DETAILED PROJECT REPORT

PALM OIL PROCESSING UNIT

UNDER ATTRIUM INTERNATIONAL LIMITED

MUKURANGO, DAR ES SALAM, TANZANIA

TABLE OF CONTENTS

1. PROJECT SUMMARY

1. Name of the proposed project	:	Palm Oil Processing Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	1000 MT PER DAY
4. Raw material	:	Oil Palm CRUDE
5. Major product outputs	:	Palm Oil
6. Total project cost	:	USD 69.50 MN
Land development, building & Civil Construction	:	USD 5.15 MN
Machinery and equipment's	:	USD 35.15 MN
Miscellaneous Fixed Assets	:	USD 2.5 MN
Working capital	:	USD 26.70 MN
7. Means of Finance		
Subsidy (max 10lakhs)	:	NIL
Promoter's contribution (min10%)	:	USD 17.85 MN
Term loan	:	USD 25.05 MN
Working Capital Requirement	:	USD 26.60 MN
8. Profit after Depreciation, Interest & Tax		
1st year	:	USD 438,208
2nd year	:	USD (1,879,802)
3rd year	:	USD 765,902
4th year	:	USD 4,075,428
5th year	:	USD 4,830,202
9. Term loan repayment	:	11 YEAR WITH ONE YEAR GRACE PERIOD

Tabel Showing Investment Breakdown

Land and Building	$ 5.15 Mn
Plant	$25.15 mn
Vehicles	$ 10.00 Mn
Furniture and Fitings	$ 2.50 Mn
Pre Expenses	$ 0.60 Mn
Others	$ 0.10 Mn
Working Capital	$ 26.00 Mn
Total	**$ 69.50 Mn**

2. ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

The most widely used vegetable oil in the world is palm oil. Palm oil is made from the pulp of the oil palm tree's fruit (*Elaeis Guineensis*). Because of its high beta-carotene content, this tropical fruit has a reddish color. It's the size of a large olive. Palm kernel oil is made from the fruit's single seed or kernel. The oil content of each palm fruit is approximately 30-35 percent. The fatty acid composition of palm fruit oil and palm kernel oil differs significantly, but they share the same botanical origin. Palm oil and palm kernel oil represent 32 per cent of the global vegetable oil production.

Palm oil can be used as crude oil or as refined oil. Only one-quarter of the palm oil and palm kernel oil worldwide is used as crude oil. Crude palm oil is commonly used for domestic cooking in Southeast Asia, Africa, and parts of Brazil. Many food products, such as margarine, confectionery, chs\ocolate, ice cream, and bakery products, use refined palm oil as an inexpensive ingredient. It is also present in non-food products like soap, candles, and cosmetics.

2.2. MARKET POTENTIAL:

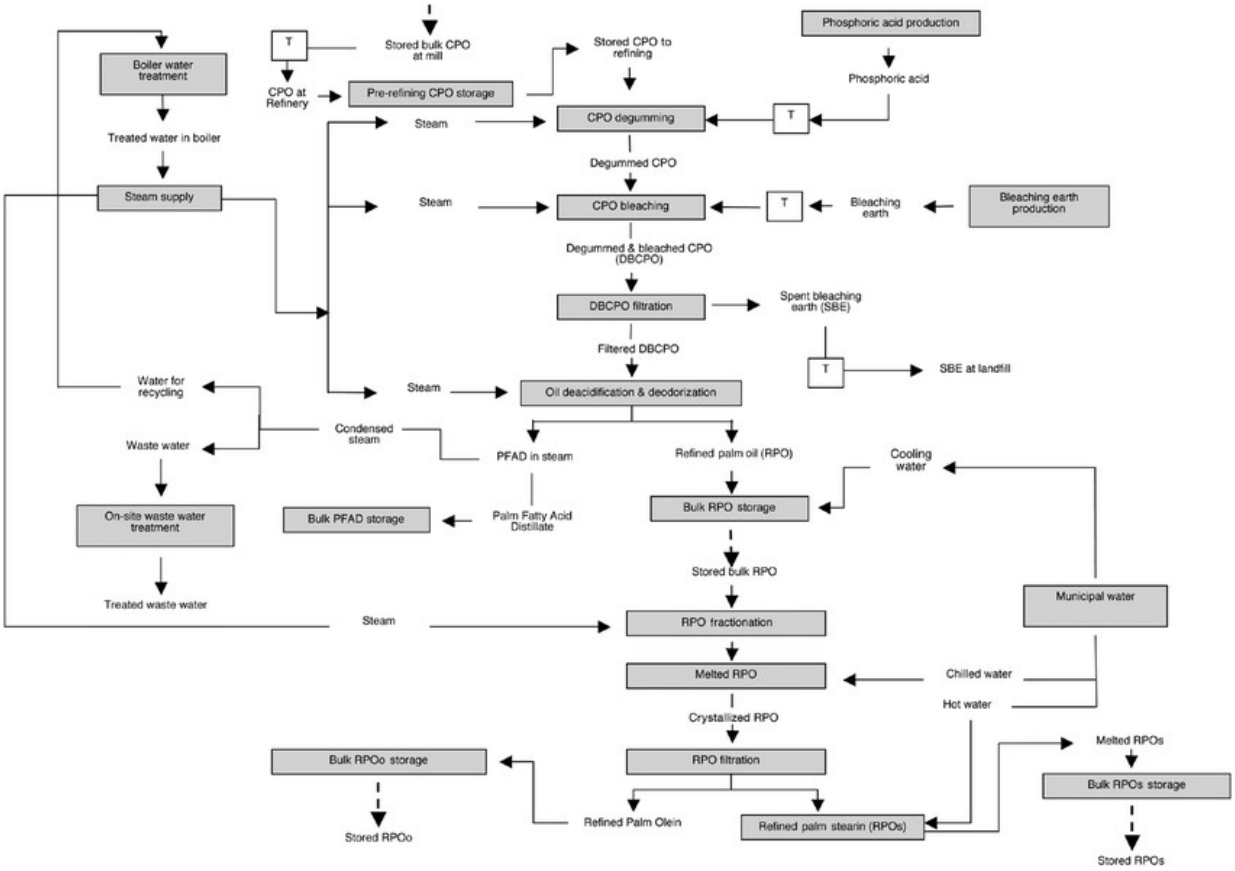
Palm Oil vegetable edible oil extracted from the mesocarp of an oil palm fruit. In 2019, the size of the Palm Oil market is projected at $81.9 billion and in the 2020-2025 forecast periods at the CAGR by 6.0%. Two types of oil can be produced, crude palm oil comes from squeezing the fleshy fruit, and palm kernel oil which comes from crushing the kernel, or the stone in the middle of the fruit. It is free of cholesterol and easy to digest and high in carotenoids and vitamin A. Palm oil

