

PAN AFRICA PLASTICS LIMITED

**FEASIBILITY STUDY FOR ESTABLISHMENT
OF**

MANUFACTURING FACILITY

FOR

VARIOUS PVC PRODUCTS

TO INCLUDE

CEILING TILES, BOARDS AND DOORS

February 2021

1.0 INTRODUCTION

Tanzania is a growing economy with high potential. The economy is relatively diversified and there are still exists opportunities especially in the building sector in the area of PVC Products of all types. It is on this strength that the company wishes to embark on the production of building materials specializing in PVC products to include Ceiling Tiles, Boards and Doors for Residential, Commercial and Industrial Complexes.

1.2 THE PROJECT

The project entails the manufacturing of PVC products to include Ceiling Tiles, Boards and Doors .Other facilities will include establishment of factory facilities and procurement of furniture, motor vehicles, generators and computers. The Business Plan is to be presented to relevant Government authorities to obtain the necessary permits and investment incentives. To implement the entire project an Investment of **US\$ 505,000** will be required and will comprise of equity .The loan will be sought when the need arises. Market for the products will be within Tanzania and indirectly export to the neighboring countries.

1.3 The Company

PAN AFRICA PLASTICS LIMITED has been incorporated on 13th January 2021 with certificate of incorporation no **149385746**. The firm wishes to venture into the manufacturing of PVC products which includes Ceiling Tiles, Boards and Doors. The project is being promoted by four

shareholders and it is a joint venture company. The shareholders are from India and one Tanzanian. The names of the promoters along with their Shareholdings are as follows:

NAMES	Nationality	%
Abdulsultan Hasham Jamal	Tanzanian	40
Shaik Saleem	Indian	30
Barkatali Sabudin Nathani	Indian	15
Ashik Shabuddin Nathani	Indian	15

1.4 LOCATION

The project will be located in plot no 181/b/1 saza road Temeke , chang'ombe Dar-es-Salaam and is well served by all the necessary infrastructure and environment requirements and well suited to the nature of the envisaged project.

2.0 PROJECT DESCRIPTION

Integrated plastic Building materials project intends to be actively involved in the manufacturing of PVC products which includes Ceiling Tiles, Boards and Doors. The machineries will be sourced from Republic of China.

The factory production capacity will be 28,800 sq. meter per month. The machinery will include PVC Ceiling Panel and Corner Profiles production line, Two Color Printing and UV Coating Line for PVC Ceiling Panel and Axially Machines (for detailed list of equipment (Pse refer appendix 1).

The machineries will be equipped with infrared tracking device to adjust speed automatically, suitable for producing seamless PVC ceiling. The machineries will also adopt rolling blade cutting dust free cutting comparing with saw cutting, and it does not produce dust and pollution.

2.1 PRODUCTION PROCESS

The Production process to be used is that of the pneumatic drive and automatic cutting. High glossy double color PVC panel printing and UV coating machine will print single or double color and coat UV varnish on surface of PVC panels ,which will make its look to be like wood or marble and its surface is shine /glossy and anti-scratched . This line can also make panel surface to be matt.

It is planned to utilize 60% of the plant capacity in the first year and growing to 100% in the 4th year. The production will ensure quality in the entire production process and that the PVC products will have sufficient structural comprehensive strength to meet the building code requirement.

2.2 The Products

The company targets to deliver 50% of its products to up market residential housing and 50% to commercial and industrial projects. The main Raw Materials will be sourced from overseas depending on the type of raw materials needed. Various vehicles will be purchased for the project. It is anticipated that the production will annually grow by 15% and stabilize in the fourth year.

3.0 MARKET AND MARKET POTENTIAL

The company main aim is to manufacture quality plastic building materials for the local and neighboring countries surrounding Tanzania. There is a huge market potential in the residential, commercial and industrial housing which has remained untapped. Tanzania has a population of 60 ml people. The provision of housing in urban centers, rural and Industrial sites remains inadequate hence once the project is undertaken will not face any marketing problem.

