

SHANATEC LIMITED

Feasibility Report

For

Pyrethrum Processing Facility

By;

SHANATEC LIMITED

P O Box 551

Mbeya

Executive Summary

1 Introduction

This study is done with an objective of preparing a Feasibility Report for M/s **SHANATEC LIMITED**, of Mbeya for a project of setting up of a pyrethrum processing unit in Plot 3 Block B idiga Mbeya Rural Area, Mbeya Region, Tanzania.

The scope of services for the proposal feasibility report for development of pyrethrum processing unit in Mbeya, 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 SHANATEC LIMITED officials to understand the requirements of the study.

Later, the team continuously interacted with SHANATEC 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 5.79 % in 2019, compared to 5.45 % in 2018. 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 seven recipients of foreign direct investments (FDI) in non-oil producing African countries. Inflows of FDI have risen from US \$ 463.40 million in 2010 to US \$ 12.50 million in 2015.

3 Genesis & Details of the Project

The project involves set up of a pyrethrum processing and packaging unit in Mbeya region.

M/s. SHANATEC LIMITED of Dar es Salaam, was incorporated on the 1st February, 2021 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 \$ 0.65 million. The major factors contributing towards the cost of the project is the cost of machinery and building construction. The project will be financed by 60% equity and 40% will be financed by bank loan

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\$ 20,000/-

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:

COST OF THE PROJECT AND MEANS OF FINANCE		
USD		
NO.	PARTICULARS	TOTAL
1	Building and Civil Work	160,000
2	Plant and Machinery	250,000
4	Motor Vehicles	110,000
5	Furniture & Fixture	10,000
6	Pre-operative Expenses	20,000
7	Working Capital	100,000
	TOTAL	650,000

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\$ 78,910. 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\$ 0.48 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 SHANATEC LIMITED officials to understand the requirements of the study. Later, the team continuously interacted with SHANATEC LIMITED for their inputs on the plan of the local and foreign market due to plans of the company.

➤ Secondary Research

A detailed desk research was undertaken to gain a fair understanding of the pyrethrum market 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 pyrethrum 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 2010/2011” 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 pyrethrum processing and packaging Plant at Plot 3 Block B idiga Songwe Industrial area, Mbeya.

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 SHANATEC 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:

Hawa Bakari Kisende and Mussa Mohamed Mnasi are the promoters and first directors of the SHANATEC LIMITED. Its head office is in Mbeya.

3.4 Location

The site is to be developed at Plot 3 Block B idiga Songwe Industrial Area in Mbeya 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 26 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 and 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 pyrethrum. The following are some of the factors that have contributed to such an increase in demand for these products in the country:-

- 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.
- Ease of doing business with neighboring country.

3.9 Production Capacity

The project estimate to process 600 tones per annum of pyrethrum

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 capita goods and other industrial productions and their distribution in the country and beyond national borders.

5. Project Cost and Means of Finance

5.1 Cost of Project

The development cost of the entire project has been estimated to be around US\$ 0.48 million. The major factors contributing towards the cost of the project is the cost of machinery, motor vehicles and cost of equipment's.

6.1 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.

6.2 Financial Indicators

Considering the usage and demand of pyrethrum products, it can be safely presumed that the premises will safely enjoy 65% occupancy from 2021 and then 5% increase every year. On the basis as mentioned above, the profitability for the company in 2021 has been worked out as following:

Table i: Annual Profitability of the Company

Particulars	2021
Capacity Utilisation	65%
Sales Turnover	2,535,000
Less Cost of Production	1,394,250
Gross Profit	1,140,750
Less	
Administration Expenses	202,800
Marketing Expenses	25,350
Financial Expenses on Long Term Loan	231,667
Depreciation	481,432
Total Indirect Cost	941,249

Operating Profit Before Tax	199,501
Taxation @ 30%	59,850
Operating Profits After Tax	139,651
Proposed Dividends	-
Cumulative Net Cash Profits CF to Balance Sheet	139,651
Net Cash Profit from Operations	621,083

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 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 noticed 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.

7. 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 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\$ 0.65 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	160,000
Plant & Machines	250,000
Motor Vehicles	110,000
Furniture & Fixtures	10,000
Pre Expenses	20,000
Working Capital	100,000
TOTAL	650,000

OTHER OPERATIONS COST

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Motor Vehicle running expens	21,000	21,400	21,800	22,200	22,600
Salaries and Wages	35,000	38,500	42,350	46,585	51,244
Adminitrative Overhead Costs	16,000	17,600	19,360	21,296	23,426
Utility Costs	13,000	14,300	15,730	17,303	19,033
Interest on Loan	4,000	4,400	4,840	5,324	5,856
Communication Exepnses	11,000	12,100	13,310	14,641	16,105
Total Costs	100,000	108,300	117,390	127,349	138,264

PROJECT BALANCE SHEET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets	530,000	465,750	434,000	366,000	298,000
Long term Assets					
Depreciation	64,250	64,250	64,250	64,250	64,250
Total long term assets	465,750	401,500	369,750	301,750	233,750
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	120,000	120,000	120,000	120,000	120,000
Total Assets	585,750	521,500	489,750	421,750	353,750
Curent Liabilities					
Accounts Payable	84,000	88,200	92,610	97,241	102,103
Other Current Liabilities	70,000	73,500	77,175	81,034	85,085
Subtotal Current Liabilities	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	465,750	401,500	369,750	301,750	233,750
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	585,750	521,500	489,750	421,750	353,750

PROJECTED INCOME STATEMENT

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR5
Sales Revenue	4,916,000	5,899,200	7,079,040	8,494,848	10,193,818
Cost of Sales	983,200	983,200	983,200	983,200	983,200
Gross Profit	3,932,800	4,916,000	6,095,840	7,511,648	9,210,618
Operating Expenses					
Administrative Overhead					
Costs	68,000	68,680	69,367	70,060	70,761
Motor Vehicle running	5000	5,050	5,101	5,152	5,203
Expenses	8,000	8,080	8,161	8,242	8,325
Salaries and Wages	78,000	78,780	79,568	80,363	81,167
Depreciation	68,175	68,857	69,545	70,241	70,943
Marketing Costs	6,500	6,565	6,631	6,697	6,764
Utility Costs	10,500	10,605	10,711	10,818	10,926
Insurance	10,000	10,100	10,201	10,303	10,406
Interest on Loan	12,200	12,322	12,445	12,570	12,695
Communication	1,750	1,768	1,785	1,803	1,821
Total Expenses	195,125	197,076	199,047	201,037	203,048
Profit before Tax	3,737,675	4,718,924	5,896,793	7,310,611	9,007,570
Tax (30%)	1,121,303	3,303,247	4,127,755	5,117,427	6,305,299
Profit After Tax	2,616,373	1,415,677	1,769,038	2,193,183	2,702,271