offers various health benefits that improve energy levels, prevent early aging, improve eye vision, boost the immune system, and reduce the risk of cancer and heart diseases. Palm oil offers several benefits for your health. Consumer awareness of these health benefits is one of the key factors contributing to market growth. Moreover, the prosperous food industry drives the product demand, because it is widely used for frying and for the preparation of healthy food products. The food industry is an important component. Besides, palm oil is an effective alternative in the transport and energy industries to replace oil-based products readily. It is also used in power plants for energy production as a substitute for mineral oil. In addition, initiatives by governments in different countries like Denmark and other Western European nations, together with World Health Organization awareness campaigns to cut trans-fat consumption, are envisaged to boost the market growth. The global market for palm oil in 2021-2026 to show moderate growth.

2.3. RAW MATERIAL DESCRIPTION:

- Oil palm bunch: Fresh fruit arrives from the field as bunches or loose fruit.

3. PROCESS FLOW CHART



Harvesting

The fruit's oil content is very low at the early stages of fruit formation. The growth of oil is fast up to about 50% of the mesocarp weight as the fruit approaches maturity. In the mature fruit, however, the exocarp becomes soft and lipolytic enzymes are more easily attacked, especially when the fruit is removed from the bunch. Cutting the bunch from the tree and allowing it to fall to the ground by gravity is the harvesting process. Harvesting activities like Harvesting, transportation, and handling of bunches can cause fruit to be damaged, to prevent spoilage fruits are processed as soon as possible after harvest, within 48 hours. Generally bunches are transported to processing unit in wooden baskets .

Bunch receiving:

Fresh fruit is delivered in bunches or loose form from the field. The quality of the bunches that arrive at the mill determines the quality standard of the products. Genetic, tree age, agronomic, environmental, harvesting technique, handling, and transport are all field factors that influence the composition and final quality of palm oil.

Sterilization of bunches

Sterilization or cooking means the use of high-temperature wet-heat treatment of loose fruit. Sterilization uses pressurized steam to destroy bacteria and thus oil-splitting enzymes and stop hydrolysis and autoxidation.

Threshing

The fresh fruit bunch consists of fruit embedded in spikelets growing on the main stem. After sterilization of the bunches of fruit the first process is to detach the fruit from the bunch, leaving the spikelets on the stem.

Digestion of the fruit

Digestion is the process of breaking down or rupturing the oil-bearing cells in the fruit to release the palm oil. A steam-heated cylindrical vessel with a central rotating shaft carrying a number of beaters arms is the most common digester used in palm oil industry, about 20 minutes, the fruitlets will be stirred and steam will be continuously injected into the digester to maintain a temperature of 95-100°C. The aim of digestion to loosen the mesocarp from palm nut and break oil cells.

Extraction the palm oil

By applying mechanical pressure to the digested mash, the extraction stage aims to squeeze the oil out of a mixture of oil, moisture, fibre, and nut.

Clarification of oil

Clarification's main objective is to separate the oil from any entrained impurities. Palm oil, water, cell debris, fibrous material, and ‘non-oily solids' are the impurities that come out of the press. The

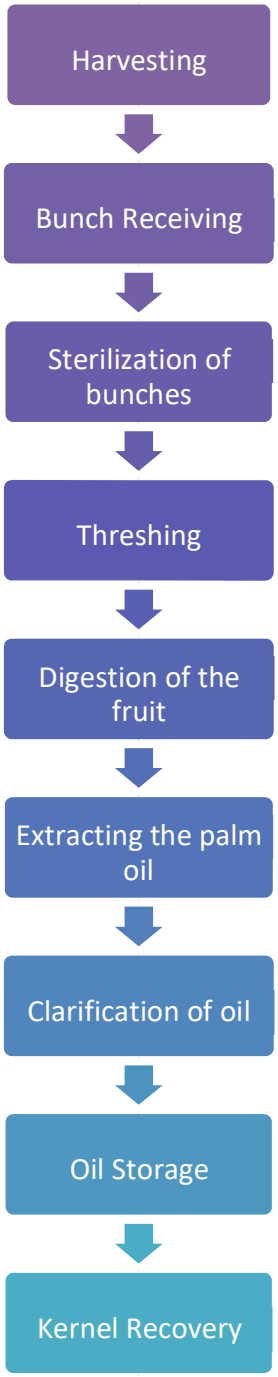
mixture is very thick (viscous) due to the non-oily materials. As a result, hot water is added to the press output mixture to thin it out. Water is added in a 3:1 ratio. To remove coarse fibre, the diluted mixture is filtered through a screen. The screened mixture is boiled for one or two hours before being allowed to settle by gravity in the large tank. The palm oil rising to the top because it is lighter than water. Decant the clear oil into a reception tank. There are still traces of water and dirt in this clarified oil. The moisture content of the oil must be reduced to 0.15 to 0.25 percent to avoid increasing (Free fatty acids) FFA through autocatalytic hydrolysis. Any remaining moisture is removed by reheating the decanted oil in a cooking pot and carefully skimming off the oil from any encrusted dirt.

Oil storage

Prior to being dispatched from the mill for further refining processes, the purified and dried oil is transferred to a tank for storage. Because the rate of oxidation of the oil increases with storage temperature, it's usually kept at 50°C using hot water or low-pressure steam-heating coils to avoid solidification and fractionation.

