LEAN MANUFACTURING COMPANY LIMITED

BUSINESS PLAN FOR PLASTIC PRODUCTS MANUFACTURING

Presented by:
LEAN MANUFACTURING COMPANY LIMITED
P.O BOX 55122
DAR ES SALAAM

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1.1 Introduction

LEAN MANUFACTURING COMPANY LIMITED is privately owned companies incorporated for purposes of establishing a modern factory for the manufacturing of plastic product and recycle the plastic material. The project will manufacture high quality products, with the aim of meeting increasing demand of plastic products

The Company is registered under Certificate of Incorporation No. 138920798 dated 11th May 2023.

1.2 The Project

The promoters of this project through LEAN MANUFACTURING COMPANY LIMITED decided to invest on plastic after taking into consideration of the following:

A: Self-assessment in order to understand their capabilities strengths, limitations and preferences of undertaking such a project.

B: Explored possible and suitable opportunities based on environment, current business scene, technology change and linkage related ideas.

C: Assessed the market potentiality available

D: Identified viable project location

E: Considers finances mobilization to suit the project requirement

G: Re assessed their managerial strengths and is in the process of pooling up human resources from local and foreign sources.

The project aims at manufacturing plastic products for domestic purposes which will be over a wide range of products, domestic and other uses. The manufacturing process except to use plastic wastes as its major input. The project will therefore have a positive indirect impact on the environment as it will reduce waste

The macro objectives of establishing the project is to support economic, social and administrative activities in the country .Also , to increase the competitiveness of Tanzania goods in the export markets and improve the manufacturing industry by offering competitive transport rates.

1.3 The Project Location

The Project will be located in Plot No 86, Tegeta Wazo Industrial Area, Kinondoni Dar es Salaam. The location is well served by all the necessary infrastructures and environmental requirements and hence well suited to the nature of the envisaged project.

1.4 The Project Promoters

The Project is being promoted by LEAN MANUFACTURING COMPANY LIMITED based in the Dar es Salaam. The shareholders to this project:

S/No	NAME OF SHAREHOLDER	NATIONALITY	SHAREHOLDING (%)
1	JIAN WANG	Chinese	80
2	MINGXIAO WUNG	Chinese	20

1.5 The Market

Recent reforms taking place in economy indicate that there is a continuous increase in demand for plastic products in the local market and in the international market. There is also growth of plastic waste which ends up affecting the environment. This has brought about a concern in the market. It is the idea of this project to focus on the external market especially the Asia countries which are in high demand of plastic finished products and semi-finished products. The Asia market is also growing as well as demand.

1.6 Project Cost and Financing Plan

The total cost of the project is estimated as US Dollars 1,050,000

The following is the summary of the capital investment cost estimated.

COST STRUCTURE

PARTICULAR	AMOUNTS USD
Land and Buildings	75,000
Plant & Machines	154,000
Motor Vehicles	64,000
Furniture & Fixtures	22,000
Pre Expenses	25,000
Working Capital	160,000
TOTAL	**500,000**

1.6 Financing

The project's cost will be fully financed by shareholder's equity contribution by Usd 400,000 and a bank loan of Usd 100,000

1.7 Financial Indicators

The following are some of the financial analysis highlights:

1.7.1 Profitability

Profitability after tax over the years in US $ is as follows:
1st Year 97,017.00
2nd Year 137,416.00
3rd Year 145,282.00
4th Year 155,266.00
5th Year 165,024.00

1.7.2 Liquidity

The projected net cash flow over the year shows a health position and demonstrates the ability of the company to meet financial commitments as they fall due. The drop in cash flow is due to the fact that the company will repay the Bank loan of 200,000

The Summary thereof in US $ is as follows
1st Year 222,504.00
2nd Year 245,654.00
3rd Year 255,544.00
4th Year 66,769.00
5th Year 275,005.00

1.7.3 Payback period

The Investment recoups itself in 5 years

1.8 Social and Economic Impact

The proposed project will result into the following social and economic impacts:

1.8.1 Increased availability of quality products alongside competitive prices of these products will result in increased healthy competition among all trading and manufacturing companies

1.8.2 The proposed project of the fleet of trucks investment in this sector will provide employment for about 80 people.

1.8.3 The proposed project will have appositive impact on the environment as it expects to use plastic wastes as inputs or raw material to produce good quality plastic products.

