

SHAYA GOOD FOOD INDUSTRIES LIMITED

PROJECT REPORT

ON

SETTING UP OF MANUFACTURING FACILITIES

FOR THE

SNACKS AND PACKAGED FOOD PRODUCTS

**Prepared by:
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Pongwe Industrial Area,
TANGA**

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This study covers the establishment of snacks and packaged food products processing plant in Tanga. These days the importance of snacks and packaged food products demand is increasing. Extruded snacks are mainly used as a major snack food item, especially in urban areas. Its acceptance in the rural areas is also steadily rising especially among the children and youth. Food products like snack food, bakery/confectionery categories are suitable and acceptable among all ages, occasions and places.

Though there is a huge demand for snack food in the country, there is no technology to produce high quality snacks at large scale, by which the demand of entire country is met. The products from this plant are intended to contribute towards the current supply locally and also act as import substitution on those which are imported from within East African and abroad based countries.

There is plenty of production of Banana, Cassava and potatoes in Tanzania, which are the ones of the main ingredients of the proposed snack food processing unit. This project not only boosts and encourages the agriculture sector (of Cassava Banana and Potatoes), but also boosts the income levels of the farmers and create employment for local Tanzanians.

1.2 THE PROJECT SPONSORS

The project sponsors are M/S Shaya Good Food Industries Limited whose shareholders and directors have vast experience in initiating multitude of projects / investments, the ones in question being inclusive. The main Shareholders of the company are Harshil Mukesh Lal (25% shareholding) and Shruti Harshil Lal (75% shareholding)

1.3 THE PROJECT

This report presents a full-fledged financial, and techno-economic analysis of the proposed integrated snacks and packaged food products processing plant to be set up / operated in Tanga to produce premium quality extruded snacks to be sold in the local and neighboring countries market. The plant will have a capacity to produce 2400 kg per plant per eight hours equivalent to 2.5 tons per eight hours of finished extruded snacks. The machinery / equipment to opted for will be of modern status, with appropriate technological set up, fully provided with all the necessary accessories. The attainable processing capacity levels will be at 60%, 70% and 80%&100% of the installed processing capacity of years 1,2, 3 and 4 respectively.

1.4 THE MARKET

The opportunity of the snack food business is in great potential as there are few producers exist in Tanzania and a few retailers and street outlets. The snack food market is represented by biscuits and corn-based products, corn cobs and still the market is not saturated. Over the past few years in Tanzania the demand for snacks in general has

been on the rise, causing a gap between demand and supply. An opportunity is opened up to set up plants to produce high quality snacks and packaged food products at optimum production level. The current extruded snacks and packaged food products market is made of retailers, hotels, restaurant and homemade hence causing a big demand for extruded snacks and packaged food products in Tanzania. The observance of these aspects will in turn enable the plant to secure its rightful market share for the products in question.

1.5 GLOBAL MARKET

The global extruded snacks market size was valued at USD 51.59 billion in 2019 and is expected to witness significant growth in the years to come. (From Internet). Large consumption of extruded snacks in round the clock meals by the consumers is a key factor boosting the market growth. Moreover, they are widely consumed in parties, small or large gatherings, entertainment centers, theaters, and various other places. Extruded snacks are also largely consumed by the customers during their free time, travel, and even when they are busy but hungry. These consumer trends are anticipated to boost the demand for extruded snacks over the forecast period

1.6 THE RAW MATERIALS

. The raw materials to be used will include: Potatoes, cassava, cassava, potato grits/rice/corn grits for extruded snacks, bananas for banana chips along with cooking oil, salt and flavors. The other key inputs will be the appropriate packaging material that will facilitate maintenance

of the packaged products to remain at a fresh status for an acceptable period of time.

1.7 ORGANIZATION AND MANPOWER REQUIREMENTS

The roles of the plant will be executed through three departments. Administration / Finance, Production and Marketing. The Heads of these departments and the project Manager will form the central operation core of the project. The initial work force has been estimated at 155 people.

1.8 PROJECT IMPLEMENTATION

The envisaged period for total project implementation is 3years.