3.1 Market Demand

The demands for PVC Ceiling Tiles, Boards and Doors are enormous. The firm targets 50% its production to the up market residential housing and 50% to the industrial and commercial high-rise complexes. The Target Markets are Real estate developers and builders for residential and self-serviced apartments.

The company sales force will be calling on architects and engineers to push sales and strengthen market specially the residential and municipal markets. The other targeted markets are industrial and commercial complexes. The company aims to at a later stage to export to neighboring countries Zambia, Mozambique, Rwanda and Burundi and in later years to all EAC & SADC countries.

4.0 PROJECT COST AND FINANCING

The total initial investment is **US\$505,000/-** broken down as follows

US\$

ITEM	Project Cost
Land and Building	0
Machinery and plant	205,000
Vehicles	90,000
Furniture & Fittings	20,000
Others	25,000
Pre-Operating Expenses	65,000
SUBTOTAL	405,000
Working Capital	100,000
TOTAL INVESTMENT	505,000

4.2 FINANCING

US\$

	EQUITY	TOTAL
Equity		50,000
Promoters or Bank Loan		455,000
TOTAL		505,000

4.3 Land and Development

The project will be situated on a plot that have already been developed therefore development in terms of soft and hard land scaping and erection of Godown will not be required .

4.4 Plant and Machinery cost is estimated **US\$.205, 000** and Vehicles cost estimated is **US\$90,000**

4.5 Furniture and fittings cost estimated is **US\$ 20,000**

4.6 Pre-Operational Expenses

The pre-operational cost is estimated at **US\$ 65,000**

4.7 Others items

Items like generator and the like are estimated at **US\$ 25,000**

4.8 Labor

The project will employ **70** people including **5** expatriates

4.9 Utilities

These include electricity and water with annual estimate Marketing costs

4.10 Advertisement

The firm will undertake aggressive advertising and promotion to create public product awareness in pushing sales.

4.11 Depreciation

The details of depreciation charges are shown below and the provisions have been calculated on straight-line basis.

- a) Land and building **5%**
- b) Machinery/plant **12.5%**
- c) Vehicles **25%**
- d) Furniture & Fittings **12.5%**

4.12 Corporate Tax

The project will pay corporate Tax 30% starting from first year **US\$93,636** increasing to **US\$175,535** in year 6, as a result of project profitability.

4.13 Revenue Assumptions

Sales will be generated from sales of PVC Ceiling Tiles, Boards and Doors products. Total no of products from the manufacturing facility is **28,800** meters per month from the two lines to be installed.

4.14 Operating Expenses

The costs constitute 65 % of the annual sales. It will increase by 10% annually as sales increases, but the impact on the operating profits is minimal.

4.15 Cash flow Projections

The cash flow is positive right from the first year.

5.0 MANPOWER

5.1 Management and organization

Pan Africa Plastics Limited project promoter will coordinate the project to implementation. Manpower requirement has been estimated at 70 employees.

5.2 Training and Requirement

The company will recruit the key staff and the operators 3 months before the operations start to enable them participate in the trial production. This will be part of their orientation and training programme. On the job training will be a continuous process in production, machinery repairs and maintenance sales and marketing.

5.3 PROJECT SOCIAL AND ECONOMIC JUSTIFICATION

- The project will create direct employment to about 70 people.
- The project will create indirect jobs in the construction Industry
- The project will contribute to poverty alleviation, in the sense that it will ensure constant income to families in meeting the basic needs like food clothing, education fees, homes improvement and development.
- It will at later stage generate forex from exports to the regional markets, SADC and EAC

7.0 CONCLUSION AND RECOMMENDATION

It is evident from the financial and economic analysis contained in this report that the proposed plastic building material project is financially and economically viable. The project is therefore highly recommended to be given certificate of incentives to speed up the economic and social development of this project.