1.8.4 The Government and other agencies will benefit from various taxes, fees and commissions that will be paid to the Treasury

1.9 Conclusion and Recommendations

The Executive Summary highlights indicate that the proposed project will be financially and economically viable. The project will generate significantly to the social and economic benefit by way of increasing the provision of quality plastic products and collection of plastic waste which reduces level of plastic waste in the city. 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

LEAN MANUFACTURING COMPANY LIMITED have invested on plastic after taking the following into consideration

A. Self-assessment in order to understand their capabilities strengths, limitations and preferences of undertaking such a project
B. Explored possible and suitable opportunities based on environment, current business scene, technology change an linkage related ideas.
C. Assessed the market potentiality available
D. Identified viable project location
E. Considers finances mobilization to suit the project requirement
F. Re assessed their managerial strengths and is in the process of pooling up human resources from local and foreign sources.

3.1 Machines technology capacity utilities

The project will need the following machineries:

- Stone crush machine
- P.E crush machine
- P.E pelleter
- Plastic grinder
- Blank – pressing machine
- Boller
- Behydrator
- Wrapped machine
- Measurement machine
- Plastic crusher
- Baler
- Vibrator
- Measurement machine

3.2 Source of technology & Capacity

The machines will be Import from China. The annual production capacity will be 2 million pieces annually. The pieces will be of various designs as per production schedules and demand.

3.3 Other inputs

These will include cars necessary for administration purpose and distribution:

- Civil works will include renovation of the existing workshop in and office buildings at the project site on the premises at Plot No 86, Tegeta Wazo Industrial Area, Kinondoni Dar es Salaam.

The site has the entire necessary infrastructure required for the business, including a workshop

- Importation of office equipment namely, telephones, facsimile machines, personal computers and air conditioners at company's head office.

3.4 **The Project time table**

The plant should be in fully operational with two production lines and a diversified product range by August of the year 2023

3.5 Sales revenue forecast and direct& indirect cost estimates

3.5.1 Sales Forecast

First year operation is schedules to begin Jan 2024 after completion of machinery installation and pre-production activites.The sales generation will be as of

3.5.2 OPERATING COSTS

Since the production will be done for the last quarter in the first operating year the cost will be less to being with and will substantially rise to reflect normal production in the following years

3.6 Environmental Aspects

Generally, Tanzania has environmental regulations governing the operation of garages and workshops. Nevertheless each operator takes basic precautions to ensure that during operations and in case of an accidental spillage or fire, damage to environment is limited to the minimum possible level. The company has taken into consideration environmental aspect in the factory and will put all necessary required facilities.

3.0 CAPITAL INVESTMENT AND FINANCING PLAN

4.1 Investment Plan

The total capital investment of the project is Usd 500,000.The promoters will contribute Usd 0.4 million and Usd 0.1 million will be financed by loan. The capital investment breakdown is as indicated below:

COST STRUCTURE

PARTICULAR	AMOUNTS USD
Land and Buildings	75,000
Plant & Machines	154,000
Motor Vehicles	64,000
Furniture & Fixtures	22,000
Pre Expenses	25,000
Working Capital	160,000
TOTAL	500,000

4.2 **Financing Plan**

It is estimated that a total of US$ 390,000 will required price to the first year of the project to acquire the various assets as shown in the Table above

The bulk of the capital cost will be raised by the company itself through equity contribution. The other major source of funding will be internally generated revenue from operations which will be ploughed back.