Kernel recovery

The press residue is consisting of a mixture of fibre and palm nuts. The sorted fibre is covered and allowed to heat up for two or three days using its own internal exothermic reactions. The fibre is then pressed in spindle presses to extract second-grade oil, which is commonly used in soap production. The nuts are separated from the fibre by hand or mechanically. Before packing, the kernels are dried in silos to a moisture content of about 7%. The nuts are usually dried before being sold to industries that process them into palm kernel oil.


Harvesting
Bunch Receiving
Sterilization of bunches
Threshing
Digestion of the fruit
Extracting the palm oil
Clarification of oil
Oil Storage
Kernel Recovery

4. ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Palm Oil is 500 Kg. per hr. First year, Capacity has been taken @ 60%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 10 days and Finished goods Closing Stock has been taken for 10 days.
4. Credit period to Sundry Debtors has been given for 7 days.
5. Credit period by the Sundry Creditors has been provided for 7 days.
6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 22 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

The details are attached in the excel sheet thereof.

4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 20,000 Sq. meter for smooth production including storage area. It is expected that the premises will be on rental.

4.4. MACHINERY & EQUIPMENTS

Machine Name	Description	Machine Image.
Pressurized vessel sterilizer	The objectives of this machine are sterilization of the fruit bunches for 90-120 minutes to eliminate the contamination, easily releasing fruit from bunches and fruit softening.	

Rotating Drum Thresher	The uses of this machine are to separate the fruit from bunches. Sterilized bunches are fed in this machine and the fruits are extracted from the bunch and exit through the holes.	
Mechanical Digester machine	The prime objective of these digester machines is to break down the oil-bearing cells in the fruits in order to release the palm oil.	
Screw press	The uses of this press are to extract oil from the mesocarp of digested oil palm fruit.	
Filter press machine	The filter press are used in liquid/solid separation.	
Jacketed heating vessels	The use of this vessel to boil the screened mixture is for one or two hours before being allowed to settle by gravity in the large tank.	
Oil clarification and storage Tank	These tanks are used for Clarification and storage of extracted oil, the mixture of oil, water, and non-solids are stored to allow the sludge to settle to the bottom.	

Material handling and other Equipment's	These Equipment's are used for material handling. Other equipment's like boiler, industrial pumps, testing equipment's, etc are also used.	

The cost of the machines are as per the attached sheets.

4.5. MISCELLANEOUS FIXED ASSETS

- Water Supply Arrangements
- Furniture & Fixtures
- Computers & Printers

4.6. TOTAL COST OF PROJECT

The same is attached as annexure.

4.7. MEANS OF FINANCE

Same is attached as annexure.

4.8. TERM LOAN: Requirement is well explained in the annexure.

4.9. TERM LOAN REPAYMENT& INTEREST SCHEDULE

Repayment Schedule is attached herewith.

4.10. WORKING CAPITAL CALCULATIONS

Same are well annexed.

4.11. SALARY & WAGES

As annexed.

4.12 POWER REQUIREMENT

The same is well explained.

4.13. DEPRECIATION CALCULATION

As Annexed

4.14. REPAIR & MAINTENANCE: As annexed.

4.15. PROJECTIONS OF PROFITABILITY ANALYSIS:

As annexed.

4.16. BREAK EVEN POINT ANALYSIS

As Annexed

4.17. PROJECTED BALANCE SHEET

As Annexed

4.18. CASH FLOW STATEMENT

As Annexed

4.19. DEBT SERVICE COVERAGE RATIO

As Annexed

About the Company

Atrium International Limited, Tanzania has been incorporated on 13th June 2022 with an object to invest in Tanzania in various fields like, FMCG**,** Agriculture, Agriculture Commodity, Iron and Steel, Cooking Oil etc. during the month of October 2022 company has started its trading activity in the field of TMT Bar, till today already done a turnover of more then a 2 Mn USD in TMT bar. After that Company has purchased a land of more then 20 Acre in Mkuranga District of Tanzania. And we are intending to put a cooking oil plant to start the project thereof with initial capacity of 200 MT per day. The shareholders of the company are belonging to the Hydrise Group of the companies. Though the Hydrise group does not have direct investment or connection with Atrium International but it belongs to the same family.

ABOUT THE MANAGEMENT & GROUP

Established in 2016, the group is already engaged in the manufacturing & selling of edible oils such as Crude Degummed Soybean oil, Palm Refined Oil, Crude Palm Oil, Crude Rice Bran Oil, Soya Refined Oil, Rice Bran Refined Oil, Mustard loose Oils, Refined Cotton seed oil, Rice, as well as Pulses, Biscuits, Chips, Carbonated drinks, Namkeen, Spices and Dry fruits etc. and have established brand and reputation in the market. The group has more than 600 distributors on PAN India base and well-established marketing team. At present, the group has a **turnover of Rs.3000.00 Crores** approximately. The management of the group have **more than 10 years of experience in FMCG industry**. The Group is supported by nationalised bankers in India such as State Bank of India, UCO Bank, Bank of Maharashtra etc.

Major Companies in the group

Hydrise Foods Private Limited:

The major company of the group "Hydrise Foods Private Limited" was incorporated on 25th July, 2016 by Mr. Anuj Kumar Agarwal and Mr. Akshay Mittal. The company is

engaged in the bulk trading of various kind of edible oils such as Crude Degummed Soybean oil, Palm Refined Oil, Crude Palm Oil, Crude Rice Bran Oil, Soya Refined Oil, Rice Bran Refined Oil, Mustard loose Oil etc which are household consumable products with Indian consumers who use oils regularly as healthy cooking medium and sold to the various Institutional Buyers & Manufacturers of food products in FMCG Industry.

Hydrise Agritech Private Limited:

Company is into trading activity of Agri Commodities i.e. Crude Degummed Soybean oil, Palm Refined Oil, Crude Palm Oil, Crude Rice Bran Oil, Soya Refined Oil, Rice Bran Refined Oil, Mustard loose Oil as well as manufacturing of Pulses, Biscuits, Chips, Carbonated drinks, Namkeen, Spices and Dry fruits etc.

Sunbridge Foods Private Limited:

M/s Sunbridge Foods Private Limited has a Rice Mill of 648MTPD Basmati Rice and Solvent Extraction plant of 250 MTPD in Gwalior, Madhya Pradesh.