1.9 INVESTMENT STRUCTURE

The total initial investment in fixed assets and working capital is estimated at **US\$ 3.0** million the breakdown of which is a follow.

ITEM	US \$
Fixed Assets	
Civil works	700,000
Machinery and Equipment	1,000,000
Vehicles	100,000
Furniture and Fittings	20,000
Pre-Operational expenses	180,000
Sub total	2,000,000
Initial working capital	1,000,000
GRAND TOTAL	3,000,000

1.10 FINANCING PATTERN

The total investment of **US\$ 3.0 million** shall be financed as follows

FINANCING PATTERN BREAKDOWN

SOURCE	US\$
<i>Fixed Assets</i>	
Equity	600,000
Long term loan (-)	2,400,000
Sub total	3,000,000
GRAND TOTAL	3,000,000

1.11 ECONOMIC ADVANTAGES

On the basis of the above account the analysis has overwhelmingly proved that the project is financially sound and techno-economically viable. Furthermore, the project has immense potential towards the earning of the badly needed forex earnings and substantial potential for job creating. This project also boosts farmers, transporters, local manufacturers of packing material, Salt and edible oil, which paves a way towards rapid industrialization in Tanzania. This project will contribute revenue in the form of Value added tax and all the other Government revenue like, SDL, PAYE, CITY LEVY, etc.

2.0 MARKET, MARKETING AND PLANT CAPACITY

2.1 GENERAL

The global snacks and packaged food products market size was valued at USD 51.59 billion in 2019 and is expected to witness significant growth in the years to come. Large consumption of extruded snacks is a key factor boosting the market growth. Extruded snacks are also largely consumed by the customers during their free time, travel, and even when they are busy but hungry. These consumer trends are anticipated to boost the demand for extruded snacks over the forecast period.

The current snacks and packaged food products market in Tanzania belongs to retailers, hotels, restaurants, and homemade. There are few local snacks and packaged food products manufacturers in the market that the consumers are aware of as most snacks are imported by retailers, outlets, hotels and restaurants. As there is lack of cold storage facilities and finance support in Tanzania, no big industries exist. Therefore, to capture the market share there is a need of heavy investment towards marketing and advertisement.

2.2 THE PRODUCT

These are snacks and packaged food products processed from agricultural products like Banana, Cassava and Potatoes and various ingredients such as vegetable edible oil, salt and flavor for taste. The products will be cheese balls, cheese curls, potato chips, and corn chips. They can be consumed as a snack, biting, or a supplement to a meal as flavoring and with tea and main course. The envisaged

products of the plant will be of a very high quality and will be marketed at extremely competitive price rates that are acceptable.

2.3 CURRENT MARKET STATUS

2.3.1 Market Target

Snacks and packaged food supplements are usually consumed by individuals of all ages. Consumption can take place in the homes, restaurants, hotels, social centers, schools and trip vehicles throughout the country. Moreover, they are widely consumed in parties, small or large gatherings, entertainment centers, theaters, and various other places. Hence the project will cater for the entire market from the working-class population, small businessmen and farmers, to the affluent community. Demand for extruded snacks is growing in the retail industry, which is expected to be one of the main drivers of the market over the next seven years. Increasing demand for snacks, growing demand for comfort food, and consumer preference for the attractiveness, taste and texture of a food product are the factors which cause the growing demand in the market

2.4 Supply

At present snack foods are supplied into Tanzania through local production and imports. The market of Tanzania is dominated largely by imported snacks. The present sources of snack food in Tanzania are two types. The local based processing plants and imports from East African Countries, India, Turkey, Malaysia, Dubai and other countries. In spite of having these sources, there appears to be a substantial

demand - supply gap for snack food in this country. These supplies are so easily marketed that there is hardly any form of outstanding efforts of advertisements being carried out for these products as compared with other categories of products like beverages. Unfortunately, imported snacks do not carry any certainty of quality and often have very short shelf life and high price. In the context of the above, therefore, with only few competitors in the country, the potential for successfully marketing the output/product is very high.