PAN AFRICA PLASTICS LIMITED

CAPITAL COST SUMMARY

US\$	
ITEM	Project Cost
Land and Building	0
Machinery and plant	205,000
Vehicles	90,000
Furniture & Fittings	20,000
Other	25,000
Pre-Operating Expenses	65,000
Sub-total	404,000
Working Capital	100,000
TOTAL INVESTMENT	505,000

PAN AFRICA PLASTICS LIMITED

DEPRECIATION SCHEDULE

US \$

YEAR	Value	Rate %	1	2	3	4	5	6	7	8	9	10
Land & buildings			0	0	0	0	0	0	0	0	0	0
Machinery and equipment	205,000	12.5	25,625	25,625	25,625	25,625	25,625	25,625	25,625	25,625	0	0
Motor Vehicles	90,000	25	22,500	22,500	22,500	22,500	0	0	0	0	0	0
Furniture & Fixtures	20,000	12.5	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500		
Operational Expenses	65,000	20	13,000	13,000	13,000	13,000	13,000	0	0	0	0	0
TOTAL			63,625	63,625	63,625	63,625	41,125	28,125	28,125	28,125	0	0

PAN AFRICA PLASTICS LIMITED

PROJECTED PROFIT AND LOSS ACCOUNTS

YEAR	1	2	3	4	5	6	7	8	9	10
Sales Revenue	1,073,554	1,252,480	1,431,405	1,610,331	1,789,257	1,789,257	1,789,257	1,789,257	1,789,257	1,789,257
Less: Cost of Sales	697,810	814,112	930,413	1,046,715	1,163,017	1,163,017	1,163,017	1,163,017	1,163,017	1,163,017
Contribution	375,744	438,368	500,992	563,616	626,240	626,240	626,240	626,240	626,240	626,240
Operating surplus	375,744	438,368	500,992	563,616	626,240	626,240	626,240	626,240	626,240	626,240
Capital Costs	63,625	63,625	63,625	63,625	41,125	28,125	28,125	28,125	0	0
Depreciation										
Total capital cost	63,625	63,625	63,625	63,625	41,125	28,125	28,125	28,125	0	0
Profit Before Tax	312,119	374,743	437,367	499,991	585,115	598,115	598,115	598,115	626,240	626,240
Taxable 30%	93,636	112,423	131,210	149,997	175,535	175,535	175,535	175,535	187,872	187,872
Net Profit	218,483	262,320	306,157	349,994	409,580	409,580	409,580	409,580	438,368	438,368
Revenue Reserves	218,483	480,803	786,960	1,136,954	1,546,534	1,956,114	2,365,694	2,775,274	3,213,642	3,652,010

PAN AFRICA PLASTICS LIMITED

PROJECTED CASHFLOW

USD

	0	1	2	3	4	5	6	7	8	9	10
Cash Inflow											
Equity											
Total Inflow	505,000										
Operational Inflow											
Profit before Tax	312,119	374,743	437,367	499,991	585,115	598,115	598,115	598,115	598,115	626,240	626,240
Depreciation	63,625	63,625	63,625	63,625	41,125	28,125	28,125	28,125	28,125	0	0
Total Operations Inflow	375,744	438,368	500,992	563,616	626,240	626,240	626,240	626,240	626,240	626,240	626,240
Total cash inflow	505,000										
Investment											
Operational Outflow	505,000										
Taxation	93,636	112,423	131,210	149,997	175,535	175,535	175,535	175,535	175,535	187,872	187,872
Total cash outflow	505,000	93,636	112,423	131,210	149,997	175,535	175,535	175,535	175,535	187,872	187,872
Net cash flows	282,108	325,945	369,782	413,619	450,705	450,705	450,705	450,705	450,705	438,368	438,368
Opening Balance	-	282,108	608,053	977,835	1,347,617	1,798,322	2,249,027	2,699,732	3,150,437	3,588,805	3,588,805
Closing balance	282,108	608,053	977,835	1,347,617	1,798,322	2,249,027	2,699,732	3,150,437	3,588,805	4,027,173	