

MUFUNDI PAPER MILLS LIMITED

PROJECT FOR ESTABLISHMENT OF AN INTEGRATED OIL PALM CULTIVATION AND PROCESSING FACILITIES IN MPANDA KATAVI REGION

**PREPARED BY:
MUFUNDI PAPER MILLS LIMITED
P.O. BOX 1 MGOLOLO
MUFINDI IRINGA**

JULY 2024

1.0 EXECUTIVE SUMMARY

1.1 Preamble:

Tanzania has been encouraging and promoting both sectors of Manufacturing and Agriculture so that it can achieve Agro- processing effect In the economy. Palm oil and its associated products are In a very high demand In Tanzania as is needed in the manufacturing sector especially in the Food Industry, Cosmetics, Pharmaceutical and is also an end user in most of Industries as it is a crucial ingredient for the production of products from variety of these industries .

Currently Tanzania is a net importer of Palm Oil and stood at around 500,000 tons annually. As of now there are no existence of huge Palm Oil Estates. The oil palm production in Tanzania in 2018/2019 was 16,593 from 7,717 hectares recorded from five regions of mainland Tanzania. Kigoma, Mbeya and Pwani of which are the main oil palm productions regions. Kigoma have over 30,000 smallholders' subsistence palm oil farmers. Hence the establishment of Agro-Processing Facility of Oil Palm Project of Mufundi Paper Mills in Katavi region would introduce new and better variety coupled with more scientific farming methods for all the above 30,000 farmers. With the new methods which will be provided by Mufundi paper products company ,there will be effects of multiplying yield from the present 2.2 tons per hectare to 8 tons per hectare .As a result this will be an impetus to the agricultural sector which is the mainstay of Tanzania's economy, providing a livelihood for about 85 percent of the economically active rural population.

The Promoters intends to utilize its strong product quality, production capabilities, service delivery, market knowledge to become one of major Palm Oil Producer in Tanzania.

1.2 THE PROJECT

Mufindi Paper Mills Limited (**MPM**) among its various activities intends to develop a large-scale Oil Palm Plantation and Crude Palm Oil (CPO) to produce edible oil, soap, fat and other downstream products. The promoters having seen the immense opportunities in the area of agro -processing subsector especially in Palm oil production, has decided to venture on the establishment of a palm oil estate with integrated facility for the establishment of a large-scale oil palm plantation and production of crude palm oil

(CPO) . The project will mainly involve establishing a palm oil plantation using drip irrigation and developing necessary oil palm infrastructure and plant and machinery for palm oil extraction & milling. Furthermore, the company will carry refining of crude palm oil to produce edible oil, soap, fat and other downstream products. The aim is to produce Palm oil to meet the existing local demand and any excess to be exported in various country of the world.

The total investment of the whole palm oil integrated facility will be the sum of **USD 107,888,900** to be funded by the promoters' retained earnings about 25% and 75% will be the term loan from local and international banks. The project will be implemented in three phases. The large-scale oil palm cultivation will have a production of **200,000 tons per year of Fresh Fruits Brunches (FFB)**, the manufacturing facility will have an installed capacity to produce **50,000 tons per year (TPA) of crude palm oil and 100,000 tons per year (TPA) of refinery products in full capacity.** It is with this regard ,Mufindi Paper Mills Limited have decided to apply for the registration of integrated Palm oil project so that they can obtain certificate of incentive in order to enjoy necessary incentives as per TIA 1997.

1.3 PROMOTERS/ SPONSORS;

The project is sponsored by The Rai Group of Kenya who is the largest manufacturer in East Africa with operations in Kenya and Uganda and Tanzania: The Rai group also owns Menengai oil refineries in Kenya which is one of the largest producer of fast moving consumer goods and home care products in East Africa . In Tanzania through Mufindi paper mills ,Rai Group is involved in the manufacture and distribution of paper and related products – The group is also active in value addition chain of consumer goods and their retail presence ranging from sugar, vegetable oil,soaps,fats detergents drinking water and packaging segment with a clear focus on the customer and the modernization of agriculture infrastructure The group Having successfully turned around the Mufindi Paper Mills over the last two decades ,the shareholders have decided to embarked on another venture in Tanzania to develop a large scale commercial oil palm cultivation, crude oil production and further refining to produce downstream products .

