

**ZHUANG CHEN CONSTRUCTION
COMPANY LIMITED**

Feasibility Report

For

**Set Up of Manufacturing Unit of
Building Materials**

By;

ZHUANG CHEN CONSTRUCTION COMPANY LIMITED

P O Box 2642

Dodoma

Executive Summary

1 Introduction

This study is done with an objective of preparing a Feasibility Report for M/s ZHUANG CHEN CONSTRUCTION COMPANY LIMITED, of Dar es Salaam for a project of setting up of Manufacturing Unit of Building Material in Dar es Salaam, Tanzania.

The scope of services for the proposal feasibility report for development of manufacturing unit for the production of building materials 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 ZHUANG CHEN CONSTRUCTION COMPANY LIMITED officials to understand the requirements of the study.

Later, the team continuously interacted with ZHUANG CHEN CONSTRUCTION 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 2020 to US \$ 12.50 million in 2017.

3 Genesis & Details of the Project

The project involves set up of manufacturing unit of building materials at Dar es Salaam

M/s. ZHUANG CHEN CONSTRUCTION COMPANY LIMITED of Dar es Salaam, was incorporated on the 2nd October, 2023 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 \$ 0.5 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

INVESTMENT BREAKDOWN

COST STRUCTUR	AMOUNTS USD
PARTICULAR	
Land and Buildings	80,000
Plant & Machines	240,000
Motor Vehicles	70,000
Pre Expenses	40,000
Working Capital	70,000
TOTAL	500,000

It has been conveyed to us that the promoters have already had consent from the bank. 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\$ 40,000/-

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	Equity	500,000
2	Loan	0
	TOTAL	500,000

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

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\$ 0.5 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 ZHUANG CHEN CONSTRUCTION COMPANY LIMITED officials to understand the requirements of the study. Later, the team continuously interacted with ZHUANG CHEN CONSTRUCTION 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 2000/2001” 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.

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3. Genesis & Details of the Project

3.1 Introduction

The project involves setting up of Manufacturing Plant for building materials at Dodoma 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 ZHUANG CHEN CONSTRUCTION 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:

Liu Dequan and Fu Zhijun are the promoters and first directors of the ZHUANG CHEN CONSTRUCTION COMPANY LIMITED. Its head office is in Dar es Salaam.

3.4 Location

The site is to be developed on, Dodoma region. 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 20 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.
- 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.

3.8 Market

Recent reforms taking place in the economy indicate that there is an increase in demand for bolts/nuts and nails. 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 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 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 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\$ 0.5 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.

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.

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\$ 0.5 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			
PARTICULAR			AMOUNTS USD
Land and Buildings			80,000.00
Plant & Machines			240,000.00
Motor Vehicles			70,000.00
Furniture & Fixtures			0.00
Pre Expenses			40,000.00
Working Capital			70,000
TOTAL			500,000

FIXED ASSETS SCHEDULE						
NAME OF ASSETS		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings		80,000	76,000	72,000	68,000	64,000
Plant & Machines		240,000	192,000	144,000	96,000	48,000
Motor Vehicle		70,000	70,000	65,000	60,000	55,000
Furniture & Fixtures		0	0	40,000	35,000	30,000
Total		390,000	338,000	321,000	259,000	197,000
Depreciation		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings		4,000	4,000	4,000	4,000	4,000
Plant & Machines		48,000	48,000	48,000	48,000	48,000
Motor Vehicles		0	5,000	5,000	5,000	5,000
Furniture & Fixtures		0	0	0	0	0
ANNUAL DEPRECIATION		52,000	57,000	57,000	57,000	57,000
CLOSING FIXED ASSETS		338,000	281,000	264,000	202,000	140,000

OTHER OPERATING COST						
Other Operations Cost		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Motor Vehicle running expens		13,000	14,170	15,445	16,835	18,351
Salaries and Wages		10,600	11,660	12,826	14,109	15,519
Administrative Overhead Costs		9,000	9,900	10,890	11,979	13,177
Utility Costs		10,000	11,000	12,100	13,310	14,641
Interest on Loan		21,400	19,260	17,334	15,601	14,041
Communication Exepnses		6,000	6,600	7,260	7,986	8,785
Total Costs		70,000	72,590	75,855	79,820	84,513

PROJECTED BALANCE SHEET						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets		390,000	338,000	321,000	259,000	197,000
Long term Assets						
Depreciation		52,000	57,000	57,000	57,000	57,000
Total long term assets		338,000	281,000	264,000	202,000	140,000
Current Assets						
Cash		3,528,730	4,058,040	2,632,581	4,941,437	7,570,679
Account Receivable		70,000	80,500	92,575	106,461	122,430
Inventory		0	0	0	0	0
Total Current Assets		3,598,730	4,138,540	2,725,156	5,047,898	7,693,109
Total Assets		3,936,730	4,419,540	2,989,156	5,249,898	7,833,109
Current Liabilities						
Accounts Payable		17,500	20,125	23,144	26,615	30,608
Other Current Liabilit		2,500	2,875	3,306	3,802	4,373
Subtotal Current Liabi		20,000	23,000	26,450	30,418	34,980
Long term Liabilities						
Long term Liabilitie		0	0	0	0	0
Total Liabiities		20,000	23,000	26,450	30,418	34,980
Captil and Reserves						
Owners Contribution		500,000	571,450	728,105	956,011	1,269,531
Retained Earning		51,450	133,655	201,456	283,103	381,366
Total Capital		571,450	728,105	956,011	1,269,531	1,685,877

PROJECTED INCOME STATEMENT						
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Sales Revenue		225,000	270,000	324,000	388,800	466,560
Cost of Sales		45,000	45,000	45,000	45,000	45,000
Gross Profit		180,000	225,000	279,000	343,800	421,560
Operating Expenses						
Administrative Overhead						
Costs		9,000	9,090	9,181	9,273	9,365
Motor Vehicle running		13,000	13,130	13,261	13,394	13,528
Salaries and Wages		10,600	10,706	10,813	10,921	11,030
Depreciation		52,000	52,520	53,045	53,576	54,111
Utility Costs		10,000	10,100	10,201	10,303	10,406
Insurance		12,500	12,625	12,751	12,879	13,008
Interest on Loan		21,400	21,614	21,830	22,048	22,269
Total Expenses		106,500	107,565	108,641	109,727	110,824
Profit before Tax		73,500	117,435	170,359	234,073	310,736
Tax (30%)		22,050	35,231	51,108	70,222	93,221
Profit After Tax		51,450	82,205	119,252	163,851	217,515