BATA FRAY CO. LIMITED

FEASIBILITY REPORT

ON

ESTABLISHING A FACTORY FOR MANUFACTURING

OF

CARPETS

SEPTEMBER, 2024

1.0 EXECUTIVE SUMMARY

BATA FRAY CO. LIMITED is a limited liability company incorporated under the Tanzania Companies company Act 2002. and is venturing into production of Carpets. This study covers the initiation/establishment of a Carpet manufacturing plant in Coast Region. **BATA FRAY CO LIMITED**. is a veteran in trading and distribution of various household's products and now have decided to venture into their own manufacturing activities for the manufacturing of Carpets and other related products in order to satisfy the already established market.

Tanzania has high consumption capacity of various types of Carpets which is being satisfied by imports including Carpets from neighboring and other mass-producing countries. This needs to be countered by increasing Tanzanian production, improving production process, methods, and quality to supply to common mass at affordable prices and also have import substitution effect in the economy. After confirming the possibilities of achieving the above objectives, the investors have decided to forge ahead with the investment.

This report presents a full-fledged financial and techno-economic analysis status relevant to the proposed integrated Manufacturing plant in Coast Region.

1.2 PROJECT SPONSORS

The project sponsors are **BATA FRAY CO. LIMITED** whose shareholders are Mr HE Hongmei and Wu Liang who have vast experience in initiating multitude of projects / investments and the one in question being inclusive. The Chairman of the company is the driving force behind the project with his vast knowledge in household products business in the East African region. Its shareholding pattern is as follows;

NAME OF SHARE HOLDER	NATIONALITY	%SHARE-HOLDING
HE Hongmei	Chinese	50
Wu Liang	Chinese	50

1.3 THE PROJECT

BATA FRAY CO. LIMITED) is a registered company which intends to deal with manufacturing, distribution, marketing, selling, exporting and exportation of Carpets in Tanzania and outside of Tanzania. Carpets have for long time being used in Asian countries and particularly the Middle East. According to Rackesh (2014) estimated Carpets in Asia countries is over 2.0 million tones. The company has decided to construct a new factory at kibaha Industrial Area and install a plant which will adopt the best technology. The aim of the promoters is to attain a bench market level of accuracy and efficiency in production of carpets and various food products in Tanzania and the neighbouring countries.

The processing capacity envisaged for this project is to the tune **12,258 sq metre** per annum**.** Starting with a capacity utilization of 80% in the first year the overall production will stabilize at 100% from the third year of operations. The project total cost has been estimated at **USD12,355,313**which includes **USD 3,745,476** as the initial working capital.

1.4 Investment Costs

The project cost is estimated at **USD 12,355,313** which will be contributed by the sponsors:

ITEM	US $
Fixed Assets	
Land and buildings	176,923
Machinery and Equipment	7,194,572
Vehicles	959,276
Furniture and Fittings	263,800
Pre-Operational expenses	15,266
Others	-
Sub total	**8,609,837**
Initial working capital	**3,745,476**
GRAND TOTAL	**12,355,313**

1.5 FINANCING PLAN

The promoters propose to finance the above investment costs in the following manner:

SOURCE	US $
Equity	**12,355,313**
Sub total	**12,355,313**

1.6 LOCATION

The company will be located in Coast Region ***at plot no 1&2 Block B Ruvu Darajani Chalinze Coast*** and is well served by all the necessary infrastructure and environment requirements and well suited to the nature of the envisaged project.

1.7 The Market

Analysis of the demand of Carpets and its supply has revealed that there is an excess demand on carpets products and establishing a company to manufacture carpets locally is a commendable idea. The market survey carried out revels that there is a huge demand for carpets and is raising rapidly. The survey concludes that the proposed manufacturing company will not face any marketing problems. **BATA FRAY CO. LIMITED)** intends to sell most of its products within the country. Initially almost all the production i.e., **1,021 sq metres per month** will be sold within the Tanzanian market and about 20% will be exported to the neighboring countries once the management and productions are well settled and are able to satisfy the local needs. The company has performed an analysis of the local demand and supply and in the process, management has understood the competition, strengths and weaknesses of the market and they are well informed to tackle and penetrate the market

1.8 Financial Profitability:

Based on a set of assumptions given here-in, the projects demonstrate a profitable trend in its future operations. The project's Income Statement and Cash flow indicate the **M/S BATA FRAY CO. LIMITED** would be able to recoup the planned investment funds within the first six years. This indicates that the project is financially and economically viable.

