on the business of Cashewnuts buying, processing, grading and exporting Cashewnuts to all over the world. It also deals in Cashewnuts roasting packing and selling in local market. This is a proposal about setting up a Cashewnuts processing plant that will sell its processed Cashewnuts to domestic and external buyers. The project therefore entails acquisition and installation of Cashewnuts processing machinery and equipment, setting up an organization to manage and run the processes and market the final output. The company has already identified a place for installation of Cashewnuts plant. The Investment cost of the whole project will be US \$**2,255,000** which will be used to procure the following

Land& Building	890,000
Plant	500,000
Vehicles	530,000
Furniture and fittings	25,000
Pre-expenses	10,000
Others	100,000
Working Capital	200,000
<b>Total</b>	<b>2,255,000</b>

## 1.4 PROMOTERS AND SHAREHOLDERS

Promoters of the proposal are Tanzamer Agribusiness Limited. This is a private limited liability company incorporated in Tanzania on 07/09/2022 with certificate of incorporation no 157737333. The authorized share capital of the company is TSHs 1,200,000,000 divided into 1000 shares, of TZS 1,200,000 TZS/each. The shareholders shares distribution is as follows

Name	NO of Shares	%age
Abdifatah Mohamed Ali	400	40
Suber Abdifatah Mohamed	400	40
Amina Mursam Adan	100	10
Amal Abdifatah Ali	50	5
Munira Mohamed Ali	50	5
<b>TOTAL</b>	<b>1000</b>	<b>100</b>

Tanzamer Agribusiness Limited has foreign shareholders and all has long experience in farming and cashewnuts processing.

## 1.5 The Market

The company intends to sell roast& raw Cashewnuts mainly for the export and local market. The marketing set-up that Tanzamer Agribusiness Limited intends to set up is two-pronged in its approach. On one side, the company will export its roast Cashewnuts beans to identified buyers around the world. For the domestic market, the company intends to import and distribute Cashewnuts at various points such as hotels, supermarkets, households etc. Cashewnuts is an internationally traded commodity. In Tanzania, the Tanzania Cashewnuts Board is the regulator

of the Cashewnuts industry and also markets the commodity through an organized Cashewnuts auction.

## **1.6 Environmental Aspects**

Processing of Cashewnuts has no visible and significant environmental impact/. In a controlled well-structured factory building the processes don't emit any harmful gases

## **1.7 Marketing and Distribution Channels**

For the exports, the company will use normal channels through shipping agencies after packing the Cashewnuts in secure, and at a later stage branded, packaging. The shipments will be destined to markets mainly where the Promoters have established links with prominent buyers. Among these buyers are the Cashewnuts processors abroad and some Cashew nuts agents. The domestic market will be served under an elaborate market arrangement that will keep the company involved with Cashewnuts. Initially, the company intends to process **3600 tons per annum**.

## **1.8 Pricing**

The price of Cashewnuts to the ultimate consumer has taken careful consideration of the level of development in the country, the purchasing power of the target market segment in the face of their individual consumer basket and the disposable income left after fulfillment of the needs. The cost of buying raw cashew nuts varies depending on the market. Generally, these prices will be affordable to the target market and promoters are confident that the entire output from their operations will be readily consumed.

### **1.9 Financial Profitability:**

Based on a set of assumptions given here-in the projects demonstrates a profitable trend in its future operations. The project's Income Statement and Cash flow indicate that Tanzamer Agribusiness Limited would be able to recoup the planned investment funds within the first four years. This indicates that the project is financially and economically viable.

### **1.10 The Implementation Plan:**

It is planned that the project will take 3 years from the time Tanzamer Agribusiness Limited commences implementation of the project to the time the plant commences commercial services. Tanzamer Agribusiness Limited shall appoint a team comprising of a competent building contractor, and engineers in order to achieve the set implementation time.

### **1.11 Developmental Linkages:**

Upon completion of the cashew processing plant shall be capable of creating the following:

- ◆ Promote increased availability of processed cashew nuts
- ◆ Generating foreign exchange through exportation of roasted cashew nuts
- ◆ Create employment for local indigenous people;

## **2.0 TECHNICAL AND TECHNOLOGICAL ASPECTS**

### **2.1 Location and accessibility**

The project will be located in Dar Es Salaam. Sponsors have been able to obtain a yard which is situated on **Plot No10 block D kimbwa Nindi, Mkuranga, Coast Region** which has a reasonable space that will accommodate the processing equipment. Wherever the processing factory will be located, it will be accessible and a well serviced area. The promoters cannot afford to locate the processing factory in an inaccessible area.