Sunbridge Agro Private Limited:

M/s Sunbridge Agro Private Limited has a refinery of edible oils with the capacity of 700 MT per day at Khasra No.- 512-514, Chhijarsi, Pilkhuwa, Uttar Pradesh - 245304.

The company is engaged in the manufacture the following edible oils in the factory:

1. Refined Palm Oil with the capacity of 300 MT per day or 90000 MT per annum
2. Refined Soyabean Oil with the capacity of 300 MT per day or 90000 MT per annum
3. Refined Cotton seed oil with the capacity of 100 MT per day or 30000 MT per annum

Hydrise Agro Private Limited:

Company is into trading activity of Agri Commodities i.e. Crude Degummed Soybean oil, Palm Refined Oil, Crude Palm Oil, Crude Rice Bran Oil, Soya Refined Oil, Rice Bran Refined Oil, Mustard loose Oil etc.

Hydrise Industries Private Limited

Hydrise Industries Private Limited is going to set-up a manufacturing unit of ethanol oil of 300KL per day along with 7.0 MW Co-generation Power Plant at Seoni, Madhya Pradesh**.**

Hydrise Warehouse Private Limited: The Company is involved in renting the warehouse and godowns.

Directors and Key Personnel

Company has two Directors 1. Mr. Raja Jaipuria and 2. Mr. Arpan Singhal
Chief Operating Officer Mr. Nitin Godha

Mr. Raja Jaipuria

Mr. Raja Jaipuria has done MBA in Marketing & Finance and possesses exceptional leadership and administration skills, far sight and deep understanding of global Agro commodity market with experience of More than 10 years. He supervises the overall operations of the group and commands a very good reputation in International Business and domestic market which helps the company in maintaining a cordial and fruitful relationship with its buyers and suppliers. His rich exposure across fields has helped him possess extensive knowledge of market entry strategy, consumer behaviour, brand building and evolving needs of consumers, especially in FMCG Food Segment. His benevolent nature and people skills make him true business leader who leads from the front. He is capable of turning around the business with his determination, vision and positive attitude.

Mr. Arpan Singhal

Mr. Arpan singhal has done CA Inter and acquired exceptional financial and analytical skills and has inherritent leadership and administration skills, with experience of More than 5 years. Doing the FMCG and Agri Commodity Business He supervises the overall operations of the FMCG business at group level. His soft and loving nature and people skills make him true business leader who leads from the front. He is capable of turning around the business with his determination, vision and positive attitude.

Nitin Godha Brief Profile: Chief Operating Officer

	Nitin Godha Date of Birth: 11th April, 1976 Contact Number: +255622522058 (WhatsApp) +255787285983 Mail Id: akagodha@gmail.com; Skype Id: akagodha

Qualifications: ICAI, ICAI Kolkatta,

IMA, IMA USA

ZICA, ZICA, Zambia

MBA – Finance, IGNOU

Black Belt Six Sigma

Experience:

1998-2021 – Willmar Group of Industries In Africa, India and East Asia

2021 -2022–Organo Africa (T) Limited, Tanzania

FMCG, Farming, Finance, Cooking Oil

Countries Worked at: Jordan, Zambia , Tanzania, UAE, Kenya, Malawi, India, Congo, Malaysia, Indonesia, Bangladesh.

I am a Professional with over 21 years of experience in various Management area and during my career I worked at various senior level positions like CFO, GM, CEO, Chairman, Regional Head etc. During my career I worked with various departments of management, production, process and develop an expertise in the cooking oil industry from across the globe to fulfil the requirement of the local industries. I dealt with various companies in the countries mentioned above.

INDEX	
Sl. No	Description
1	Dash Board
2	Production Plan Refinery
3	Refinery Costing Per MT
4	Refinery Overheads
5	Sales Plan Refinery
6	Projection Cost (Capex)
7	Project Cost Funding
8	Loan Schedule
10	Depreciation Charges & Schedule
11	Refinery Cash Flow Statement
12	Refinery Profit & Loss Statement USD
13	Refinery Profit & Loss Statement ZMW
14	Refinery Balance Sheet Satemet USD
15	Refinery Balance Sheet Satemet ZMW
16	Internal Rate of Return (IRR)
17	Employment Creation

FINANCIAL PROJECTIONS PARAMETERS

Oil Refinery (Production)

PRODUCE PRODUCTION

Year	Capacity MT/Day	Total Tonnage
2023	1000	19,380
2024	1000	22,800
2025	1000	24,000
2026	1000	26,400
2027	1000	26,400
2028	1000	26,400
2029	1000	26,400
2030	1000	26,400
2031	1000	26,400
2032	1000	26,400
2033	1000	26,400