1.9 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 creation.

1.10 The Implementation Plan:

It is planned that the project will take 5 years from the time **M/S BATA FRAY CO. LIMITED** commences implementation of the project to the time it completes the purchasing of all the required machinery and equipment's. **M/S BATA FRAY CO. LIMITED** shall appoint a team comprising of a competent employee in all the departments in order to achieve the set implementation time.

1.11 Developmental Linkages:

Upon completion of the Implementation programme and operational, the Carpet manufacturing company will be capable of creating the following:

- Promote increased availability of Carpets locally hence have an impot substitution effect in the economy
- Generating foreign exchange through exports which will account to be 20% of its annual production
- Create employment for the local indigenous people;
- Promote inter-regional trade through exports to neighbouring Democratic Republic of Congo, and East African region just to mention a few.

1.12 CONCLUSION AND RECOMMENDATIONS

The executive summary highlights indicate that the proposed project will be financially and economic viable. It is recommended that the project be accorded the required institutional and financial support to pave the way for its expeditious establishment and development.

2.0 THE PROJECT

2.1 INTRODUCTION

Tanzania is a growing economy with high potential. The economy is relatively diversified and there are still exists opportunities especially in the Manufacturing sector. Throughout Tanzania there is no registered company for manufacturing and exporting of Carpets. These statistics verified existence of the market of Carpets. Tanzania economy has been showing enormous improvements. Gross Domestic Product (GDP) rose from 6.4% in 2011 to 7.5% as of 2013. Inflation rate has also improved from double digit and highest ceiling of 19.8% at the end of 2011 to single digit 6.7% at the end of 2013. Such economic status infers that purchasing power for Tanzanians, Dar es Salaam residents particularly is relatively increasing which promise for more luxury goods purchasing and ability to pay for Carpets at the price to be charged by **BATA FRAY CO. LIMITED**. At present sources of carpets in Tanzania is only through importation. These imported carpets 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 products. Moreover, marketing analysis showed existence of local market in Tanzania in Dar Es Salaam, Tanga, Arusha, Mwanza, Iringa, Mbeya, Mtwara, Lindi and Kigoma Regions.

2.2 THE PROJECT CONCEPT

The project entails to establish a manufacturing facility for the manufacturing of carpets in Coast region ***at plot no at plot no 1&2 Block B Ruvu Darajani Chalinze Coast*** The company has decided to construct a new factory at the leased premises and install a plant which will adopt the best technology. Other facilities will include procurement

of furniture, motor vehicles, generators and computers. The management has already embarked on this journey and initial processes of buying the land for the proposed project plans has begun. The processing capacity envisaged for this project is to the tune **12,258 sq metres** per annum. Starting with a capacity utilization of ***80%*** in the first year the overall production will stabilize at ***100 %*** from the fifth year of operations. The project total cost has been estimated at **USD 12,355,313**which includes **USD 3,745,476**as the initial working capital. The Business Plan is to be presented to relevant Government authorities to obtain Land, necessary permits and investment incentives.

2.3 THE COMPANY

BATA FRAY CO. LIMITED has been incorporated on 16th May 2024 with certificate of incorporation no **174668035**. The project is being promoted by two shareholders. After being in various business for more than 3 years and been able to secure and establish market for its products in Tanzania, the shareholders have decided to start a manufacturing facility to manufacturing carpets locally instead of importing them. This project will be able to meet the local demand and that of the neighbouring countries. The shareholders are Chinese namely:

NAME OF SHARE HOLDER	**NATIONALITY**	**%SHARE-HOLDING**
HE Hongmei	Chinese	50
Wu Liang	Chinese	50

2.4 Company Vision

The project promoters wish to see **BATA FRAY CO. LIMITED** as the leading manufacturer of quality carpets in Tanzania. The customers should associate the company's name with high quality products manufactured to international standards in a modern environment. This includes positioning **BATA FRAY CO. LIMITED** clearly in relation to the competitors and placing the company as a leading carpets manufacturer in areas of production technology, quality control, safety, and working environment.

