

**COOTECH TZ COMPANY LIMITED**

**FEASIBILITY REPORT FOR**

**SET UP OF MANUFACTURING UNIT FOR**

**VARIOUS HOUSEHOLD APPLIANCES**

**AND**

**CONSUMABLES ELECTRONICS PRODUCTS**

## EXECUTIVE SUMMARY

### 1 Introduction

This study is done with an objective of preparing a Feasibility Report for **M/s COOTECH TZ COMPANY LIMITED** of Dar es Salaam for a project of setting up of Manufacturing Unit of Various household appliances and consumables electronics products in Dar es Salaam, Tanzania.

The scope of services for the proposal feasibility report for development of manufacturing unit for the production of Various household appliances and consumables electronics products in Dar es Salaam include: Market assessment, Development program, land and civil works, project implementation schedule, project cost, financial projections, and conclusion & recommendations.

The overall approach comprised a combination of secondary and primary research. A multi-disciplinary team of appropriate personnel with experience in techno economic studies and market research were deployed for undertaking this assignment. The assignment commenced with a planning for the primary and secondary research. Initially, our team interacted with **M/s COOTECH TZ COMPANY LIMITED** officials to understand the requirements of the study.

Later, the team continuously interacted with **M/s COOTECH TZ COMPANY LIMITED** for their inputs on the plan of the unit, machinery, the constructing cost, project cost, financing etc. The data obtained from the secondary and primary research has been analyzed and incorporated in the report. A worksheet model has been prepared for feasibility calculations. The report is prepared on the basis of best of the information provided by the various stakeholders and associations/agencies. The information in the report should not be claimed and be used as evidence for any purpose.

### 2 DEMOGRAPHIC INDICATORS & DEVELOPMENT – TANZANIA

Tanzania has been showing an appreciate growth in the past few years. The development taking place in the country has been in pace with the other developing nations. The GDP in real terms grew by 7.1 % in 2017, compared to 6.7 % in 2016. Over the years the construction has shown a decent increase. Since the country started to implement economic and institutional reforms, there has been a steady increase of Foreign Direct Investment (FDI) inflows in the economy. Tanzania is among top three recipients of foreign direct investments (FDI) in non-oil producing African countries after South Africa and Ethiopia. Inflows of FDI have risen from US \$ 463.40 million in 2013 to US \$ 12.50 million in 2015.

### **3 Genesis & Details of the Project**

The project involves set up of manufacturing unit of Various household appliances and consumables electronics products at Dar es Salaam **M/s COOTECH TZ COMPANY LIMITED** of Dar es Salaam, was incorporated on the 2<sup>nd</sup> December, 2024 as private limited liability company under the Companies Ordinance (Cap 212 of the Laws of Tanzania).

The day-to-day activities would be managed by an individual appointed for the said purpose. It is expected that a significant number of people will be employed, during the construction of the commercial complex and about 1000 local citizens would be employed permanently, excluding the security guards, once it becomes operational.

### **5 PROJECT COST AND MEANS OF FINANCE**

The development cost of the entire project has been estimated to be around US \$20 million. The major factors contributing towards the cost of the project is the cost of machinery and building construction.

The table below indicates the detailed cost of project:

**TABLE 1: COST OF PROJECT**

<b>COST OF THE PROJECT AND MEANS OF FINANCE</b>		
<b>USD</b>		
<b>NO.</b>	<b>PARTICULARS</b>	<b>TOTAL</b>
1	Building and Civil Work	2,000,000
2	Plant and Machinery	6,800,000
4	Motor Vehicles	1,000,000
5	Office Equipments	100,000
6	Furniture & Fixture	100,000
7	Working Capital	10,000,000
	<b>TOTAL</b>	<b>20,000,000</b>

Considering the size of this project, and also keeping in mind the 3 months of implementation period, the contingencies working capital have been estimated at US\$ 10,000,000/-

The finance for the project is already arranged for by the promoters. The table below indicated in details the manner in which the investment is going to be arranged:

**Table 2: Means of Finance**

<b>NO.</b>	<b>MEANS OF FINANCE</b>	<b>TOTAL</b>
1	Equity	12,000,000
2	Director's Loan	8,000,000
	<b>TOTAL</b>	<b>20,000,000</b>

## **7 Financial Projections**

Details of financial projections are attached as appendices to this report. However, in brief the annexed project financials show that the project will be one with a full proof financing scheme.