The investment will be undertaken through M/S Mufindi Paper Mills Limited. The main project sponsors are the shareholders of Mufindi Paper Mills Limited.

The shareholders of Mufindi Paper Mills Limited who are also the shareholders of The Rai Group own the largest integrated pulp and paper manufacturer in Tanzania having factory located at Mgololo, Iringa region. The intended integrated Palm oil production under their leadership and guidance will be a grand success. This business plan is intended to establish the technical feasibility, utility and economic viability of the project.

1.4 LOCATION

Mufindi paper mills has identified land of 6,000 hectares in Luhafwe Investment Area at Mpanda Council, Katavi Region for setting up a large-scale oil palm plantation and crude oil processing facilities. This piece of land is considered as being ideal for the establishment of a greenfield large-scale oil palm plantation development and a crude oil processing facility.

1.5 The company

M/S Mufindi Paper Mills Limited is limited liability company, incorporated in Tanzania under the COMPANY ORDINANCE (CAP212) under Certificate of Incorporation no: 47435 dated 12th November 2003. All the shareholders and directors of the company are well experienced businessmen with a strong financial back up and sound financial track record.

| SHAREHOLDER | NATIONALITY | SHARES in % |
|---------------------------------------|------------------------------|--------------------|
| <i>Angle Hurst Industries Limited</i> | <i>British Virgin Island</i> | <i>85.45</i> |
| <i>Jaswant S. Rai</i> | <i>Kenyan</i> | <i>14.55</i> |

1.6 Capital Investment Plan and Sourcing of Funds

M/S Mufindi Paper Mills Limited proposes to invest **USD 107,888,900** for this project. The breakdown of the relevant costs is as shown below:

| Item | Amount | Total |
|--|--------------------|--------------------|
| Land/Building (<i>land development, irrigation and factory building</i>) | 30,000,000 | 30,000,000 |
| Plant | 50,000,000 | 50,000,000 |
| Vehicles | 15,000,000 | 15,000,000 |
| Furniture & Fittings | 888,900 | 888,900 |
| Pre-expenses | 5,000,000 | 5,000,000 |
| Others | 2,000,000 | 2,000,000 |
| Working Capital | 5,000,000 | 5,000,000 |
| TOTAL | 107,888,900 | 107,888,900 |

1.7 Financing

The total investment cost of the project is planned to be financed by the shareholders retained earnings and shareholders contribution equity .Retained earnings will be about 25% and 75% will be the term loan from local and international banks. .

USD

| | Amount | Total |
|----------------------|-------------|-------------|
| Owners' Equity (25%) | 26,972,225 | 26,972,225 |
| Long term loan | 80,916,675 | 80,916,675 |
| Grand Total | 107,888,900 | 107,888,900 |

1.8 Financial Profitability

Based on a set of assumptions given here in the project, it demonstrates a profitable trend in its future operations. The project's Income Statement and Cash Flow indicate

that M/S Mufindi Paper Mills Limited Palm oil project would be able to recoup the planned investment funds for its investment programme. This indicates that the project is financially and economically viable.

1.9 The Implementation Plan:

It is planned that the project will be implemented in phases and it will take up to five years to be fully completed. The overall project is divided into Two phases as follows:

- I) Phase one will include land preparation, irrigation, nursery, Crude Palm oil factory and refinery and other down stream infrastructure . The entire 6,000 hectares of oil palm estate would be planned for nursery in three phases(phase1,2&3 of 2000 hectares each .After the nursery development phases are ready, the necessary replanting(commercial) Planting would be done.
- II) Phase two will involve the doubling of capacities of the crude oil production and processing facilities. Mufindi Paper Mills Limited shall appoint a team comprising of a competent building contractors, mechanical engineers and chemical engineers in order to achieve the set implementation time.