Taking into account acceptable financial rations will be financed through the following sources of finance:

Financing Source	USD
Equity	400,000
Long term loans	100,000
Total	500,000

Interest rates for the loan are assumed to be at 8% with a grace period of 5 years and will be paid back in the fifth year of operation.

4.0 MARKET AND MARKETING ASPECTS

5.1 **General Overview**

There is a wide market for plastic products in Tanzania. Likewise, there is external market and the demand is increasing .Hence, it can be expected that the sponsors would not face marketing and operational problems in managing the proposed project

The existing market is supplied by importation of the products from overseas .Based on the nature of the products and its users; the company's product has a good market in Tanzania.

The ports of Dar es Salaam have undergone major rehabilitation, modernization and expansion so as not only to be able to complete with South Africa ports in handling of the cargo and this will substantially enhance cargo handling in all phases of the project. The port would also provide the proposed freight haulage project necessary condition for its soft establishment and expansion of its future operations.

LEAN MANUFACTURING COMPANY LIMITED will endeavor to achieve the projected sales for both domestic and transits business in the neighboring eastern Africa countries and Asia

5.2 Key Success Factors

Following are Key Success Factors of the manufacturing industry:

- Financial Resources
- Working Capital
- Use of Technology
- Proper logistics to meet demand

The importance of having huge funds to finance the use of latest technology which will yield a quality product which is important in project success operation. Further with a quality product there must be proper delivery of the product to the customers to meet their demand. All this depends on financial resources which the owner has to achieve desired result.

5.3 Long Term Relationships

Established transport firms enjoy the advantage of long- term relationships with corporate clients. Such corporate firms include among others, armies, huge mining companies using thermal power, etc, clearing and forwarding companies, just to mention a few. Again the proposed project would use its Synergy of its relation with parent companies in securing huge cargo.

However, it should be clearly understood that as time changes some industry forces have tended to re- modify these key success factors, Hence, generally it is the ability of a transport company to design and implement its business strategies that may suit building of a company's success in this sector.

5.0 MANAGEMENT AND ORGANIZATION STRUCTURE

6.1 Management

The Company policy is to have adequate manpower to manage its operations efficiently. LEAN MANUFACTURING COMPANY LIMITED believes in keeping on board only the very essential manpower strength, to develop them into highly motivated and sincere company team for the best and efficient operations of the company.

The company will have a team of qualified and experienced functional managers in the areas of Operations/Marketing, Workshop Operations and Finance & Administration. Other senior and middle level staff will be available for the startup and subsequent operations of the company. The personnel will be qualified, well-seasoned and most possessing considerable industrial experience.

6.2 Management Policy

The day to day operations will be managed by the General Manager, to be assisted by the Operations Manager who will be the overall in charge of the fleet, a Sales & Marketing Manager whose major responsibility will be marketing and a Finance & Administrative Manager who will manage finance and administrative issues. The Company's fleet pool will therefore be professionally managed.

6.3 Organization Structure

Once the company has well established the market its organizational structure will have to change sp as to give it a corporate structure of freight Haulage Company. Therefore, the shareholders will have to embark on a meticulous manpower planning and recruitment, which will be preceded by a manpower consultant's report.

It is proposed that the company's operations then be headed by the General Manager under whom there will be functional managers, that is : Personnel & Administration Manager, Sales & Marketing Manager, Finance & Administration manager, and Production manager.

The Marketing Manager will be responsible for both the countrywide and regional wide sales and marketing for the service .The job responsibilities will include market planning and development, sales promotion and sales co- ordination.