ESTIMATES ON A CSO Chemical Refinery PLANT:	TZS	2,375.00	Exchange Rate as per ZRA 01-15 Jan						
Perticulars: General									
REFINERY MILLING PLANT CAPACITY	MT	1,000							
Refining Capacity (Mt/24-hr day) Tonne Per Hour	MT/HRs	41.67							
Refinery Operation in day	Hrs	24			100%		Hrs		
Days in Operation in a Month	Days	24					Days		
Monthly Mt of CPO Purchased	Tons	24,000					Capacity 200t per Day		
Purcahse Price of CPO at the Plant	$/Tons	1,075							
Value of CPO in Stock Carry	USD	$ 25,800,000					This is calculated on CSO needed for 1 month.		
	Unit	Value							
Sale Price	$/Mt	$1,562.69					Average Price TZS		
Total Sales	**MT**	**22,800**			64406.78				
Sales Price Inflation	%	2%			3578.154	1.51			
Average Sales Price Per MT / Month	USD	$ 1,562.69							
Average Sales Price from 2024 on wards	USD	$ 1,593.94							
Utilities									
Power Consumption on the mill in kW/h	Unit	380							
Price of electricity per kW/h	Unit	$ 0.32	TZS	750.00					
Electricity Requirement HP/day	Unit	9,120							
Electricity Requirement kWhr/Month	Unit	218,880							
Processing Cost	MT	28							
Packaging Cost	MT	110							
Expenses									
Water And Taxes Bill Per Month	$/Mt	$ 0.00	TZS	22,600					
Fuel Expenses Per Month?	$/Mt	$ 0.00	TZS	18,200					
Cost Of Repair & Maintenance Per Tonne	$/Mt	$ 5.50	TZS	13,063					
Provision Of Loading Cost Per Month	$/Mt	$ 0.00	TZS	540					
Other Delivery Cost	$/Mt	$ 0.00	TZS	1,800					
Unloading Cost	$/Mt	$ 0.00	TZS	540					
Provision Of Insurance Per Month	$/Mt	$ 0.00	TZS	320					
Telephone & Internet Charges Per Month	$/Mt	$ 0.00	TZS	130					
Stationary & Printing Per Month	$/Mt	$ 0.00	TZS	100					
Staff Food Expenses	$/Mt	$ 0.00	TZS	2,200					
Security Expenses Per Month	$/Mt	$ 0.07	TZS	185,000	20				
Bank Charges Per Month	$/Mt	$ 0.00	TZS	2,000					
Misc. Expenses Per Month	$/Mt	$ 0.00	TZS	7,000					
Advertising Expenses Per Month	$/Mt	$ 0.00	TZS	15,500					
Storage Cost	$/Mt	$ 0.00	TZS	4,500					
Business Promotion Expenses	$/Mt	$ 0.00	TZS	9,200					
Vehicle Running Exp	$/Mt	$ 0.00	TZS	45,000					
Sales Commission	$/Mt	$ 0.00	TZS	13,000					
Loading Charges	$/Mt	$ 0.00	TZS	540					
Fumigaion Cost	$/Mt	$ 0.00	TZS	440					
Marketing Expenses	$/Mt	$ 0.00	TZS	9,700					
Travel & Admin Expenses Per Month	$/Mt	$ 0.00	TZS	4,000					
Salary Part Of Refinery Head (Expats) Per Month	$/Mt	$ 0.55	TZS	5,937,500	5		TZS		29,687,500.00
Salary Project Head	$/Mt	$ -	TZS	23,750,000	5		TZS		118,750,000.00
Salary Of Refinery Supervisor Per Month	$/Mt	$ 0.12	TZS	1,662,500	4		TZS		6,650,000.00
Salary Of Filling Line Workers Per Month	$/Mt	$ 0.13	TZS	1,187,500	6		TZS		7,125,000.00
Salary Of Finished Goods Line Workers Per Month	$/Mt	$ 0.16	TZS	1,425,000	6		TZS		8,550,000.00
Salary Of other Workers Per Month	$/Mt	$ 0.18	TZS	1,187,500	8		TZS		9,500,000.00
Salary Of Sales Representative Per Month	$/Mt	$ 0.68	TZS	5,225,000	7		TZS		36,575,000.00
Salary Of Other Staffs Per Month	$/Mt	$ 0.59	TZS	3,562,500	9		TZS		32,062,500.00
Salary Of An Unskilled Person Per Month	$/Mt	$ 0.21	TZS	475,000			TZS		11,400,000.00
Number Of Unskilled Persons Would Be Employ	$/Mt			24			TZS		260,300,000.00
Expats Part House Rent, Security, Internet, Electricity & W	$/Mt	$ 1.75	TZS	19,000,000	5				
Expats Medical & Insurance Expenses	$/Mt	$ 0.00	TZS	2,000	5				
Other's Information:									
Total Assests Value		$ -	TZS	161,946,259					
Interest Rate Considered		12%							
Mortorium	Years	1							
Repayment Period	Years	9							

FINANCIAL PROJECTIONS PARAMETERS

Oil Refinery (Costing Per MT)

Installed Capacity 50

Sl.No	Particulars	MT	Percentage	Remarks
1	Procuments Cost (COGS)	$ 1,075.00		
2	Packaging Cost	$ 110.00		
3	Processing Cost	$ 28.18		
4	Administration Cost	$ 9.94		
5	Selling & Distribution Cost	$ 31.05		
	Total Operating Cost	**$ 1,254.17**	**80.3%**	**On Sales**
6	Sales Price	$ 1,562.7		
7	**PBDIT**	**$ 308.52**	**19.7%**	**On Sales**

ZAMBIA

INCOME STATEMENT (USD) - Oil Refinery

Over Heads Per Month

Sr. No	Particulars	TZS	USD	Total In USD	Amount/MT
A)	**Processing Cost**				
1	Electricity Charges	164,160,000	69,120		
2	Water & Sewerage Charges	542,400,000	228,379		
3	Fuel Charges	436,800,000	183,916		
4	Repair & Maintance	313,500,000	132,000		
5	Other Delivery Cost	43,200,000	18,189		
6	Loading Cost	12,960,000	5,457		
7	Unloading Cost	12,960,000	5,457	642,518	28.18
B)	**Administration Cost**				
8	Telephone & Internet Charges	2,964,000	1,248		
9	Security Charges	3,700,000	1,558		
10	Misc Expenditure	19,007,000	8,003		
11	Printing & Stationery	2,280,000	960		
12	Staff Food Expenses	50,160,000	21,120		
13	Travel & Admin Expenses	91,200,000	38,400		
14	Fumigaion Cost	10,032,000	4,224		
15	Salaries	260,300,000	109,600		
16	Bank Chages	45,600,000	19,200		
17	Insurance	52,896,000	22,272	226,585	9.94
C)	**Selling & distribution Cost**				
18	Business Promotion Expenses	104,880,000	44,160		
19	Marketing Expenses	110,580,000	46,560		
20	Advertising Expenses	176,700,000	74,400		
21	Storage Cost	102,600,000	43,200		
22	Vehicle Running Exp	1,026,000,000	432,000		
23	Sales Commission	148,200,000	62,400		
24	Loading Charges	12,312,000	5,184	707,904	31.05
	Total Expenses	**2,219,411,000**	**934,489**	**934,489**	**69.17**