1.10 Developmental Linkages:

Upon completion of the Implementation programme of the a large-scale Oil Palm Plantation and Crude Palm Oil (CPO) facilities, the project will be capable of creating the following:

- ◆ The project would aim at improving the livelihood of the communities of Katavi Region and surrounding Districts of Kigoma region and would include modern farming technologies and best agricultural practices.
- ◆ As the Palm oil project would focus on sustainable drip irrigation-based cultivation, with the best modern technology, it will ensure the most efficient use of water and optimising requirements for the plant to maximise yield.
- ◆ Generating foreign exchange through exports

- ◆ Create employment for the local indigenous people of about 2000 people ;
- ◆ Promote inter-regional trade through exports to neighboring Democratic Republic of Congo, Uganda and Burundi just to mention a few.
- Enable the creation of forward linkages between production and distribution sector.
- Building of genuine and efficient import substitution industries so as to reduce the import bill, especially in the importing of industrial palm oil.
- Will impart modern farming methods to indigenous Tanzanian who are engaging in palm oil cultivation. About 30,000 outgrowers will benefit
- Lay the foundation for the development of other industries.
- Will bring a ready made market for the palm oil farmers and hence improve their life and bring economic growth effect in the country . The project would produce 50,000 tons of Palm oil annually which would reduce the palm imports .

2.0 THE SPONSORS

2.1 Introduction

The project is promoted by M/S Mufindi Paper Mills Limited of Iringa with head office in Dar-es salaam. This is a limited liability company that was incorporated and registered in Tanzania under the Companies Act2002 with a Certificate of incorporation **No 47435** dated **12th November 2003**. The company is owned by the following shareholders:

| Shareholder | No of shares | Shares% |
|-------------------------------|---------------------|----------------|
| Anglehurst Industries Limited | 33,110 | 85.45 |
| Jaswant Singh Rai | 56,698 | 14.55 |

The shareholders have proven track record and performance in managing a wide range of commercially projects in Tanzania, Kenya and Uganda. M/S Mufindi Paper Mills Limited mission intends to operate its dedicated assets and capabilities as a moving pipeline and to offer a safe, reliable and cost-efficient source of quality Integrated large-scale Oil Palm Plantation and Crude Palm Oil (CPO processing in Tanzania)

3.0 THE PROJECT

3.1 Project Description

M/S Mufindi Paper Mills Limited (MPM) among its various activities intends to develop an integrated large-scale Oil Palm Plantation and Crude Palm Oil (CPO) processing in Tanzania. The project's main purpose is to establish a greenfield project of an integrated large-scale Oil Palm Plantation and Crude Palm Oil (CPO) processing in Tanzania to address the huge demand versus supply gap that exists in Tanzania.

Once fully established and with matured palm trees, the annual production of Fresh Fruits Bunches (FFB) is estimated at 200,000 tons per annum, with a yield of 25% of palm oil. The total production of crude Palm oil would be **50,000 tons (CPO per annum)**. This would be equal to a yield of **8 tons** of palm oil per hectare and **7,500 tons** of palm kernel oil per annum. The farm would be further integrated with complete processing facilities by setting up a **40 Tons per hour**, of fresh Brunch fruits (FFB) processing plant, together with 320 tons per day (TPD) of crude palm oil (CPO) refinery with downstream processing facility to produce edible oils, soaps and other downstream product lines. The integrated large-scale Oil Palm Plantation and Crude Palm Oil (CPO) processing will also result in the development of the following additional complimentary business / industries:

- The 6,000 hectares land which will be divided into 3 phases of nursery planting of 2,000 hectares each in each phase. The project intends to use proper irrigation and crop management of which about 147 trees can be grown per hectare of land. The total number would be 1,037,647 of fully germinated sprouts in the 6,000 hectares. The nursery plan would involve the development of 2,000 hectares in three phases to come to the total of 6,000 hectares.
- It is also proposed to develop about 30,000 out-growers in the region and would supply better varieties and teach growing practices of which will result into improving oil production.
- The project will also produce palm kernel oil of 7,500 tons per year.
- The project will involve irrigation by the way of extraction of water from the river. On this will involve construction of water extraction intakes and power.

lines . With a view to meet the above Irrigation requirement of 150 litres//tree and be evenly distributed . The project will use a comprehensive drip Irrigation system. The sytem will provide localized Irrigation pattern with high water and fertilizer efficiency .

3.2 The Phases of the project

It is planned that the project will be implemented in phases and it will take up to five years to be fully completed. The overall project is divided into Two phases as follows:

- III) Phase one will include land preparation, irrigation, nursery, Crude Palm oil factory and refinery and other down stream infrastructure . The entire 6,000 hectares of oil palm estate would be planned for nursery in three phases(phase one,2&3 of 2000 hectares each .After the nursery development phases are ready, the necessary replanting(commercial) Planting would be done. It will also constitute investments in land development, irrigation facilities and related infrastructure and development of land in cultivatable area into oil palm farming. The sub-surface drip irrigation technology to effectively irrigate the land after development will be used .
- IV) Phase two will involve the doubling of capacities of the crude oil production and processing facilities. Mufindi Paper Mills Limited shall appoint a team comprising of a competent building contractors, mechanical engineers and chemical engineers in order to achieve the set implementation time.

3.3 Proposed oil palm Estate Development Programme

The **6,000 hectre** of land for the oil palm project is divided into 3 phases of nursery planting . As per the best practices , with proper irrigation and crop management, 147 trees can be grown per hectre of land of which will result into 1,037,647 fully germinated sprouts in 6,000 hectares .Phase one will be in the year 2027, phase 2 in the year 2028 and phase three in the year 2029. After the nursery development of the three phases, the necessary replanting(commercial planting) would be done . The minimum number of years needed for the oil palm tree to yield fruits is three years from the

date of commercial planting. Hence after end of 4th year from day 0 the 10th year for nursery+3years growth, the yield of oil palm tree would commence.

3.4 Oil Palm Milling And Crude Palm Oil Production Facility .

This will feature the development of a state-of-the-art crude palm oil factory with an installed capacity of 40 tons per hour of Fresh fruits bunches(**FFB**) of which would result into 50,000 tons per annum of Crude Palm Oil. The Crude Palm Oil Factory investment would commence concurrently with nursery progress and is expected to be commissioned and operational from Year 3.The development of the factory will involve the following key sections of the refinery;

| No | Main section | Main machine |
|----|--|--|
| 1 | fresh palm fruit bunch reception section | Loading Ramp |
| 2 | Steralization section | Sterilization Tank |
| 3 | Threshing section | Threshing machines Platfoam |
| 4 | Digesting and pressing section | Digester and screw pressure |
| 5 | Oil clarification section | Clarification Tank |
| 6 | Fiber separation Section | Polishing drum |
| 7 | Palm kernel recovery section | Palm nut storage tank,2) polishing drum3) nut grading screen4)palm nut rpple 5) separating column system6) hydro cyclone equipment7) palm kernel drying bunker8) dry palm kernel final storage warehouse |
| 8 | | Nut sheller |
| 9 | Engine room | Diesel generator |
| 10 | Boiler House | boliler |
| 11 | Water treatment | |
| 12 | effluent treatment | |

3.5 Manufacturing Process Of Oil Palm Processing

The entire palm oil mill process will involve the reception of fresh fruit bunches from the plantations,sterilizing and threshing of the bunches to free

the palm fruit, mashing the fruit and pressing out the crude palm oil.. The crude oil is further treated to purify and dry it for storage and despatch.