For the purpose of calculations and projections the following assumptions were made:

1. Long term loan is availed @ 8% per annum
2. The repayment of the loan would start very second year in installments of US\$ 1,666,667/- per annum.

The detailed calculations of the projected financial are given in the annexure. The Net Present Value for the project comes out to be US\$ 1,109,296/= and the IRR is reasonably good at 19%. Pay Back for the project is estimated to be around 4.59 years.

The next annexure indicates the calculation for the Break-Even Analysis and the Margin of Safety. It must be noticed that the average Return on Investment for the five years is more than 22%, which is a very good sign for the investors.

As far as DSCR is concerned we can see that for the coming years it is expected to be more than 1 which means that the company can repay the loan from its current profits only and not require to repay from its accumulated resources.

## 8 DEVELOPMENT VALUE

The Project's development value to the country is as under: -

The project will generate employment to several people both during the development and after completion. It has been estimated that directly or indirectly this project will provide employment to nearly 1,000 individuals excluding the security guards.

Government will also earn revenue in terms of various levies on the Company associated with the operation of the complex. Further as indicated in the financial projections the total contribution for five years by way of income-tax itself will be to the tune of about US\$ 7,778,910. Last but not the least, the manufacturing units are always considered to be a national property and will therefore add to the national wealth.

It may be mentioned here that total investment of US\$ 4.00 million will play a good part in boosting the local economy. Considering all relevant factors, it is being recommended that the grant of 0% import duty and VAT deferment on capital goods and deemed capital goods is granted to this project not only to make the project viable but also to catalyze other development benefits that may accrue to the country on acceptance of this project.

### 1.1 Approach and methodology

#### Approach

The overall approach comprised a combination of secondary and primary research. A multi-disciplinary team of appropriate personnel with experience in techno economic studies and market research were deployed for undertaking this assignment.

#### Methodology.

The assignment commenced with a detailed planning for the primary and secondary research. Initially, our team interacted with **M/s COOTECH TZ COMPANY LIMITED** officials to understand the requirements of the study. Later, the team continuously interacted with **M/s COOTECH TZ COMPANY LIMITED** for their inputs on the plan of the commercial complex, the material that would be used, the construction cost, project cost, financing etc.

## ➤ **Secondary Research**

A detailed desk research was undertaken to gain a fair understanding of the construction industry, its trends, market size, best practices etc. The sources from which the secondary data was collected included in-house database, internet, and various periodicals. The secondary research was used for planning the primary research for the study and identifying the data to be collected by way of primary research. A detailed desk research was undertaken to gain a fair understanding of the construction industry, its trends, market size, best practice etc. The sources from which the secondary data was collected included in-house database, internet, and various periodicals. The secondary research was used for planning the primary research for the study and identifying the data to be collected by way of Primary research.

## ➤ **Primary Research**

Interview guidelines were developed for the compilation of the necessary information by way of interview.

## **2. Demographic Indicators and Development – Tanzania.**

### **2.1 Tanzania – The Developing Economy**

In the African continent Tanzania is among the fastest developing economies. Tanzania has clinched the top slot in the improvement index as published by the Centre for International Development at Harvard University.

The report titled “The Africa Competitiveness Report 2013/2014” ranks Tanzania as first on improvement index. Investors in Tanzania are highly optimistic of the future of the economy. Low inflation, a reasonable stable currency, friendly government and peaceful country are what most of the international company chiefs quoted as being economic driving force.

Tanzania has been showing an appreciable growth in the past few years. The development taking place in the country has been in pace with the other developing nations. Tanzania has been showing an appreciable growth in the past few years. The development taking place in the country has been in pace with the other developing nations. The GDP in real terms grew by 7.1% in 2013, compared to 6.7% in 2014. Over the years the construction has shown a decent increase.

### **3. Genesis & Details of the Project**

#### **3.1 Introduction**

The project involves setting up of Manufacturing Plant for Various household appliances and consumables electronics products at Dar es Salaam.

Tanzania is growing commercially and is being viewed positively by outside world. The tourists are becoming more and more interested in viewing the national parks and hidden beauties. Tanzania depends largely on the performance of its agricultural sector for its social and economic development. Like many developing countries it is the agricultural sector that constitutes the major source of national food reserves and, at the same time is an engine for generating foreign exchange and raw materials for basic industries.