### **2.2 Raw Material Supplies**

The farmers of Cashewnuts will be the major source of the raw materials for the project. For, Tanzamer Agribusiness Limited the idea is to have the stocks of cashewnuts to be delivered to Dar Es Salaam. This will most likely be by road. There are a number of road transporters operating between Dar Es Salaam and the regions producing the cashew, and the promoters intend to utilize the one who will provide the services advantageously in line with their production and marketing schedules. The project will import materials required for processing Cashewnuts. These are normally supplied as a packaging material. Promoters will arrange for their importation from the selected suppliers.

### **2.3 Machinery and Equipment**

The project's production machinery and equipment including Cashewnuts machines will be imported from abroad. These will include Roasting machine, Packing Machines, steam boiler, cooking vessels, semi-automatic peeling machine, multi-color cashew kernel sorting machine,

husk winnowing machine, steam pipeline, hot oven, hand operated cutting machine, cashew peeling machine, filling machine, pieces separator, weighing machine, sealing machine, food grade, plastics, tubs, buckets, crates, bowl, and diesel generator set.

Promoters are already in contact with prospective equipment supplies and will be shipped once the proposal obtains the necessary clearance from the Tanzanian authorities. Quality of production equipment has been the promoters' insistence from the very beginning to ensure smooth take-off and operation of the project.

## **2.4 Production Process**

The primary process involved in Raw Cashew nuts sun-drying, steam boiling, cooling, cutting and separation, drying of kernel in the oven, cooling of kernels peeling of kernels grading and packing -cashew.

### **2.4.1 PROCESS FLOW**

#### **1. Steam Cooking:**

**Steaming:** The in-shell cashews are steamed under pressure to soften the shell. This causes the cashews inside to become loose and easier to remove in time.

#### **2. Shelling (or) Cutting:**

**Shelling:** Each cashew shell is split open longitudinally and the cashew inside is immediately taken out by hand.

#### **3. Drying System:**

**Drying:** The kernels after they are removed from the shells have to be dried in an oven at low heat for a few hours to loosen the skin which enables for easy peeling.

#### **4. Peeling System:**

**Peeling:** The skin (Testa) of each cashew is removed by Hand / peeling Machine and the cashew are simultaneously visually graded according to quality.

#### **5. Grading System:**

**Grading:** The whole cashew kernels are individually graded on the basis of shape, size and colour.

**6. Quality Inspection:** The cashews of each grade are inspected according to the present quality standards for that grade.

**7. Quality Control:** Our cashews are then put through a set of quality assurance measures, heating in an oven, metal detection, and dust aspiration and handpicking conveyor.

**8. Packing:** Our cashews are packed in 50-pound (22.68 kg) multilayer barrier pouches in a modified atmosphere of low oxygen and high carbon dioxide and nitrogen. These pouches are placed one each in a carton.

#### **2.4.2 Utilities**

It is expected to build a factory building that is well supplied in terms of all utility requirements of this project. This will include electricity and water supplies.

### **3.0 MANAGEMENT AND ORGANIZATION STRUCTURE**

The management of the entire project will entail the setting up of a Board of Directors and a Management team under a CEO who will oversee the day-to-day activities of the factory including marketing aspects of the processed Cashewnuts.

#### **3.1 Manpower requirements**

This is a labor demanding production process and therefore about 100 direct employments in the factory and overall operations will be required. Among the initial 100 people 10 will be in management.

### **4.0 THE MARKET**

**4.1** Cashews are widely cultivated in tropical climates of 20 African countries. The major raw cashew producing countries are Tanzania, Benin, Guinea-Bissau, and Ghana. The low processing capacity of cashews in Africa is a major cause of economic stagnation, a problem which cannot be overlooked today, 90% of the raw cashews traded in the international market come from these countries. A key challenge for cashew nut producing countries is the limited processing capacity of the market. The majority of cashew nuts harvested in Africa are exported uncooked, before being shelled in primarily two countries: India and Vietnam.

**4.2** Although the demand for the nuts has increased significantly, the supply is still limited. The majority of the traded kernels are roasted, salted, and packaged. In the developing world, cashews are consumed as a snack or ingredient in other products. Consumption of Cashewnuts is generally not a necessity and therefore it is a luxury to those who can afford and, in this case, it is limited to that market segment which frequents restaurants, hotels and shopping malls and a few individuals

who can purchase to cater for their Cashewnuts consumption needs in-house.

**4.3** Most African countries currently export their crop to India, Vietnam, and Cambodia. Other emerging developing countries, such as Ghana and Burkina Faso, have begun processing their own cashew nuts and selling them to a wide range of markets, including France. These producers can also access global markets, including Japan, China, and the UAE, where they can reap higher prices.

