

ZX CO-CREATION COMPANY LIMITED

Feasibility Report

For

Set Up of Manufacturing Unit of Building Materials

By;

ZX CO-CREATION COMPANY LIMITED

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Dar es Salaam

Executive Summary

1 Introduction

This study is done with an objective of preparing a Feasibility Report for M/s ZX CO-CREATION COMPANY LIMITED, of Coast Region for a project of setting up of Manufacturing Unit of steel bars, wire mesh, nails and paints in Coast Region Tanzania.

The scope of services for the proposal feasibility report for development of manufacturing unit for the production of these materials in Coast Region 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 ZX CO-CREATION COMPANY LIMITED officials to understand the requirements of the study.

Later, the team continuously interacted with ZX CO-CREATION 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 5.5 % in 2024, compared to 4.9 % in 2023. 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 2020 to US \$ 12.50 million in 2022.

3 Genesis & Details of the Project

The project involves set up of manufacturing unit of cast iron grinding balls at Coast Region region

M/s. ZX CO-CREATION COMPANY LIMITED of Dar es Salaam, was incorporated on the 31st October 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 20 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 \$ 1.98 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

COST OF THE PROJECT AND MEANS OF FINANCE		
USD		
NO.	PARTICULARS	TOTAL
1	Building and Civil Work	400,000
2	Plant and Machinery	1,200,000
4	Motor Vehicles	240,000
5	Furniture & Fixture	10,000
6	Pre-operative Expenses	50,000
7	Working capital	80,000
	TOTAL	1,980,000

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

NO.	MEANS OF FINANCE	TOTAL
1	Foreign Equity	660,000
2	Foreign Loan	1,320,000
	TOTAL	1,980,000

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\$ 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 20 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\$ 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 catalyse 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 ZX CO-CREATION COMPANY LIMITED officials to understand the requirements of the study. Later, the team continuously interacted with ZX CO-CREATION 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 undertaking 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 indentifying 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.

1.2 Data Analysis and Report Preparation

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.

Report Format

The report is presented in 07 chapters.

Chapter 1 Introduction

This chapter outlines the objectives, scope, approach & methodology for the study.

Chapter 2 Demographic Indicators & Development – Tanzania

This chapter discusses about the demography of Tanzania and the macro-economic developments that are taking place in the Country.

Chapter 3 Genesis & Details of the Project

The chapter discusses the initiation of the project, the stakeholders, location, construction details, components of the projects, employment details and other relevant details.

Chapter 4 Project Cost and Means of Finance

The chapter presents the elements of the project cost and discusses the means of financing for the project.

Chapter 5 Financial Projections

Financial statements including projected income statement, projected cash flow statement and projected balance sheet for the first 05 years of operation and financial indicators such as IRR and payback period are given in this chapter.

The Return on Investment on annual basis for the project has also been calculated.

Chapter 6 Developmental Value

This chapter mentions about the benefits incurring to the nation and the citizens as a result of this implementation of the project in consideration.

Chapter 7 Conclusions and Recommendations

The chapter discusses the conclusions derived from the study and recommendations how to go ahead.

Annexure

1.3 Limitations

The report is prepared on the basis of best of the information provided by the various stakeholders and association/agencies. The information in the report shall not be claimed and be used as evidence for any purpose.

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 2020/2021” 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 5.5% in 2024, compared to 3.9 % in 2023. 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 building materials at Coast Region.

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 confirm that ZX CO-CREATION 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.

3.3 Ownership:

Guo juncheng and Huong shouyong are the promoters and first directors of the ZX CO-CREATION COMPANY LIMITED. Its head office is in Coast Region.

3.4 Location

The site is to be developed at Coast Region and company has lease the land but plan to purchase in future depending with production and market. This place is well served with the necessary utility facilities, including the central sewerage system for all liquid waste. Communication links are also available.

3.5 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.

3.6 Employment

It is expected that a significant number of people will be employed, during the construction of the commercial complex and about 50 local citizens would be employed permanently, excluding the security guards, once it becomes operational. Security personnel will be contracted from an outside security firm.

3.7 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.
- Device 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.

3.8 Market

Recent reforms taking place in the economy indicate that there is an increase in demand for these kinds of balls. 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 mining sites in Tanzania and neighbouring countries.
- Value addition on material found in Tanzania instead of importing the same.
- Increase of cement factories which use iron grinding balls on during productions

- Increased general level of investments in industrial activities which are the major users of industrial inputs;
- Increase transit trade between Tanzania and its neighbours 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.

Cast Iron Grinding Ball production and Uses

The project will produce $\Phi 20\text{mm}—\Phi 130\text{mm}$ low, middle, high chrome alloy casting iron ball. Huafu chose large angle steel, scrap steel and other raw material, according to different product, needs adding chrome, manganese, vanadium, titanium, rare earth and as so on metal. Products high hardness, low wear, good toughness and less broken, in the process of using sphere will further improve the surface hardness, wear resistance. Chrome alloy casting iron ball are widely used in cement, building materials, metal mining, coal slurry thermal power, chemical engineering, ceramic coating, light industry, papermaking, ultrafine powder preparation of magnetic materials and other industries and further processing.