6.4 Manpower requirement and emoluments

SCHEDULE 5

SALARIES & WAGES

No	DEPARTMENTS/DESIGNATION	NO	SALARY PER MONTH	SUBTOTAL MONTHLY SALARY	ANNUAL GROSS SALARY
1	Managing Director	1	750	750	9,000
2	General Manager	1	700	700	8,400
3	Personnel Administration Department	10	150	1500	18,000
4	Finance Department	5	150	750	9,000
5	Marketing Department	10	150	1500	18,000
6	Laboratory	4	150	600	7,200
7	Production Department	19	100	4900	58,800
	TOTAL USD $	**50**	**2,150**	**10,700**	**128,400**

6.0 FINANCIAL ANALYSIS

7.1 Financial Viability

The analysis of the proposed LEAN MANUFACTURING COMPANY LIMITED transport project shows that the project can generate a fairly good profit and that it generates sufficient cash to meet its financial obligations

7.2 Fundamental Assumptions:

The preparation of the financial projections took into account the following main assumptions:

7.2.1 The operation period under which the viability of the project is being evaluated is 5 years

7.2.2 The capital of the proposed project is US$ 500,000

7.2.3 All the calculations throughout the economic lifetime of the project are constant with September 2008 being the base date.

7.2.4 The projected operational costs are shown

7.2.5 Capital Expenditure has been assumed to be incurred for a period of 1 year

7.2.6 The financial plan is for the shareholders to finance the project form own sources by ploughing back profits

7.3 Working Capital Requirements

Ideally, working capital requirements are directed by the volume and business tempo

7.4 Projected Profitability

The projected profit and loss account is shown in the *Financial Analysis Schedule.* On the basis of the operating assumptions and cost the proposed investment is expected to be profitable throughout the project period of five years. The after tax profits (US$)are as follows:

1st Year	97,017
2nd Year	137,416
3rd Year	145,282
4th Year	155,266
5th Year	185,024

7.5 **Cash Flow Projection**

The liquidity performance of the project is shown in the Financial Analysis Schedules. The projections take into account the assumed sources and applications of funds over the planned period and show the ability of the project to meet financial obligations and capital expenditure requirements.

Cash flow on the 5 the year will be used to pay back the loan and this reflects the small balance at the end of the year but the activities will be performed as usual

7.6 Financial Review

The financial review of the proposed LEAN MANUFACTURING COMPANY LIMITED shows that:

7.6.1 The project is profitable

7.6.2 The liquidity position is sound and that is should be able to meet its financial commitments without any undue difficulty.

7.6.3 The operations are financially viable

7.6.4 The key ratios are acceptable with Internal Rate of Return (IRR) of 20%, Net Present Value of US$ 199,476 and a Payback Period of 5 years.

7.7 **Development Aspects**

The following are the major economic and social benefits, which will be generated by the proposed project.

7.7.1 Revenue to the government Treasury and other organs in the form of taxes, fees and levies.

7.7.2 Increase in employment opportunities

7.7.3 Savings/earnings of foreign exchange because of the project's active engagement in the transit trade

7.7.4 Facilitate in increased improvement and availability of the freight Haulage services especially in the transportation of raw materials, crops, building, materials and finished products to and form markets.

With the liberalization of the economy in fully swing the resultant industrial growth is expected to push up the demand for the transportation of industrial and consumer goods services considerably.

7.0 CONCLUSION AND RECOMMENDATIONS

The foregoing discussion highlights on the social, economic and financial dimensions which the envisaged project is set to generate in this country. The brief financial analysis indicates that the project will be financially viable. Therefore, it is strongly recommended that the sponsors, LEAN MANUFACTURING COMPANY LIMITED be availed with the required institutional assistance so as to enable them establish the propose project.