2.5 PROJECT DESCRIPTION

The project intends to be actively involved in the manufacturing of carpets The machineries will be sourced from China. The factory processing capacity envisaged for this project is to the tune **12,258 sq metres** per annum. Various facilities are required in order to establish a manufacturing plant. This will include main building with floor-roof clearance of above 4 meters for equipment installation, warehousing for raw materials and yard for finished goods storage, electrical power supply (3 phases), water supply, compressed air supply.

Other facilities include a generator, 300 to 600 KVA will also be included including the following fleet of cars; delivery and distribution trucks, and pick-ups. The project will also purchase a production line which will include Tufting, weaving, knitting, needle punching, fusion bonding and **flocking** machines. Also, they will import furniture, fittings and office equipment to facilitate good office environment, efficient and effective management information systems and faster communication facilities.

2.6 PRODUCTION PROCESS

The manufacturing process is also relatively simple as it will be using machinery which are mainly automated. It will start with a capacity utilization of ***80%*** in the first year the overall production will stabilize at ***100%*** from the third year of operations. The production will ensure quality in the entire production process.

2.6. MANUFACTURING PROCESS OF CARPETS

2.6.1.1RAW MATERIAL

*i)*FIBER

Fiber is the basic material that a carpet is made up of. Over ninety percent of all of the carpet made today is made up of synthetic fiber. The rest is natural fiber, most commonly wool. Synthetic fibers are usually made up of one of three materials: nylon, polypropylene or polyester. All three are created by similar chemical processes using oil and natural gas.

ii) INYLON

Nylon leads the way. Almost 75% of carpet today is made of nylon and, compared to the other fibers below, it performs the best overall. Nylon is the leader in appearance retention, fade and heat resistance, soil and stain resistance, and color and styling. The highest performance nylon is Type 6.6, which has a tighter molecular construction, making the carpet more resistant to stain penetration.

iii)POLYPROPYLENE

It is most common material used in carpet manufacturing. Introduced in the late 1950's in Italy, polypropylene BCF has seen fast growth over the last twenty years, and today represents more than thirty-five percent of the total fibers used in the carpet industry.

While polypropylene is not as resilient or resistant to abrasion as nylon, it is naturally stained and fade resistant. Its natural resistance to moisture means that it must be dyed before being extruded, resulting in a more limited range of colour options. Polypropylene is most often used in loop pile carpet constructions.

POLYESTER'S Is the Third Type of Material Commonly Used in Carpet Manufacturing. Polyester Was Introduced to The Carpet Industry in The Mid 1960's, and has been well accepted for its bulkiness, color clarity, and good stain and fade resistance. While not as resilient as nylon, Polyester fiber carpet constructed with today's new technologies can be a good performer.

iv)WOOL

This is another raw material used to make carpets. The above three materials make up the majority of synthetic fibers. The other type of fiber used in carpet construction is staple fiber. While some synthetics are used in the creation of staple fibers, the original staple fiber used in the making of carpet is wool. The wool used in today's carpet comes primarily from New Zealand, Argentina, and the United Kingdom. Since wool is a natural fiber, it ranges in color from off-white to black, with many earthen tones between. Berber, now considered a type of carpet construction, actually comes from the name of a group of North African sheepherders called the Berbers. The Berbers were known to produce very coarse wool, with characteristic color flecks in their yarns.

Although wool doesn't stand up to abrasion and moisture as well as synthetics, it cleans well and is known to *age gracefully*. Wool is the most expensive carpet fibre, and represents less than one percent of the U.S. carpet market

2.6.1.2 PRODUCTION PROCESS

HOW CARPET IS MADE IS A 3-PART PROCESS.

i) TUFTING

There are basically three steps to manufacturing carpet. The first step is **tufting.** Tufting begins with the process of weaving the synthetic or staple fibre into a primary backing material. The primary backing material is usually made of woven polypropylene, and its main value is to provide a base cloth to hold the yarn in place while the tufting happens. The tufting machine looks like a really big sewing machine. It has anywhere from 800 to 2000 needles working in concert to pull the yarn through the primary backing material. The typical tufting machine sits about 12 feet wide, and as its needles penetrate the backing, a small hook called a looper grabs the yarn and holds it in place. This process results in what is called loop pile construction.