TANZANIA

FINANCIAL PROJECTIONS PARAMETERS - Oil Refinery venture

Sr no.	Item	Budget (USD)	Detailed	Remarks
1.0	**CSO Chemical Refinery - 50 MT/Day**	**23,040,000**		
1.1	**Civil**		**5,615,000**	
1.1.1	Civil, Structure		5,500,000	
1.1.2	EIA/EPB/TCSA/TMD		75,000	
1.1.3	Soil Testing		15,000	
1.1.4	Design		25,000	
1.2	**ELECTRICAL**		**1,550,000**	
1.2.1	Transformer, Cabels & Control System		1,200,000	
1.2.2	Additional Electrification, Instrumentation etc.		350,000	
1.3	**EQUIPMENT**		**13,875,000**	
1.3.1	Degumming, Neutralizing, Water Washing and Drying Unit			
1.3.2	Bleaching Unit			
1.3.3	Deodorization Unit			
1.3.4	Steam generation distribution system			
1.3.5	Water Cooling and Cold Water CirculationSystem		13,875,000	
1.3.6	Insulation Materials			
1.3.7	Steam Boiler & Water softning Plant			
1.3.8	Oil Storage Tanks			
1.3.9	Packing filling unit System			
1.4	**INSTALLATION**		**875,000**	
1.4.1	Plant Automation, Installation, Service & Commissioning Charges		875,000	
1.5	**MISCELLANIOUS**		**1,125,000**	
1.5.1	Transportation & Clearing Cost		750,000	
1.5.2	Contingency		375,000	
2.0	**INFRASTRUCTURE**	**14,685,000**		
2.1	Weighbridge with Civil & Installation		950,000	
2.2	IT Equipments		910,000	
2.3	Motors Vehicle		3,375,000	
2.4	Transport Vehicle		1,750,000	
2.5	Tools and Tackles for Installation		375,000	
2.6	Start up Spare Parts		1,050,000	
2.7	Lab Equipment and Building		390,000	
2.8	Safety System (Fire Deluge Hydrant System)		275,000	
2.9	Wall Fence, Fire Alarm, Road, Drainage, CCTV etc.		825,000	
2.10	Bore Hole, Water System		75,000	
2.11	Office Block		1,250,000	
2.12	Work Shop		750,000	
2.13	Storage Warehouse - 03 No		1,150,000	Finished Goods, Raw Material Store, Packing Section
2.14	Miscellaneous Expenditure		375,000	Includes Salaries, Bank Charges, Statutory, admin, misc local purchases etc.
2.15	Genrator (400 KW ^ 2)		775,000	
2.16	Contingency		410,000	
	GRAND TOTAL	**37,725,000**		

FINANCIAL PROJECTIONS PARAMETERS - Oil Refinery venture (Sales)

Year	Tonnage	Average Sales Price	Sales Amount
2023	19,380	$ 1,562.69	$ 30,284,890
2024	22,800	$ 1,593.94	$ 36,341,868
2025	24,000	$ 1,625.82	$ 39,019,690
2026	26,400	$ 1,658.34	$ 43,780,092
2027	26,400	$ 1,691.50	$ 44,655,694
2028	26,400	$ 1,725.33	$ 45,548,808
2029	26,400	$ 1,759.84	$ 46,459,784
2030	26,400	$ 1,795.04	$ 47,388,980
2031	26,400	$ 1,830.94	$ 48,336,759
2032	26,400	$ 1,867.56	$ 49,303,494
2033	26,400	$ 1,904.91	$ 50,289,564
			$ 481,409,623

TANZANIA

INVESTMENT PLAN (USD) - Chemical Oil Refinery

Details	Amount
Capex Milling	37,725,000
Working Capital-Oil Inventory	4,260,000
Working Capital for Expenses	4,760,014
Total	46,745,014

FUNDING STRUCTURE (USD)	Amount	% of Contribution
EQUITY CONTRIBUTION		
Land Cost with Conversion and registartion cahrges	1,027,000	
Advance Payment for Plant and Machinery	2,475,000	
Motor Vehicle already procure	22,947	
Furniture	22,000	
IT Equipment	17,000	
TOTAL COMPANY ASSETS PRIOR TO PROJECT	**3,563,947**	7%
PROJECT FUND REQUIRED		
Capital expenditure	35,188,053	
Working capital for Raw Material	4,260,000	
Working Capital for Expenses	4,760,014	
TOTAL INVESTMENT REQUIRED	**44,208,067**	93%
Capital expenditure	37,725,000	
Working capital	9,020,014	
Land Cost with Conversion and registartion cahrges	1,027,000	
	47,772,014	
Note:		
1) The working Capital requirement is approx. USD 3.2 MN.		

TANZANIA

INVESTMENT PLAN (US$) -

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OIL REFINING										
Opening balance	44,208,067	44,208,067	39,296,059	34,384,052	29,472,045	24,560,037	19,648,030	14,736,022	9,824,015	4,912,007
Repayment	-	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007
Closing balance	44,208,067	39,296,059	34,384,052	29,472,045	24,560,037	19,648,030	14,736,022	9,824,015	4,912,007	(0)
Dividend / Interest charges	5,304,968	5,304,968	4,715,527	4,126,086	3,536,645	2,947,204	2,357,764	1,768,323	1,178,882	589,441
Dividend / Interest rate		12%								