FINANCIAL PROJECTIONS

PROJECTED INCOME STATEMENT						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR5
Sales Revenue		725,000	870,000	1,044,000	1,252,800	1,503,360
Cost of Sales		145,000	145,000	145,000	145,000	145,000
Gross Profit		**580,000**	**725,000**	**899,000**	**1,107,800**	**1,358,360**
Operating Expenses						
Administrative Overhead						
Costs		51,800	52,318	52,841	53,370	53,903
Motor Vehicle running		20,000	20,200	20,402	20,606	20,812
Salaries and Wages		43,800	44,238	44,680	45,127	45,578
Depreciation		54,900	55,449	56,003	56,564	57,129
Utility Costs		23,000	23,230	23,462	23,697	23,934
Insurance		12,500	12,625	12,751	12,879	13,008
Interest on Loan		8,600	8,686	8,773	8,861	8,949
Total Expenses		**142,800**	**144,228**	**145,670**	**147,127**	**148,598**
Profit before Tax		**437,200**	**580,772**	**753,330**	**960,673**	**1,209,762**
Tax (30%)		131,160	174,232	225,999	288,202	362,929
Profit After Tax		**306,040**	**406,540**	**527,331**	**672,471**	**846,833**

PROJECTED BALANCE SHEET						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets		315,000	260,100	217,800	175,500	133,200
Long term Assets						
Depreciation		54,900	42,300	42,300	42,300	42,300
Total long termassets		**260,100**	**217,800**	**175,500**	**133,200**	**90,900**
Current Assets						
Cash		406,100	684,700	979,050	1,292,735	1,625,723
Account Receivable		105,000	110,250	216,535	421,763	527,628
Inventory		214,710	376,383	438,469	402,292	467,493
Total Current Assets		**185,000**	**185,000**	**185,000**	**185,000**	**185,000**
Total Assets		**445,100**	**402,800**	**360,500**	**318,200**	**275,900**
Curent Liabilities						
Accounts Payable		84,000	88,200	92,610	97,241	102,103
Other Current Liablit		70,000	73,500	77,175	81,034	85,085
Subtotal Current Liabi		**154,000**	**1,616,700**	**169,785**	**178,274**	**187,188**
Long term Liabilties						
Long term Liabilitie		1,820,000	1,820,000	1,820,000	1,820,000	1,820.00
Total Liabiities		**260,100**	**217,800**	**175,500**	**133,200**	**90,900**
Net Assets		**820,810**	**877,633**	**951,268**	**1,044,516**	**1,157,656**
Captil and Reserves						
Owners Contribution		780,000	780,000	780,000	780,000	780,000
Retained Earning		**40,810**	**97,633**	**171,268**	**264,516**	**377,656**
Total Capital		**445,100**	**402,800**	**360,500**	**318,200**	**275,900**

OTHER OPERATING COST						
Other Operations Cost		**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
Motor Vehicle running expens		20,000	20,400	20,800	21,200	21,600
Salaries and Wages		43,800	48,180	52,998	58,298	64,128
Adminitrative Overhead Costs		51,800	56,980	62,678	68,946	75,840
Utility Costs		23,000	25,300	27,830	30,613	33,674
Interest on Loan		8,600	7,740	6,966	6,269	5,642
Communication Exepnses		12,800	14,080	15,488	17,037	18,740
Total Costs		**160,000**	**172,680**	**186,760**	**202,363**	**219,625**

FIXED ASSETS SCHEDULE						
NAME OF ASSETS		**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
Land and Buildings		75,000	71,250	67,500	63,750	60,000
Plant & Machines		154,000	123,200	92,400	61,600	30,800
Motor Vehicle		64,000	46,400	41,400	36,400	31,400
Furniture & Fixtures		22,000	19,250	16,500	13,750	11,000
Total		**315,000**	**260,100**	**217,800**	**175,500**	**133,200**
Depreciation		**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
Land and Buildings		3,750	3,750	3,750	3,750	3,750
Plant & Machines		30,800	30,800	30,800	30,800	30,800
Motor Vehicles		17,600	5,000	5,000	5,000	5,000
Furniture &Fixtures		2,750	2,750	2,750	2,750	2,750
ANNUAL DEPRECIATION		**54,900**	**42,300**	**42,300**	**42,300**	**42,300**
CLOSING FIXED ASSETS		**260,100**	**217,800**	**175,500**	**133,200**	**90,900**