2.5 Market Potential

Based on the demand and supply situation prevailing in the country as narrated above, it can be concluded that there is a huge ready market in Tanzania for snacks like potato/cassava wafers, banana chips and extruded snacks like puffed balls, etc. Hence, the project sponsors need to worry only on how to tap this potential. Output can be disposed in the local market. The annual demand on this assumption works out to be 6.0 billion packets. Hence the demand for snack food is quite substantial.

2.6 DISTRIBUTION SYSTEM

The products will be distributed locally directly to sub-wholesalers and retailers using company motor vehicles. The latter will sell to other retailers and final consumers respectively.

2.7 ADVERTISEMENTS

On the basis of the market survey, it has been found that none of existing suppliers carries promotional efforts. This is an indication of the existence of un-satisfied demand. Nevertheless, in order to penetrate the market quickly and accrue position, the project will have to carry out proper advertisement efforts. The marketing and promotion of snacks and packaged food products in Tanzania is needed hence there is a need of allocating a heavy budget towards promotional activities.

2.8 PLANT CAPACITY

The proposed plant will have a capacity to process 300 kg per hour of different flavors of snacks and packaged food products. It is envisaged that the attainable processing capacities will range of 60%, 70% ,80% % 100% for years 1,2,3&4 – respectively.

2.9 MATERIAL AND INPUTS

Extruded snacks market is segmented based on type, raw material and manufacturing method. On the basis of type, the extruded snacks market is segmented into simply extruded, expanded, co-extruded. On the basis of raw material, extruded snack manufacturing includes Cassava, Potatoes, Banana, degermed corn grit edible vegetable oil and salt Corn flour, Vegetable oil, Salt, Flavors and Packing materials

3.0 CIVIL WORKS AND BUILDINGS

GENERAL

The facility is to be located in a suitable premise at plot No 644 and 645, Block N, Pongwe Industrial Area, Tanga City, Tanzania

3.1 ACCESSIBILITY OF THE SITE

The project site is accessible and it can easily be reached. It has full provision of all the basic necessities: Electricity and water.

3.2 DESIGN CONCEPT

The factory building will be properly designed with ample to cover all the functional spaces such as: Processing Hall, offices raw materials storage, and other social amenities space requirement.

3.4 Power Supply System

- **Main Power Supply**

It has power supply from the national grid prevailing in the Municipal. The standby generator will be needed to supply all the essential loads in and event of TANESCO power failure. For this reason, M/S SHAYA GOOD FOOD INDUSTRIES LIMITED will be forced to use its standby generator during times of Tanesco power break down.

3.5 Power Distribution

Power distribution in the Yard is via underground cables installed with TANESCO requirements.

3.6 Fire Protection

It is proposed to provide fire detection and firefighting systems. Fire detection system with consist of automatic and manual detection devises, alarm and communication systems whereas firefighting system will feature portable extinguishers, hose reels, wet and dry rises and automatic sprinkler system.

3.7 Access entrance

Wide inlet /entrance is provided so as to facilitate smooth passage of the workers and vehicles.

3.8 A Parking Space for the plant

The complex has ample parking space adequate to accommodate several vehicles at any given time.

3.9 Water Supply

3.9.1 Source of Water

The source of potable water for the plant will be the self-made bore hole.

3.9.10 Sewerage System

Waste and foul water is collected from building by means of UPVCP pipes of different sizes.

4.0 FACTORY MACHINERY / EQUIPMENT

The following machinery and equipment will be purchased for the project presented they are of high standard that will facilitate the processing of high-quality products.