1) Fresh Palm Fruit Bunch (FFB) Reception section

Fresh palm Fruit Bunches can be harvested all the year around . after cutting from palm trees , fresh palm fruit bunch is to be processed within 2 days to maintain the acid value and final palm oil quantity.

2) Sterilizing station

The FFb are discharged into the loading ramp., then transported to sterilizer for sterilization with a high temperature to soften the fruit and kill the bacteria. This will increase the moisture content of fruit and separate the fruits easily, so finally it will be easy to get oil and separate palm kernel, also avoid the raising of free fatty acid. From picking to sterilization the time shall not be over 24 hours .

3) Threshing station

In the sterilization process, the palm fruit are soften, through the threshing and screening of thresher to separate the palm fruits and empty fruit bunches. The empty fruit bunches are stored to be used as fuel or fertilizer, also can be used for other functions .

4) Digesting & pressing station

This process involves transporting the softened palm fruits to the digester for mixing and cooking again to separate the palm pulp and nut then use double screw hydraulic palm oil presser to get crude palm oil., which improved the production efficiency greatly.

5) Oil clarification section.

Machine press crude oil is first diluted with water washing, through settlement and filtration, the fibre material is removed from the oil followed by continuous settlement to separate the oil and the sediment. The oil and sludge taken out

separated (by 90% pure oil) is taken out of the oil containing 45%-55% of the water, sludge and other things .

6) Oil Tank and oil Loading

The produced CPO is stored in the Oil Tank Arm and will be ready for despatch.

7) Depericaping section

The pressed palm fibre cake gets in the cake breaker then get into winnowing system to separate the fibre and nuts.

8) Kernel Recovery Section.

Then nut should be crushed to get shell and kernel, through winnowing system and washing system to separate the shell and kernel. The shell can be used as fuel for boiler, the kernel will be dried for storage and further processing to make palm kernel oil depending on the need .

3.6 Crude Palm Oil (CPO) Refinery

For Further refining of crude palm oil produced by the facility , an integrated refinery to process crude palm oil (CPO) with capacity of 320 tons per day is also envisaged in the project, together with further downstream products manufacturing/packing facilities as follows:

- 1) Edible oil of different grades and different packaging
- 2) Soaps and its derivatives
- 3) Fats and its derivatives

The crude oil refinery will be of the State Of The Art Plant and machineries , efficient process layout, safety and security systems, semi automated packing lines , quality control laboratories and fuel dispensation systems .

The key sections of the refinery are;

1. Preparation Section,
2. CPO Refinery
3. Fraction Section
4. Flings Lines
5. Jerry Can Plant
6. Boilers

7. Effluent Treatment Section
8. Workshop
9. Distribution Trucks And Automobile Workshop.

4.0 Location

Mufindi paper mills has identified land of 6,000 hectares in Luhafwe Investment Area at Mpanda Council, Katavi Region for setting up a large-scale oil palm plantation and crude oil processing facilities. The region has set aside land for large-scale irrigation oil palm farming. This piece of land is considered as being ideal for the establishment of a greenfield large-scale oil palm plantation development and a crude oil processing facility. The Mufindi paper mill limited will work hand in hand with Kigoma region and the Government of Tanzania to make sure the site will be served with electricity, water transport, communication other infrastructure facility. The area is large enough to accommodate the factory and other buildings and also it can allow extensive future expansion of factory buildings.

. The reason and rationale for choosing this area is that .

- As per Kigoma Investment Document Government published in 2019; There is no available palm manufacturing facility in the north-western part of Tanzania at present hence this facility has come at the opportune time.
- The proposed project is supported by the current Government industrialisation drive aiming at becoming a middle-income country by year 2025.
- Kigoma Region is suitable for growing palm-oil based on availability of vast river valleys and vast plain land, and conducive climatic conditions for cultivation of palm oils
- Kigoma Region grows palm oil in all of its districts..
- There is a growing demand for crude palm oil in Tanzania and in the neighbouring countries of DRC, Rwanda, Burundi, Uganda and South Sudan.