## 5.0 CAPITAL INVESTMENT AND FINANCING

The cost outlay for completion of the project is currently estimated at **US\$ 2,255,000** as below:

US\$

Land& Building	890,000
Plant	500,000
Vehicles	530,000
Furniture and fittings	25,000
Pre-expenses	10,000
Others	100,000
Working Capital	200,000
<b>Total</b>	<b>2,255,000</b>

The bulk of the cost outlay is towards purchase of land, vehicles and machineries.

### 5.1 PROJECTED FINANCING

It is intended that the project will be financed by the equity and loans as follows:

S/NO	SOURCE	FOREIGN	LOCAL	TOTAL
1.	Equity	2,255,000	-	2,255,000
	<b>Total</b>	<b>2,255,000</b>		<b>2,255,000</b>

## 6.0 FINANCIAL ANALYSIS

### 6.1 REVENUE ASSUMPTIONS

The basic assumption underlying the projected cashewnuts revenue and expenses are explained below:

### 6.2 BASIC ASSUMPTIONS

The agro- processing factory will have a capacity of processing cashewnuts of **about 3600 tons per annum**

### 6.4 INCOME CALCULATION

It is assumed that each plant will operate for 30 days a month or 365 days per annum. Income is therefore calculated as follows:

YEAR	1 YEAR 60	2- YEAR 80	3 -YEAR 100
Working Days /Annum	365	365	365
Number of Tons /Annum	2160	2880	3600
<b>INCOME (US\$)</b>	<b>360,000</b>	<b>480,000</b>	<b>600,000</b>

### 6.5 DEPRECIATION AND AMORTIZATION

ITEM	COST	RATE%
Land & Building	890,000	5
Motor vehicles	500,000	25
Machineries	530,000	12.5
Office Equipment & Furniture	25,000	12.5
Pre-operational Expenses	10,000	20
Total	1,955,000	

The Capital cost, depreciation, and depreciation charges have been calculated as follows:

## **6.6 Projected Profit and Loss Accounts**

Based on the capacity utilization level as outlined above, the company should realize a total turnover of about **US\$360,000** during the first year of operation rising to **US\$600,000** during the third year of operation and onwards.

## **6.7 Cash-flow Projects**

Cash flow projections indicate that Tanzamer Agribusiness Limited should be able meet its other obligations and future development without reverting to the shareholders for further financing. Cash flow projections confirm further that the proposed project is highly commercially attractive.

## **6.8 Social Economic analysis**

From a national point of view, the timely implementation of the project will lead to the following economic benefits: -

- The project will earn sufficient profits that will be beneficial to the promoters and the Government at large which will earn substantial company taxes on top of individual employee taxes. These will be besides the intermediate taxes benefits that the Government will collect from companies and individual along the value chain i.e., farmers/companies selling, packers and transporters of Cashewnuts
- The project will process Cashewnuts before they are exported thus adding value and therefore increase earnings from Cashewnuts exported. It therefore increases the foreign exchange inflows to the country. Moreover, the project will

provide a market for the output from the Cashewnuts farmers. Besides entrenching and adding purpose to the employment in Cashewnuts farming, the project will also provide more than **100** direct employment opportunities.

## **7.0 CONCLUSION AND RECOMMENDATIONS**

Analysis of the viability of the Project proposal to establish agro processing company of cashewnut proves that the proposal is financially viable and highly economically attractive. The project is promoted by a strong sponsor with the ability to manage the processing of cashewnuts and other activities of the company efficiently. The short implementation period combined with the fact that the proposed project can be delivered over a short period of time makes the Tanzamer Agribusiness Limited proposal highly attractive and ideal for supporting. Conclusively, it is recommended to offer a certificate of Incentives to the company to enable timely implementation of the tour project. It is also recommended to assist Tanzamer Agribusiness Limited in obtaining all other statutory requirements for the Project.

# TANZAMER AGRIBUSINESS LIMITED

## CAPITAL COST SUMMARY US\$

Land& Building	890,000
Plant	500,000
Vehicles	530,000
Furniture and fittings	25,000
Pre-expenses	10,000
Others	100,000
Working Capital	200,000
<b>Total</b>	<b>2,255,000</b>

# TANZAMER AGRIBUSINESS LIMITED FINANCING PLAN

**USD**

<b>S/NO</b>	<b>SOURCE</b>	<b>FOREIGN</b>	<b>LOCAL</b>	<b>TOTAL</b>
1.	Equity	2,255,000	-	2,255,000
	<b>Total</b>	<b>2,255,000</b>		<b>2,255,000</b>