Machine	Supplier	Price (USD)	Capacity		
Baked Snacks Line	Fabcon Machines Pvt Ltd	600,000.00	Capacity to produce approx. 200 to 250 Kgs per hour		
Meal Mixer					
Screw Conveyer					
Extruder					
Extruder Collection Conveyer					
Nubin Separator					
Vibratory Feeder					
Continuous Dryer					
Slurry Seasoning System					
Control Panel with VFD					
Fried Snacks Line			Atlas Copco	100,000.00	Capacity to produce approx. 300 Kgs per hour
Continuous Fryer Line with Accessories					
De Oiling Conveyer with Drain Oil Recirculation Pump					
Balancing Vibratory Feeder & Dry Dosing System					
Seasoning Drum					
Control Panel with VFD					
Air Compressor	Piovan	170,000.00			
Oil Treatment / Discharge Plant		130,000.00			
Total		1,000,000.00			

4.2 Other machines which will be imported with the above machineries

4.3 Potato/Cassava Peeler Machine

This machine removes the skin from potatoes/peanuts (boiled), washed potatoes are poured into the drum of the potato peeler from the top, the inner of the drum is coated with abrasive carborundum, as the base of the drum rotates the potatoes strike against the abrasive inner wall which removes the skin, this processing requires minor flow of water through a pipe to remove the skin from the walls, the peeled potatoes/cassava are removed from the side of the drum through a gate.

4.5 Potato Slicer

This is a self-pressing type model; the potatoes are fed from the top of the machine. This machine comes with three basic cutters, Plain chips, ripple chips, potato and French fries.

4.6 FLAVOUR APPLICATOR

Dry flavor / seasoning is sprinkled in proportion of the product by a rotating screw Coagulation of flavor is avoided by mixing blade. A variable speed motor adjusts feed rate of the flavor / seasoning. Entire system construction is of stainless-steel construction except standard components and is mounted on flavoring drum.

4.7 FLAVOURING DRUM

It is a rotary horizontal drum, which blends the fried products and flavor together so that the flavor is evenly coated as for as practically possible.

The drum is made in such a way that its degree of inclination can be adjusted. The drum is also provided with inwardly projecting product lifters.

4.8 PACKING MACHINE

A) Weigh filler + Bag sealer (Semi-Automatic)

B) Automatic packaging machine (Fully automatic machine)

It is used to weigh and pack (Without variation means accurate filling) all types of non-homogeneous products like potato wafers & chips snacks, cheese balls & cheese rings

5.0 MANPOWER REQUIRMENTS

5.1 MANAGEMENT

The success of a venture of this kind depends on the competence of the personnel recruited to manage. It is assumed that relevant personnel with requisite skills shall be available within the country. There will be a need of recruiting expatriates in some key technical positions. The overall in charge, responsible for the day-to-day operations will be the Project Manager who will in turn be answerable to the Board of Directors.

5.2 ORGANIZATION SET UP

Initially the operations will broadly be divided into the following: -

- Finance / Administration department
- Production department
- Marketing and slakes department

5.3 MANPOWER REQUIREMENTS

Based on the proposed organization structure the project will initially employ a total of 155 persons as below

Financial Controller	1	2500
Plant Manager	1	2500
Stores & Logistics Manager	1	650
Sales & Marketing Manager	10	1000
Accounts Assistant	1	400
Commercial Assistant	1	400
HR & Admin Assistant	1	400
Procurement Assistant	1	400
Stores Assistant	1	400
Logistics Assistant	1	400
Production Assistant	1	500
Maintenance Assistant	1	500
Logistics & Distribution	14	200
Machine Operators	120	150
Total manpower	155	10250

5.6 RECRUITMENT AND TRAINING

5.6.1 Recruitment

All new staff would be recruited at least one month before the plant operations are commenced.

5.6.2 Training

The Management of the plant would strive to employ competent and qualified personnel in the snack food business. To reduce cost few senior staff will be trained at the selected locally available institutions. All other supporting staff will be trained on the job. However, it is expected that most of them will have some basic knowledge and experience in snacks and packaged food products food business.

6 IMPLEMENTATION SCHEDULE

6.1 GENERAL

Both local and external factors have been taken into account when implementing this project. Factors such as finalization of, acquisition of the rentable premises, machinery and equipment, recruitment of qualified personnel and other factors have been looked into.

6.2 PROJECT STAGE

Project location

M/S Shaya Good Food Industries Limited has finalized the formalities concerning the project location

6.3 Ordering of Machinery / Equipment / Vehicles / Furniture

Timely ordering of the various machinery / equipment is in process to match the rate of implementing the plant.