TANZANIA

DEPRECIATION SCHEDULE - Consolidated

Descriptaion	%	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Infrastructure	**5%**											
Opening balance		500,000	500,000	475,000	451,250	428,688	407,253	386,890	367,546	349,169	331,710	315,125
Addition			-	-		-	-	-	-	-	-	-
Depreciation			25,000	23,750	22,563	21,434	20,363	19,345	18,377	17,458	16,586	15,756
Closing balance		**500,000**	**475,000**	**451,250**	**428,688**	**407,253**	**386,890**	**367,546**	**349,169**	**331,710**	**315,125**	**299,368**
EQUIPMENT AND MACHINERY	**10%**											
Opening balance		37,202,053	37,202,053	33,481,847	30,133,663	27,120,296	24,408,267	21,967,440	19,770,696	17,793,626	16,014,264	14,412,837
Addition		-	-	-		-	-	-	-	-	-	-
Depreciation			3,720,205	3,348,185	3,013,366	2,712,030	2,440,827	2,196,744	1,977,070	1,779,363	1,601,426	1,441,284
Closing balance		**37,202,053**	**33,481,847**	**30,133,663**	**27,120,296**	**24,408,267**	**21,967,440**	**19,770,696**	**17,793,626**	**16,014,264**	**14,412,837**	**12,971,554**
MOTOR VEHICLES	**20%**											
Opening balance		22,947	22,947	18,358	14,686	11,749	9,399	7,519	6,016	4,812	3,850	3,080
Addition		-	-	-	-	-	-	-	-	-	-	-
Depreciation			4,589	3,672	2,937	2,350	1,880	1,504	1,203	962	770	616
Closing balance		**22,947**	**18,358**	**14,686**	**11,749**	**9,399**	**7,519**	**6,016**	**4,812**	**3,850**	**3,080**	**2,464**
TOTAL												
Opening balance		37,725,000	37,725,000	33,975,205	30,599,599	27,560,733	24,824,919	22,361,850	20,144,258	18,147,608	16,349,824	14,731,042
Addition		-	-	-	-	-	-	-	-	-	-	-
Depreciation		-	3,749,795	3,375,606	3,038,866	2,735,814	2,463,069	2,217,592	1,996,650	1,797,784	1,618,782	1,457,656
Closing balance		**37,725,000**	**33,975,205**	**30,599,599**	**27,560,733**	**24,824,919**	**22,361,850**	**20,144,258**	**18,147,608**	**16,349,824**	**14,731,042**	**13,273,386**

TANZANIA
PROJECTED BALANCE SHEET STATEMENTS (US$)

Particulars	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
FIXED ASSETS											
Infrastructure	500,000	475,000	451,250	428,688	407,253	386,890	367,546	349,169	331,710	315,125	299,368
Motor Vehicles	22,947	18,358	14,686	11,749	9,399	7,519	6,016	4,812	3,850	3,080	2,464
Equipment And Machinery	37,202,053	33,481,847	30,133,663	27,120,296	24,408,267	21,967,440	19,770,696	17,793,626	16,014,264	14,412,837	12,971,554
TOTAL FIXED ASSETS	**37,725,000**	**33,975,205**	**30,599,599**	**27,560,733**	**24,824,919**	**22,361,850**	**20,144,258**	**18,147,608**	**16,349,824**	**14,731,042**	**13,273,386**
CURRENT ASSETS											
Cash and Bank	1,465,208	(1,176,806)	(1,347,305)	854,982	3,508,990	6,628,821	10,227,579	14,317,488	18,909,980	24,015,789	34,557,036
Stock	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014	9,020,014
Debotrs	-	-	-	-	-	-	-	-	-	-	-
TOTAL CURRENT ASSETS	**10,485,222**	**7,843,208**	**7,672,709**	**9,874,996**	**12,529,005**	**15,648,835**	**19,247,594**	**23,337,502**	**27,929,994**	**33,035,803**	**43,577,050**
NET ASSET VALUE	**48,210,222**	**41,818,413**	**38,272,308**	**37,435,729**	**37,353,924**	**38,010,685**	**39,391,851**	**41,485,110**	**44,279,818**	**47,766,845**	**56,850,436**
CURRENT LIABILITIES											
Trade creditors	-	-	-	-	-	-	-	-	-	-	-
Current Taxation	-	-	-	-	-	-	-	-	-	-	-
TOTAL CURRENT LIABILITIES	-	-	-	-	-	-	-	-	-	-	-
SHAREHOLDER FUNDS											
Promoter Contribution	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947	3,563,947
Retained Earnings	438,208	(1,441,594)	(675,691)	3,399,737	8,229,939	13,798,708	20,091,882	27,097,148	34,803,863	43,202,898	52,286,488
TOTAL SHAREHOLDERS FUNDS	**4,002,155**	**2,122,354**	**2,888,256**	**6,963,685**	**11,793,887**	**17,362,655**	**23,655,829**	**30,661,095**	**38,367,811**	**46,766,845**	**55,850,436**
LONG TERM DEBT											
Long Term Loan	44,208,067	39,296,059	34,384,052	29,472,045	24,560,037	19,648,030	14,736,022	9,824,015	4,912,007	(0)	(0)
Deferred Taxation	-	-	-	-	-	-	-	-	-	-	-
TOTAL DEBT CAPITAL	**44,208,067**	**39,296,059**	**34,384,052**	**29,472,045**	**24,560,037**	**19,648,030**	**14,736,022**	**9,824,015**	**4,912,007**	**(0)**	**(0)**
NET LIABILITIES	**48,210,222**	**41,418,413**	**37,272,308**	**36,435,729**	**36,353,924**	**37,010,685**	**38,391,851**	**40,485,110**	**43,279,818**	**46,766,845**	**55,850,436**
DIFFERENCE	**-**	**400,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**

TANZANIA

OIL REFINERY PROJECTED CASHFLOW STATEMENTS (USD)

Particulars	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total
CASH INFLOW												
Promoter'S Equity Contribution	3,563,947	400,000	600,000	-	-	-	-	-	-	-	-	4,563,947
Debt Capital	44,208,067	-	-	-	-	-	-	-	-	-	-	44,208,067
Cash From Operating Profit	438,208	(1,879,802)	765,902	4,075,428	4,830,202	5,568,768	6,293,174	7,005,266	7,706,716	8,399,034	9,083,591	52,286,488
Add Back Depreciation	-	3,749,795	3,375,606	3,038,866	2,735,814	2,463,069	2,217,592	1,996,650	1,797,784	1,618,782	1,457,656	24,451,614
TOTAL INFLOW	**48,210,222**	**2,269,993**	**4,741,509**	**7,114,294**	**7,566,016**	**8,031,838**	**8,510,766**	**9,001,916**	**9,504,499**	**10,017,816**	**10,541,246**	**125,510,117**
CASH OUTFLOW												
Land Cost	-	-	-	-	-	-	-	-	-	-	-	-
Capital Expenditure	37,725,000	-	-	-	-	-	-	-	-	-	-	37,725,000
Equipment	-	-	-	-	-	-	-	-	-	-	-	-
Motor Vehicles	-	-	-	-	-	-	-	-	-	-	-	-
Loan Repayment	-	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	4,912,007	-	44,208,067
Purchase Of Inputs	4,260,000	-	-	-	-	-	-	-	-	-	-	4,260,000
Purchase Of other Inputs	4,760,014	-	-	-	-	-	-	-	-	-	-	4,760,014
Land Development	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OUTFLOW	**46,745,014**	**4,912,007**	**4,912,007**	**4,912,007**	**4,912,007**	**4,912,007**	**4,912,007**	**4,912,007**	**4,912,007**	**4,912,007**	**-**	**90,953,081**
NET CASH FLOWS	1,465,208	(2,642,014)	(170,499)	2,202,287	2,654,008	3,119,830	3,598,759	4,089,909	4,592,492	5,105,809	10,541,246	33,091,828
Cash B/F	-	1,465,208	(1,176,806)	(1,347,305)	854,982	3,508,990	6,628,821	10,227,579	14,317,488	18,909,980	24,015,789	
Cash C/F	1,465,208	(1,176,806)	(1,347,305)	854,982	3,508,990	6,628,821	10,227,579	14,317,488	18,909,980	24,015,789	34,557,036	