# TANZAMER AGRIBUSINESS LIMITED

## DEPRECIATION SCHEDULE

**USD**

		Rate	1	2	3	4	5	6	7	8	9	10
Land & Buildings	890,000	5.00 %	44,500	44,500	44,500	44,500	44,500	44,500	44,500	44,500	44,500	44,500
Machinery and equipment	500,000	12.50 %	62,500	62,500	62,500	62,500	62,500	62,500	62,500	-	-	-
Motor Vehicles	530,000	25.00 %	132,500	132,500	132,500	132,500	-	-	-	-	-	-
Furniture & Fixtures	25,000	12.50 %	3,125	3,125	3,125	3,125	3,125	3,125	3,125	-	-	-
Preoperational expenses	10,000	20%	2,000	2,000	2,000	2,000	2,000	-	-	-	-	-
<b>Total</b>	<b>1,955,000</b>		<b>244,625</b>	<b>244,625</b>	<b>244,625</b>	<b>244,625</b>	<b>112,125</b>	<b>110,125</b>	<b>110,125</b>	<b>44,500</b>	<b>44,500</b>	<b>44,500</b>

# TANZAMER AGRIBUSINESS LIMITED

## REVENUE SCHEDULE

**USD**

<b>YEAR</b>	<b>1 YEAR</b>	<b>2- YEAR</b>	<b>3-YEAR</b>
	<b>60</b>	<b>80</b>	<b>100</b>
Working Days /Annum	365	365	365
Number of Tons /Annum	2160	2880	3600
<b>INCOME (US\$)</b>	<b>360,000</b>	<b>480,000</b>	<b>600,000</b>

# TANZAMER AGRIBUSINESS LIMITED

## PROJECTED PROFIT AND LOSS ACCOUNTS US \$

YEAR	1	2	3	4	5	6	7	8	9	10
Sales Revenue	360,000	480,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Less: Cost of Sales	144,000	192,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000
<b>GROSS PROFIT</b>	<b>216,000</b>	<b>288,000</b>	<b>360,000</b>	<b>360,000</b>	<b>360,000</b>	<b>360,000</b>	<b>360,000</b>	<b>360,000</b>	<b>360,000</b>	<b>360,000</b>
<b>Capital Costs</b>										
Depreciation	<b>244,625</b>	<b>244,625</b>	244,625	244,625	112,125	110,125	110,125	44,500	44,500	44,500
<b>Total capital cost</b>	<b>(28,625)</b>	<b>43,375</b>	<b>115,375</b>	<b>115,375</b>	<b>248,000</b>	<b>249,875</b>	<b>249,875</b>	<b>315,000</b>	<b>315,000</b>	315,000
<b>Profit Before Tax</b>	<b>(28,625)</b>	<b>43,375</b>	<b>115,375</b>	<b>115,375</b>	<b>248,000</b>	<b>249,875</b>	<b>249,875</b>	<b>315,000</b>	<b>315,000</b>	315,000
<b>Taxable 30%</b>	-	13,013	34,500	34,500	74,400	74,400	74,400	94,500	94,500	94,500
<b>Net Profit</b>	<b>(28,625)</b>	<b>30,362</b>	<b>80,875</b>	<b>80,875</b>	<b>173,600</b>	<b>173,600</b>	<b>173,600</b>	<b>220,500</b>	<b>220,500</b>	<b>220,500</b>

# TANZAMER AGRIBUSINESS LIMITED

## PROJECTED CASHFLOW

US\$

YEAR	0	1	2	3	4	5	6	7	8	9	10
<b>INFLOWS</b>											
Share Capital	2,255,000										
Depreciation		244,625	244,625	244,625	244,625	112,125	110,125	110,125	44,500	44,500	44,500
Net Profit		(28,625)	30,362	80,875	80,875	173,600	173,600	173,600	220,500	220,500	220,500
<b>TOTAL INFLOW</b>		<b>216,000</b>	<b>274,987</b>	<b>325,500</b>	<b>325,500</b>	<b>285,725</b>	<b>283,725</b>	<b>283,725</b>	<b>265,000</b>	<b>265,000</b>	<b>265,000</b>
<b>OUTFLOWS</b>											
Taxation		-	13,013	34,500	34,500	74,400	74,400	74,400	94,500	94,500	94,500
<b>TOTAL OUTFLOW</b>	<b>2,255,000</b>	<b>-</b>	<b>13,013</b>	<b>34,500</b>	<b>34,500</b>	<b>74,400</b>	<b>74,400</b>	<b>74,400</b>	<b>94,500</b>	<b>94,500</b>	<b>94,500</b>
<b>NET CASHFLOW</b>		<b>216,000</b>	<b>261,974</b>	<b>291,000</b>	<b>291,000</b>	<b>211,325</b>	<b>211,325</b>	<b>211,325</b>	<b>170,500</b>	<b>170,500</b>	<b>170,500</b>