Loop pile products hold their appearance exceptionally well. Since there are no exposed yarn tips, only the sides of the yarn are exposed to wear and stress. Generally speaking, low profile loop carpet stands up to heavy traffic best. If you decide to use another method which is an alternative to the above mentioned, you can use the following; In some carpet styles the looper then rocks back against a knife, where the small loops of yarn are cut, creating what we call a *cut pile* carpet. The length of these cut pieces of yarn is referred to as the *pile height*, and is basically the distance between the looper and the primary backing. These precision cuts are controlled by a computer, and are sometimes programmed to cut only

some of the loops. This method of selectively cutting, called cut and loop construction, creates a recognizable pattern on the surface of the carpet.

ii) APPLICATION OF DYE

The second step of carpet manufacturing is the application of dye**.** In the second step, the carpet is taken through one of two dyeing processes. The first method of dyeing is called yarn dyeing, or sometimes pre-dyeing, where the colour is applied to the yarn prior to tufting. The advantages of all yarn dyeing methods include good side-by-side colour consistency, large lot sizes, and uniformity. The second method involves applying colour to the yarn *after* the carpet has been tufted. This method is called carpet dyeing. There are several carpet dyeing methods in use, each producing a unique end result. The first technique, often referred to as Beck, or batch dyeing, involves stitching the ends of the carpet together, and then running the tufted carpet loop through large vats of dye and water for several hours. The Beck process is ideal for smaller production runs, and heavier face weight products.

Continuous dyeing is a similar process to Beck dyeing, but involves running the carpet through several processes in addition to just the dye application. Continuous dyeing applies the colour directly to the carpet face by spraying or printing. This process is also used to create multicolour or patterned effects in the carpet.

Screen printing is another common method of carpet colouring, where colour is applied through anywhere from one to as many as eight silk-screens.

The major benefits of carpet dyeing, that is dyeing the carpet after the tufting process, are greater colour flexibility, and lower cost.

iii) FINISHING PROCESS.

The third and last step in the manufacturing of carpet is the finishing stage. This process is typically a single production line that completes the final stage of the carpet construction. In the finishing process, a coating of latex is applied to both the tufted, dyed carpet's primary backing, and also to secondary backing. Secondary backing is typically made of a woven synthetic polypropylene material. The two parts are squeezed together in a large heated press, where they are held firmly to preserve their shape. Shearing, one of the last stages in the manufacture of carpet, is the process of removing all of the little loose ends and projecting fibres that might have been created during the tufting process. It also helps achieve the yarn's tip definition of the finished carpet. Finally, each carpet is carefully inspected for colour uniformity and other manufacturing defects before it is rolled, wrapped, and shipped.

2.7 PRODUCTION FACILITIES

Production Facilities mainly fall into three major categories which include *Land and Buildings*; *Machinery and Equipment*; and *Motor Vehicles*. Land and Buildings where there will be construction of a factory. Machinery and Equipment constitutes freights and installations of machines, Water well/tanks and water pumps. Motor Vehicles include a vehicle and trucks

3.0 MARKET ANALYSIS

3.1 Competition Analysis

Handwoven carpets take time to be completed. This Carpets technology will take a short time to make Carpets and will maintains Carpets quality without any problem as well as conserving environment through its advanced technology. Carpets technology has been found and will be introduced in Tanzania so BATA FRAY CO. LIMITED will be the first to work through the eco-friendly and assure superlative product as a future in Tanzania. Most of the carpets sold in Tanzania are imported hence will not face competition. BATA FRAY CO. LIMITED will emphasis on speed of service and quality to ensure that customers experience the dedication of improving customer service through different ways of training our staff and ensure their welfare are taken care of to make the external customer service superb.

3.2 SUPPLY

Marketing analysis showed existence of local market in Tanzania in Dar Es Salaam, Tanga, Arusha, Mwanza, Iringa, Mbeya, Mtwara, Lindi and Kigoma Regions. Local market would account for 80% and international market 20% particularly in Neighboring African countries Asian countries. The market of Tanzania is dominated largely by imported Carpets. 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.

3.3 ADVERTISEMENT

On the basis of the market survey, it has been found that none of existing suppliers carries our 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 carry out proper advertisement efforts promote. Promoters will supplement the distribution network with advertisements and promotions to launch biscuits products. Technology on the other hand has been on rise in Tanzania, for instance use of internet, websites and social media through computers like laptops and even on mobile phones where one would access the same wherever his or she is. Therefore, this end paves for an opportunity for **BATA FRAY CO. LIMITED** to market Carpets through its website, internet and on social media.