6.3.1 Installation of Machinery / Equipment / Furniture

Once the building had been properly renovated then follows the installation of machinery / equipment / furniture and fittings upon their arrival at the project site.

6.3.2 Trial Runs

Upon completion of the installation of machinery and equipment then follows trial runs, which will take about 2 weeks.

6.3.3 Commercial Production

On completion of the trial runs then will follow commercial production.

7.0 FINANCIAL ANALYSIS

7.1 Revenue Assumptions

The basic revenue underlying the projected revenue is detailed below:

7.2 Basic Revenue Assumptions

- 1) The project will operate in one shift and will have capacity to process 300 kg per hour at the attainable processing capacities ranging from 60%, 70%, 80%&100% for years 1,2 and 3 – respectively.
- 2)The products produced will be for local and export market
- 3) The revenue and operating cost assumptions have been projected at constant prices; it being assumed that any increase in costs will be offset by a corresponding increase in freight rate.
- 4) Economic depreciation rates based on useful lifetimes of the various capital items have been adopted. The following facts apply for the depreciation rates in this project:
 - Building and Civil works are depreciated at 4% straight line.
 - Workshop equipment, plant, machinery, and operating equipment 12.5% and therefore replacement is after 7 years.
 - Office equipment is depreciated at 12.5% and therefore replacement is due in the 8th year of operation.
 - Furniture and fittings are depreciated at 12.5%
 - Pre-operational expenses are amortized and written off after 5 years the write off therefore is 20%.

7.3 Freight Revenue

Based on the above revenue assumptions, the trucks will realise earnings for the company of about US\$6.4 million in the first year and is expected to increase to US\$10.6 million in year 4 and onwards.

7.4 Operating Costs and Assumptions

The operating costs is estimated at 75% of the operating costs

7.5 Projected Profit and Loss Accounts

The accounts clearly demonstrate that the project will be very profitable as shown in the profit and loss account

7.6 Projected Cash flow

The strong liquidity position confirms the project's ability to meet all financial obligations.

7.7 Profitability

The projected profitability levels compare well the profit levels being achieved by other transit cargo transporters of a similar scale. The project's long-term retained earnings are considerably high due to the gains from the current establishment. The financial plan is for the shareholders to finance the project from own sources by ploughing back profits. Otherwise, shareholders are prepared to arrange for a financial package including supplier credit.

8.0 ECONOMIC BENEFITS OF THE PLANT

The successful operation of this Integrated Snack food processing plant will contribute significant economic benefits to Tanga region people and Tanzania as whole. In summary, the benefits which will be realized are as follows:

- The execution of this project will bring about employment opportunities for 155 people.
- Significant contribution to self-sufficiency in snacks and packaged food products supply for the people in Tanga and the rest of country.
- This facility will bring about possibility of increasing the protein intake by the people because the same plant can be used to protein rich snacks and packaged food products.
- Provision of income to other services providers, thus contributing to the reduction of poverty. The income to be earned will help in improving standard of living of the workers and other people residing in the region.
- The direct income for the workers, combined with other social benefits that the Management of Shaya Good Food Industries Limited Ltd will provide, help in overall efforts of alleviation of poverty in the Region.
- The Government will earn considerable revenue from the industry in terms tax collections.
- This project will facilitate opportunities to increase foreign exchange earnings through export of some of its value products.

9.0 CONCLUSION & RECOMMENDATION

The investment and development of this Integrated snacks and packaged food products processing undertaking is in line with the Government objective of encouraging proper development of agro based industries in the country. In addition, it will have a positive impact on the development of the region, as it would generate a number of benefits and more positive impact on the economy of the region.

This document has provided a full analysis on the financial, Techno – economic viability on the establishment and operation of the Integrated snacks Processing Undertaking along with the financing requirements have been considered and it has been established that the proposed project is technically sound, financially viable, and economically / socially beneficial.

In the context of the immense useful potential of this project, the management of **Shaya Good Food Industries Limited Ltd** anticipates that all interested parties in the region / and the Government of Tanzania will give their full support so as to ensure timely implementation of the project and apprehension of successful operation.