The company will use the new Technology from people republic of China and will have qualified engineers to install and operate the machine while teaching the local employees who will take over after understanding how to operate the machines.

These are machines which company had already ordered :

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\$ 1.98 million. The major factors contributing towards the cost of the project is the cost of machinery and cost of equipments.

The table below indicates the detailed cost of project.

Table : Cost of Project

COST OF THE PROJECT AND MEANS OF FINANCE		
USD		
NO.	PARTICULARS	TOTAL
1	Building and Civil Work	400,000
2	Plant and Machinery	1,200,000
4	Motor Vehicles	240,000
5	Furniture & Fixture	10,000
6	Pre-operative Expenses	50,000
7	Working capital	80,000
	TOTAL	1,980,000

Considering the size of this project, and also keeping in mind the 3 months of implementation period, the contingencies and pre-operational expenses have been estimated at US\$ 170,000/-

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

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 20 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\$ 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\$ 1.98 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 STATEMENTS

INVESTMENT BREAKDOWN			
COST STRUCTUR		AMOUNTS USD	
PARTICULAR			
Land and Buildings			400,000
Plant & Machines			1,200,000
Motor Vehicles			240,000
Furniture & Fixtures			10,000
Pre Expenses			10,000
Others			0
Working Capital			80,000
TOTAL			1,940,000

FIXED ASSETS SCHEDULE						
NAME OF ASSETS		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings		400,000	380,000	360,000	340,000	320,000
Plant & Machines		1,200,000	960,000	720,000	480,000	240,000
Motor Vehicle		240,000	200,000	160,000	120,000	80,000
Furniture & Fixtures		10,000	8,750	40,000	35,000	30,000
Total		1,850,000	1,548,750	1,280,000	975,000	670,000
Depreciation		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings		20,000	20,000	20,000	20,000	20,000
Plant & Machines		240,000	240,000	240,000	240,000	240,000
Motor Vehicles		40,000	40,000	40,000	40,000	40,000
Furniture & Fixtures		1,250	1,250	1,250	1,250	1,250
ANNUAL DEPRECIATION		301,250	301,250	301,250	301,250	301,250
CLOSING FIXED ASSETS		1,548,750	1,247,500	978,750	673,750	368,750

OTHER OPERATING COST						
Other Operations Cost		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Motor Vehicle running expens		48,000	48,400	48,800	49,200	49,600
Salaries and Wages		16,000	17,600	19,360	21,296	23,426
Adminitrative Overhead Costs		10,000	11,000	12,100	13,310	14,641
Utility Costs		4,000	4,400	4,840	5,324	5,856
Interest on Loan		900	990	1,089	1,198	1,318
Communication Exepnses		1,100	1,210	1,331	1,464	1,611
Total Costs		80,000	83,600	87,520	91,792	96,451

PROJECTED INCOME STATEMENT						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR5
Sales Revenue		1,750,000	1,837,500	1,929,375	2,025,844	2,127,136.00
Cost of Sales		700,000	735,000	771,750	810,338	850,854
Gross Profit		2,450,000	2,572,500	2,701,125	2,836,182	2,977,990
Operating Expenses						
Administrative Overhead						
Costs		105,000	110,250	115,763	121,551	127,628
Motor Vehicle running						
Expenses		8,000	8,400	8,820	9,261	9,724
Salaries and Wages		378,000	396,900	416,745	437,582	459,461
Depreciation		381,000	381,000	381,000	381,000	381,000
Marketing Costs		26,500	27,563	28,941	30,388	31,907
Utility Costs		24,500	25,725	27,011	28,362	29,780
Insurance		49,000	51,450	54,023	54,023	54,023
Interest on Loan		18,200	18,200	18,200	18,200	18,200
Communication		1,750	1,838	1,029	1,929	2,929
Total Expenses		991,700	1,021,325	1,052,431	1,082,295	1,114,652
Profit before Tax		58,300	81,175	105,194	133,211	161,629
Tax (30%)		17,490	24,353	31,558	39,963	48,489
Profit After Tax		40,810	56,823	73,636	93,248	113,140

PROJECT BALANCE SHEET						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets		1,850,000	1,548,750	1,280,000	975,000	670,000
Long term Assets						
Depreciation		301,250	301,250	301,250	301,250	301,250
Total long term assets		1,548,750	1,247,500	978,750	673,750	368,750
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		725,810	1,171,333	1,634,053	2,116,790	2,620,844
Total Assets		2,274,560	2,418,833	2,612,803	2,790,540	2,989,594
Current 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 Liabilities						
Long term Liabilitie		1,820,000	1,820,000	1,820,000	1,820,000	1,820.00
Total Liabiities		1,974,000	1,981,700	1,989,785	1,998,274	2,007,188
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		820,810	877,633	951,268	1,044,516	1,157,656