3.3 DEMAND

Carpets is not a new phenomenon in Tanzania but the technology of manufacturing Carpets is new and replaces the use traditional carpets. There is a ready market for Carpets in Tanzania and from outside Tanzania particularly in Asian countries. The carpets to be produced will be using machines instead of using hands. Therefore, the innovative ways will be used to meet the demand of carpets in Tanzania. There will be advertisements so that we can increase awareness and hence increase the demand of the Carpets. Demand will also be created through a professional demonstration and advertisements as well through the word of mouth.

3.2 .2 Distribution network

Carpets Distribution Channel are basically Supermarkets/Hypermarkets, furniture Stores, Specialty Retailers, Online Retailers, and Other Distribution Channels. In order to strengthen its distribution network, the management is planning to purchase fleet of distribution vehicles to cover as much area as possible. Initially, the plan is to purchase 3 one-ton pickups, 2 four-ton capacity mini-Lorries. With this fleet, many areas and

whole-sellers could be covered and it will be easy to penetrate the market. The company will also appoint distributors in such areas where direct distribution is difficult. Furthermore, distribution companies are much more effective due to their fully developed infrastructure.

4.0 ORGANIZATION STRUCTURE

4.1 MANPOWER REQUIREMENTS

Based on the proposed organization structure the project will initially employ a total of 140 persons 20 will be expatriates.

4.1 Management Team

The company dream team comprises of the following members to make the business operational and profitable. The company will be headed by the Managing Director who among the shareholders but with majority shareholding. Under him will be the accountant to oversee all company financial issues. Again, the company will have Marketing Director to oversee marketing issues pertaining to the operations of the company. Also, company purchases, transportation issues, staff affairs, center management and sales will be under here. Under the Marketing Director will be Centre supervisors ensuring safety of equipment, also, making sure that quality of products produced (mats) are to the required standard.

4.2 OUTSOURCING

Other professionals will be outsourced from various firms, like we will hire external auditors from local Business Consultants in Dar Es Salaam. Services for medical and public liability will be outsourced from the competent insurance companies in Dar es Salaam to make sure that there is value for money. This is because staffs and public needs to ensure in case of any problem rising from manufacturing of Carpets.

5.0 PROJECT IMPLEMENTATION

The envisaged period for total project implementation is **5 years**

5.1.1 IMPLEMENTATION SCHEDULE

5.1.2 GENERAL

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

5.1.3 PRELIMINARY FORMALITIES

On the finalization of the study duration of about 2 weeks was needed for execution of the preliminary formalities of the project. These include submission of the application on incentives to investor's certificate from TIC.

5.1.4 PROJECT STAGE

The premises Acquisition in Coast region is in final stages.

5.1.5 Premises Renovation

The plot in question was examined to ascertain construction measures.

5.1.6Ordering of Machinery / Equipment / Vehicles / Furniture

Timely ordering of the various machinery / equipment will be executed to match the rate of implementing the plant.

5.1.7 Installation of Machinery / Equipment / Furniture

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

5.1.8 Trial Runs

Upon completion of the installation of machinery and equipment then followed trial runs.

5.1.9 Commercial Production

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

6.0 INVESTMENT AND FINANCING

6.1 ASSUMPTIONS

- The economic life of the project is 10 years.
- The currency exchange rate of Tshs. 2,600/= to one US$ has been adopted.
- Re-investment in vehicles shall be done after every four years.

6.2 INVESTMENT STRUCTURE

The total initial investment in fixed assets is estimated at US$. **12,355,313** whose breakdown of which is as follows;

ITEM	US $
Fixed Assets	
Land and buildings	176,923
Machinery and Equipment	7,194,572
Vehicles	959,276
Furniture and Fittings	263,800
Pre-Operational expenses	15,266
Others	-
Sub total	**8,609,837**
Initial working capital	**3,745,476**
GRAND TOTAL	**12,355,313**

6.3 FINANCING PATTERN

The initial total investment of US$ **12,355,313** shall be financed as here after presented in Table

SOURCE	US$
Fixed Assets	
Equity (100%)	**12,355,313**
GRAND TOTAL	**12,355,313** -

Promoters are willing to invest 100% of the total investment an in case there will be short of funds the investor will seek loan from the locally banks in Tanzania.