However, present economic reforms taking place in the country have started to show that other sectors of the economy like – general engineering and fabrication, tourism, general trade and commerce in non-tradition products, are becoming increasingly important sectors of the economy, especially considering their potential for generating foreign exchange earnings.

As a consequence, it is imperative that the need for more and more manufacturing units will be felt and the fact is that there is shortage of such manufacturing units in Dar es Salaam which is the financial capital of the Country. It is therefore inferred that such project should be undertaken. It is confirmed that **M/s COOTECH TZ COMPANY LIMITED** has the required expertise for the Project. With ready market, availability of proven management expertise and availability of funding to the extent needed, the success of the project is guaranteed.

#### **3.2 LOCATION**

The site is to be developed on, Dar es Salaam. This place is well served with the necessary utility facilities, including the central sewerage system for all liquid waste. Communication links are also available.

#### **3.3 DAY TO DAY MANAGEMENT.**

The management of the company has the required expertise in-house. The day-to-day activities would be managed by an individual appointed for the said purpose.

### **3.4 EMPLOYMENT**

It is expected that a significant number of people will be employed, during the construction of the commercial complex and about 1000 local citizens would be employed permanently, excluding the security guards, once it becomes operational. Security personnel will be contracted from an outside security firm.

### **3.5 STRATEGIES**

In order to achieve the objectives, it is planned to implement the following strategies;

- Establish an effective preventive maintenance programme of the equipment, which will ensure sustainable equipment availability for operation.
- Establish a quality assurance and control system that will ensure provision of quality products and services.
- Conduct regular evaluations of production and servicing processes to ensure optimum costs of products and services.
- Devise and implement productivity improvement measures
- Develop and implement an effective marketing policy
- Develop and implement an advertising and promotion programme
- Establish effective financial and resources management

### **3.6 MARKET**

Recent reforms taking place in the economy indicate that there is an increase in demand for home appliances and electronics products. The following are some of the factors that have contributed to such an increase in demand for these products in the country: -

- Increased level of life, rehabilitation and expansion of roads by the Government and international assistance agencies – which has subsequently resulted in increased kilometers of passable roads by small and heavy-duty vehicles.
- Rise in people's standard of living and a change in people's consumption patterns;
- General improvement in the national economy, especially the balance of payments which has made it possible for the Government to achieve greater capability to import critical products into the country;
- Increased general level of investments in industrial activities which are the major users of industrial inputs;  
Increase transit trade between Tanzania and its neighbors especially – Uganda, Rwanda, Burundi, Malawi, Zambia and the Democratic Republic of Congo.

These factors have led to increased demand for general engineering activities for products in the country. Furthermore, these factors have created the impetus for increased inflow of investment capital by foreign and local private investors who now have decided to venture in the importation and industrial raw materials.

The reforms which are now being introduced in this sector aim at influencing the inflow of and increased supply of both capital goods and other industrial

productions and their distribution in the country and beyond and national borders.

#### **4. PROJECT COST AND MEANS OF FINANCE**

##### **4.1 COST OF PROJECT**

The development cost of the entire project has been estimated to be around US\$ 1.00 million. The major factors contributing towards the cost of the project is the cost of machinery and cost of equipment's.

The table below indicates the detailed cost of project.

**TABLE F: COST OF PROJECT**

<b>COST OF THE PROJECT AND MEANS OF FINANCE</b>		
<b>USD</b>		
<b>NO.</b>	<b>PARTICULARS</b>	<b>TOTAL</b>
1	Building and Civil Work	2,000,000
2	Plant and Machinery	6,800,000
4	Motor Vehicles	1,000,000
5	Office Equipment	100,000
6	Furniture & Fixture	100,000
7	Working Capital	10,000,000
	<b>TOTAL</b>	<b>20,000,000</b>

Considering the size of this project, and also keeping in mind the 3 months of implementation period, the working capital have been estimated at US\$ 10,000,000/-

Stock of Consumables has been considered at 1.5 months, and Debtors at 1 months.

On the other hand, 40 days credit has been considered form creditors.

## **5. FINANCIAL PROJECTIONS**

Details of financial projections are attached as appendices to this report. However, in brief the annexed project financials show that the project will be one with a full proof financing scheme.

The financing is so prudently designed that the smooth cash flow position is guaranteed throughout the gestation period.