Note: Surplus Cash will be used for Payment of Dividends and Business Development

Discount Factor - 10%	1	1	1	1	1	1	1	1	1	0	0
Discounted Cash Flows	1,465,208	(2,642,014)	(154,999)	1,820,072	1,993,996	2,130,886	2,234,546	2,308,647	2,356,675	2,381,898	4,470,518
Net Present Value (NPV)		18,365,431									

TANZANIA

INCOME STATEMENT (USD) - Oil Refinery

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
INCOME												
Sales	30,284,890	36,341,868	39,019,690	43,780,092	44,655,694	45,548,808	46,459,784	47,388,980	48,336,759	49,303,494	50,289,564	481,409,623
COST OF SALES												
Inputs	20,833,500	25,000,200	25,500,204	26,010,208	26,530,412	27,061,020	27,602,241	28,154,286	28,717,371	29,291,719	29,877,553	294,578,715
Processing Cost	546,140	655,368	668,476	681,845	695,482	709,392	723,580	738,051	752,812	767,868	783,226	7,176,100
Packaging Cost	2,131,800	2,558,160	2,609,323	2,661,510	2,714,740	2,769,035	2,824,415	2,880,904	2,938,522	2,997,292	3,057,238	28,011,138
Administration Expenses	192,597	231,117	235,739	240,454	245,263	250,168	255,171	260,275	265,480	270,790	276,206	2,530,662
Selling & distribution Expenses	601,718	722,062	736,503	751,233	766,258	781,583	797,215	813,159	829,422	846,011	862,931	7,906,378
COST OF SALES	**24,305,756**	**29,166,907**	**29,750,245**	**30,345,250**	**30,952,155**	**31,571,198**	**32,202,622**	**32,846,674**	**33,503,608**	**34,173,680**	**34,857,154**	**343,675,248**
OPERATING PROFIT	**5,979,134**	**7,174,961**	**9,269,445**	**13,434,842**	**13,703,539**	**13,977,610**	**14,257,162**	**14,542,305**	**14,833,151**	**15,129,814**	**15,432,411**	**137,734,374**
Finance Charges on Term Loan	5,304,968	5,304,968	4,715,527	4,126,086	3,536,645	2,947,204	2,357,764	1,768,323	1,178,882	589,441	(0)	31,829,808
Depreciation	-	3,749,795	3,375,606	3,038,866	2,735,814	2,463,069	2,217,592	1,996,650	1,797,784	1,618,782	1,457,656	24,451,614
PROFIT BEFORE TAXATION	**674,166**	**(1,879,802)**	**1,178,311**	**6,269,890**	**7,431,080**	**8,567,336**	**9,681,806**	**10,777,332**	**11,856,486**	**12,921,592**	**13,974,755**	**81,452,952**
Taxation @35%	235,958	-	412,409	2,194,461	2,600,878	2,998,568	3,388,632	3,772,066	4,149,770	4,522,557	4,891,164	29,166,464
NET PROFIT	**438,208**	**(1,879,802)**	**765,902**	**4,075,428**	**4,830,202**	**5,568,768**	**6,293,174**	**7,005,266**	**7,706,716**	**8,399,034**	**9,083,591**	**52,286,488**
Retained Profit b/f	-	438,208	(1,441,594)	(675,691)	3,399,737	8,229,939	13,798,708	20,091,882	27,097,148	34,803,863	43,202,898	52,286,488
Retained Profit c/f	438,208	(1,441,594)	(675,691)	3,399,737	8,229,939	13,798,708	20,091,882	27,097,148	34,803,863	43,202,898	52,286,488	-

TANZANIA

Internal Rate of Return (IRR) Caluculation

YEARS	In-Flow	Add Back	Add Back	Cummulative	Factor	No of	Discount	Discounted
		Loan Repayment	Interest PMTS	Total	1.32	Year	Factor	Cash Flow
2023	(48,210,222)	-	5,304,968	(42,905,254)	1.32	-	1.00	(42,905,254)
2024	2,269,993	4,912,007	5,304,968	12,486,969	1.32	1	1.32	9,464,912
2025	4,741,509	4,912,007	4,715,527	14,369,043	1.32	2	1.74	8,255,569
2026	7,114,294	4,912,007	4,126,086	16,152,388	1.32	3	2.30	7,034,212
2027	7,566,016	4,912,007	3,536,645	16,014,668	1.32	4	3.03	5,286,354
2028	8,031,838	4,912,007	2,947,204	15,891,050	1.32	5	4.00	3,976,038
2029	8,510,766	4,912,007	2,357,764	15,780,537	1.32	6	5.27	2,992,811
2030	9,001,916	4,912,007	1,768,323	15,682,246	1.32	7	6.96	2,254,371
2031	9,504,499	4,912,007	1,178,882	15,595,389	1.32	8	9.18	1,699,311
2032	10,017,816	4,912,007	589,441	15,519,265	1.32	9	12.11	1,281,762
2033	10,541,246	-	(0)	10,541,246	1.32	10	15.97	659,915

IRR	**32%**

Internal Rate of Return