6.4 WORKING CAPITAL FINANCING

Banks will be approached for the working capital facility to finance the current assets of the company partially. Further, Banks will be requested for a Letter of Credit facility of US$ **3,745,476** to cover all imports of raw materials and consumable.

As indicated above the financing of the fixed assets have been called out through equity contributions at 100%, whereas the working capital will be financed through equity and bank overdraft when the need arises.

6.5 PLANT CAPACITY

The proposed plant will have a capacity to process **12,258 sq metres** per annum of different categories of biscuits per month. It is envisaged that the attainable processing capacities will range of 80% ,90%, and 100%for years 1,2,3 – respectively

6.6 CIVIL WORKS

The proposed civil works are estimated at a cost of **US$ 176,000**

6.6.1 Civil Works and Buildings

The facility is be located at plot no ***at plot no 1&2 Block B Ruvu Darajani Chalinze Coast***

6.6.2 Accessibility 0f The Site

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

6.6.3 Design Concept

The factory building is built of concrete blocks and properly designed with ample to cover all the functional spaces such as: Processing Hall. Offices raw materials storage and other social amenities space requirement.

6.7 AUXILIARY SERVICE REQUIREMENT

1)Power Supply System

- **Main Power Supply**

It has power supply from the national grid prevailing in the Municipal. This power has proved highly unreliable because of the frequent cuts and fluctuating voltages.

- **Emergency Power Supply**

A standby generator is to be provided to supply all the essential loads in and event of TANESCO power failure.

For this resign M/S **M/S BATA FRAY CO. LIMITED** will be forced to use its standby generator during times of Tanesco power break down.

- **Power Distribution**

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

- **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.

2. Water Supply

- **Source of Water**

The source of potable water for the plant will be the self-made bore hole and from the coast water supply. Storm water – run – off will

be collected from the buildings by means of spouts and full boras through down pipes and will be discharge into the open channel and deposited into the road side drains.

- **Sewerage System**

Waste and foul water is collected from building by means of UPVCP pipes of different sizes e.g., 75 mm and 150 mm to the municipal sewer lines.

6.8 OPERATING COSTS

6.8.1 ASSUMPTIONS

The prices of inputs are assumed to remain constant over the ten years period because under rising inflation the prices and services will rise including those of outputs hence having, the profit margin unchanged.

The main items which will constitute the operating costs are as hereafter outlined. Salaries and wages, Vehicles running expenses, Electricity, Basic raw material Other raw materials, Packaging material, Fuel oil, Maintenance Machinery / equipment (2.5%), Maintenance Buildings (3%), Repairs of furniture and fittings (2.5%), advertisement &, Administrative overheads

Working Capital Requirements

i) ***Current Assets*****:** Main constituents of current assets are Debtors and Stocks. One-month requirements of raw materials will always be ready at any given time. A 15 days sales requirement of finished stocks, the carpets will always be stored. Over a period of time, finished stocks are managed well and expected to be lowered to probably to a week with efficient distribution system as well as covering the market well.

ii) ***Current Liabilities:*** All the raw materials excepting expected to

be purchased on one-month credit terms.

iii) Depreciation

Depreciation is based on the life of the machinery and straight-line method depreciation is considered and is charged to the profit and loss account every year.

iv) Cost of Sales

Cost of sales will include all other costs other than those directly related to production. Generally, cost of sales includes the 'Office and General administration Costs', 'Selling and Distribution Costs', 'Finance Charges - Mainly interest and Bank Charges'.

7.0 FINANCIAL AND ECONOMIC ANALYSIS

7.1 ASSUMPTIONS

- The prices of inputs and outputs are assumed to remain constant over the life of the project i.e., 10 years.
- However, in case of changes in the costs of inputs, to maintain the desired profit margin, the prices of the outputs will be accordingly adjusted.

7.2 INCOME

The project's income at full capacity utilization is estimated to average at US$ **7,692,306**

7.3 EXPENDITURE

The expenditure items are as indicated in the operating costs They include all costs items plus depreciation and financial charges.

7.4 PROJECTED CASH FLOWS

The project has a positive net cash flow from year 1 of operation to the tenth year when the long-term loan will have been paid in full.