### **5.1 ASSUMPTIONS**

For the purpose of calculations and projections the following assumptions were made

**TABLE H: ASSUMPTION FOR THE PROJECT**

Sr No	Particulars	
1.	Long Term Loan is availed @ 8% per annum	
2.	The repayment of the loan would start very second year in the instalment of USD 666,667/- p.a.	
3.	Production and Rate of Nuts & Bolts	
	Average Production per day in Tons	3
	Average Rate per Ton	3,000
	Number of days in year considered	300
	Turnover @ 100% capacity (A)	2,700,000
4.	Production and Rate of Nail Wire	
	Average Production per day in Tons	4
	Average Rate per Ton	1,000
	Number of days in year considered	300
	Turnover @ 100% capacity (B)	1,200,000
	Turnover @ 100% capacity (A+B)	3,900,000

## 5.6 FINANCIAL INDICATORS

Considering the usage and demand of Various household appliances and consumables electronics products, it can be safely presumed that the premises will safely enjoy 65% occupancy from 2010 and then 5% increase every year. On the basis as mentioned above, the profitability for the company in 2010 has been worked. The detailed calculations of the projected financial are given in the annexure. The Net Present Value for the project comes out to be US\$ 7,709,296/- and the IRR is reasonably good ate 19%. Pay Back Period for the project is estimated to be around 4.59 years.

The next annexure indicates the calculations for the Break-Even Analysis and the Margin of Safety. It must be notices that the average Return on Investment for the five years is more than 22%, which is a very good sign for the investors. The chart below indicated the summary of the projected profits of the company from the first five years of the operations. Over a period of five years operations the total amount of Reserves generated shall be to the tune of US\$ 1,817,456. It shows a comfortable position for the company

## **6. DEVELOPMENTAL VALUES**

The project's development value to the country is as under: -

1. The project will generate employment to several people both during the construction and after completion. It has been estimated that directly or indirectly this project will provide employment to nearly 1000 individuals excluding the security guards.
2. Government will also earn revenue in terms of various levies on the Company associated with the operation of the complex. Further r as indicated in the financial projections the total contribution for five years by way of income-tax and withholding tax will be to the tune of about US\$ 7,778,910.
3. The project will also contribute directly and indirectly in the generation of foreign exchange.
4. Last but not least, the manufacturing units are always considered to be a national property and will therefore add to the national wealth.

## **7. CONCLUSIONS & RECOMMENDATIONS**

The economic impact from implementing and operating it is also positive. Since the project is technically feasible, financially and economically viable, socially and from nation's point of view desirable a fast implementation thereof is recommended. It is important that there are no cost overruns so as to enable the realization of the benefits as outlined above.

It may be mentioned here that total investment of US\$ 20,000,000 million will play a good part in boosting the local economy. Considering all relevant factors, it is being recommended that the grant of 0% import duty & VAT deferments on capital goods and deemed capital goods is granted to this project not only to make the project viable but also to catalyze other development benefits that may accrue to the country on acceptance of this project.



## **FINANCIAL PROJECTIONS**

<b>FIXED ASSETS SCHEDULE</b>						
<b>NAME OF ASSETS</b>		<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>
Land and Buildings		2,000,000	1,900,000	1,800,000	1,700,000	1,600,000
Plant & Machines		6,800,000	5,440,000	4,080,000	2,720,000	1,360,000
Motor Vehicle		1,000,000	920,000	915,000	910,000	905,000
Furniture & Fixtures		100,000	87,500	75,000	62,500	50,000
<b>Total</b>		<b>9,900,000</b>	<b>8,347,500</b>	<b>6,870,000</b>	<b>5,392,500</b>	<b>3,915,000</b>
<b>Depreciation</b>		<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>
Land and Buildings		100,000	100,000	100,000	100,000	100,000
Plant & Machines		1,360,000	1,360,000	1,360,000	1,360,000	1,360,000
Motor Vehicles		80,000	5,000	5,000	5,000	5,000
Furniture & Fixtures		12,500	12,500	12,500	12,500	12,500
<b>ANNUAL DEPRECIATION</b>		<b>1,552,500</b>	<b>1,477,500</b>	<b>1,477,500</b>	<b>1,477,500</b>	<b>1,477,500</b>
<b>CLOSING FIXED ASSETS</b>		<b>8,347,500</b>	<b>6,870,000</b>	<b>5,392,500</b>	<b>3,915,000</b>	<b>2,437,500</b>