8.0 ECONOMIC BENEFITS

The successful operation of this Carpet Manufacturing plant will contribute significant economic benefits to Coast 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 **140** people.
- Significant contribution to self-sufficiency in Carpet supply in Tanzania.
- 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.
- Create employment for the local indigenous people. The direct income for the workers, combined with other social benefits that the Management of M**/S BATA FRAY CO. LIMITED** will provide, will help in overall efforts of alleviation of poverty in the Region.
- Provision of a market for goods and services demanded by Expanded tax base to the Treasury and local Government authorities and generation of substantial income to the Government.
- This project will facilitate opportunities to increase foreign exchange earnings through export of some of its value products.
- Promote increased availability of Carpets products locally hence have an impot substitution effect in the economy
- Promote inter-regional trade through exports to neighbouring Democratic Republic of Congo, and East African region just to mention a few.

ANNEXTURES

BATA FRAY CO. LIMITED

Investment Cost

ITEM	US $
Fixed Assets	
Land and buildings	176,923
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BATA FRAY CO. LIMITED

Financing Pattern

SOURCE	US$
Fixed Assets	
Equity (100%)	**12,355,313**
GRAND TOTAL	**12,355,313 -**

BATA FRAY CO. LIMITED

Depreciation Schedule

US$

		Rate	1	2	3	4	5	6	7	8	9	10
Land & Buildings	176,923	4%	7,077	7,077	7,077	7,077	7,077	7,077	7,077	7,077	7,077	7,077
Machineries & Equipment's	7,194,572	12.5 %	899,322	899,322	899,322	899,322	899,322	899,322	899,322	899,322	-	-
Vehicles	959,276	25%	239,819	239,819	239,819	239,819	-	-	-	-	-	-
Furniture & Fittings	263,800	12.5 %	32,975	32,975	32,975	32,975	32,975	32,975	32,975	32,975		
Pre operational Expenses	15,266	20%	3,053	3,053	3,053	3,053						
			1,182,246	**1,182,246**	**1,182,246**	**1,182,246**	**939,374**	**939,374**	**939,374**	**939,374**	7,077	7,077

BATA FRAY CO. LIMITED

SALES REVENUE SCHEDULE

Productions	**1**	**2**	**3**	**4**	**5**	**6**
Percentage	80%	90%	100%			
Sales revenue	3,846,153	5,384,614	7,692,306	7,692,306	7,692,306	7,692,306
Total Sales revenue	3,846,153	5,384,614	7,692,306	7,692,306	7,692,306	7,692,306

BATA FRAY CO. LIMITED

Projected Profit & Loss Account

USD 000

	1	2	3	4	5	6	7	8	9	10
Total Revenue	3,846	5,385	7,692	7,692	7,692	7,692	7,692	7,692	7,692	7,692
Cost of sales 80%of total revenue	3,077	4,308	6,154	6,154	6,154	6,154	6,154	6,154	6,154	6,154
Gross Operating Profit	769	1,080,	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538
Operating Profit	769	1,080,	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538
Depreciation	**1,182**	**1,182**	**1,182**	**1,182**	**939**	**939**	**939**	**939**	7	7
Profit Before tax	(413)	(102)	356	356	599	599	599	599	1531	1531
Corporation Tax 30%	-	-	107	107	180	180	180	180	459	459
Net Profit After Tax	(413)	(102)	249	249	419	419	419	419	1072	1072
Profit Brought forward	-	(413)	(514)	(265)	(16)	403	822	1,241	1660	2732
Revenue Reserves	**(413)**	**(514)**	**(265)**	**(16)**	**403**	**822**	**1,241**	**1660**	**2,732**	**3,804**

BATA FRAY CO. LIMITED

Cash Flow USD 000

	0	1	2	3	4	5	6	7	8	9	10
Capital Re-investment	**12,355**										
Profit Before Tax		(413)	(102)	356	356	599	599	599	599	1531	1531
Depreciation		1182	1182	1182	1182	939	939	939	939	7	7
Total Inflow	**12,355**	**769**	**1080**	**1080**	**1080**	**1538**	**1538**	**1538**	**1538**	**1538**	**1538**
Outflow											
Capital investment	**12,355**										
Corporation Tax		-	-	107	107	180	180	180	180	459	459
Increase in Working Capital											
Total Outflow	**12,355**	-	-	107	107	180	180	180	180	459	459
Net Cash Flow	-	769	1080	943	943	1358	1358	1358	1358	1079	1079