<b>OTHER OPERATING COST</b>						
<b>Other Operations Cost</b>		<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>
Motor Vehicle running expense		260,000	260,400	260,800	261,200	261,600
Salaries and Wages		1,080,000	1,188,000	1,306,800	1,437,480	1,581,228
Administrative Overhead Costs		415,000	456,500	502,150	552,365	607,602
Utility Costs		23,000	25,300	27,830	30,613	33,674
Interest on Loan		444,000	399,600	359,640	323,676	291,308
Raw Materials		7,778,000	8,555,800	9,411,380	10,352,518	11,387,770
<b>Total Costs</b>		<b>10,000,000</b>	<b>10,885,600</b>	<b>11,868,600</b>	<b>12,957,852</b>	<b>14,163,182</b>

PROJECTED BALANCE SHEET						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets		9,900,000	8,347,500	6,870,000	5,392,500	3,915,000
Long term Assets						
Depreciation		1,552,500	1,477,500	1,477,500	1,477,500	1,477,500
<b>Total long term assets</b>		<b>8,347,500</b>	<b>6,870,000</b>	<b>5,392,500</b>	<b>3,915,000</b>	<b>2,437,500</b>
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
<b>Total Current Assets</b>		<b>10,100,000</b>	<b>10,100,000</b>	<b>10,100,000</b>	<b>10,100,000</b>	<b>10,100,000</b>
<b>Total Assets</b>		<b>18,447,500</b>	<b>16,970,000</b>	<b>15,492,500</b>	<b>14,015,000</b>	<b>12,537,500</b>
<b>Current Liabilities</b>						
Accounts Payable		84,000	88,200	92,610	97,241	102,103
Other Current Liability		70,000	73,500	77,175	81,034	85,085
<b>Subtotal Current Liabilities</b>		<b>154,000</b>	<b>1,616,700</b>	<b>169,785</b>	<b>178,274</b>	<b>187,188</b>
<b>Long term Liabilities</b>						
Long term Liabilities		1,820,000	1,820,000	1,820,000	1,820,000	1,820,000
<b>Total Liabilities</b>		<b>8,347,500</b>	<b>6,870,000</b>	<b>5,392,500</b>	<b>3,915,000</b>	<b>2,437,500</b>
<b>Net Assets</b>		<b>820,810</b>	<b>877,633</b>	<b>951,268</b>	<b>1,044,516</b>	<b>1,157,656</b>
<b>Capital and Reserves</b>						
Owners Contribution		780,000	780,000	780,000	780,000	780,000
<b>Retained Earning</b>		<b>40,810</b>	<b>97,633</b>	<b>171,268</b>	<b>264,516</b>	<b>377,656</b>
<b>Total Capital</b>		<b>18,447,500</b>	<b>16,970,000</b>	<b>15,492,500</b>	<b>14,015,000</b>	<b>12,537,500</b>

PROJECTED INCOME STATEMENT						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Sales Revenue		29,000,000	34,800,000	41,760,000	50,112,000	60,134,400
Cost of Sales		5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
<b>Gross Profit</b>		<b>23,200,000</b>	<b>29,000,000</b>	<b>35,960,000</b>	<b>44,312,000</b>	<b>54,334,400</b>
<b>Operating Expenses</b>						
Administrative Overhead						
Costs		415,000	419,150	423,342	427,575	431,851
Motor Vehicle running		260,000	262,600	265,226	267,878	270,557
Salaries and Wages		1,080,000	1,090,800	1,101,708	1,112,725	1,123,852
Depreciation		1,552,500	1,568,025	1,583,705	1,599,542	1,615,538
Utility Costs		23,000	23,230	23,462	23,697	23,934
Insurance		500,000	505,000	510,050	515,151	520,302
Interest on Loan		444,000	448,440	452,924	457,454	462,028
<b>Total Expenses</b>		<b>3,599,500</b>	<b>3,635,495</b>	<b>3,671,850</b>	<b>3,708,568</b>	<b>3,745,654</b>
<b>Profit before Tax</b>		<b>19,600,500</b>	<b>25,364,505</b>	<b>32,288,150</b>	<b>40,603,432</b>	<b>50,588,746</b>
Tax (30%)		5,880,150	7,609,352	9,686,445	12,181,029	15,176,624
<b>Profit After Tax</b>		<b>13,720,350</b>	<b>17,755,154</b>	<b>22,601,705</b>	<b>28,422,402</b>	<b>35,412,122</b>