- The factory will reduce crude palm oil shortages in the region and in the neighbouring regions where the demand is growing over time.

4.1 Integrated facility Production Capacity

The machinery/ equipment to be opted for will be of modern status, with appropriate technological set up, fully provided with all the necessary accessories. The plant will have an envisaged installed processing capacity at an installed capacity to produce installed capacity of 40 tons per hour of Fresh fruits bunches of would result into 50,000 tons per annum of crude palm oil **in full capacity** and also an intergrated refinery to process crude palm oil (CPO) with capacity of 320 tons per day .

4.2 Source of Raw Materials:

Raw material such as crude palm oil will be sourced from plantation. Other inputs will be imported within 4-5 days reach the port of Dar es Salaam. Some of the raw materials is also readily available from sources in Kenya, Europe, the Middle East and South Africa.

5.0 MARKETING ASPECTS

5.1 Palm Oil Production In The World

The global palm oil market size was valued at USD 63.7 billion in 2021 and is anticipated to grow at a compounded annual growth rate of 5.1% in terms of revenue from 2022 to 2030. As of now Indonesia is a largest palm oil producer in the world, fractionated palm oil segment with a revenue share of over 39% as it is very popular in low-income countries. The market is driven by exponentially growing demand from food, beverage, biofuel, energy, personal care, and cosmetics.

5.2 OIL PALM IN TANZANIA

Palm oil is an important commercial crop in Tanzania. It is the main source of crude palm oil produced for both export and domestic consumption. Currently, there are no big plantations of palm oil, and there are very few contract growers. Hence the establishment of Agro-Processing Facility of oil palm project by Mufundi Paper Mills Limited at Katavi region would introduce new and better variety coupled with more scientific farming methods for all the above 30,000 farmers. Tanzania has the potential to become a net exporter of the commodity if the current constraints limiting production at the farm level were removed. Tanzania's total cooking oil demand is 570,000 tons (which include Palm Oil demand of 500,000 tons) of which is presently imported. The demand is expected to increase year by year and projected to increase to 700,000 tons in 2030. Potential statistics show that the demand for Oil Palm would continue to grow at least be 5%. M/S Mufundi Paper Mills Limited, by considering to start palm oil production facility at Katavi, considers itself to be in a unique position as it could service a sizeable proportion of Tanzania's main economic sectors and that of neighbouring countries. The company relies on growth in both agro-processing and large industrial sectors for its markets.

5.4 Palm oil Industry in Tanzania

Currently Tanzania is a net importer of palm oil and stood at around 500,000 tons annually. As of now there are no existence of huge palm oil estates. The oil palm production in Tanzania in 2018/2019 was 16,593 from 7,717 hectares recorded from five regions of mainland Tanzania. Kigoma, Mbeya and Pwani are the main oil palm productions regions. Kigoma has over 30,000 smallholders' subsistence palm oil farmers. Kigoma is producing about 61.4%, Mbeya 35.7% and Pwani 0.9% (*per 2017/2018 agriculture season Data*).

The establishment of the project would introduce new and better varieties, coupled with more scientific farming methods for all the 30,000 farmers. This would improve the yield of palm oil from the present level of 2.2 tons per hectre up to about 6 tons/ha ,hence increase the supply of palm oil in Tanzania .

5.5 Distribution

Production will be sold at the factory, where both wholesale and retail customers would be served. The company will also have distribution trucks, which would carry the product to various depots, especially in Dar es Salaam where the market is concentrated. This would be a strategy to increase sales.

5.4 Marketing Strategies:

M/S Mufindi Paper Mills Limited Management team shall take proactive marketing and promotional strategy to ensure that the company achieves high turnover of sales through sales made to corporate customers. In order to achieve optimal business turnover management shall design and implement the marketing strategies;

5.5 Advertisement

These would include the local media namely; local television, social medias, Radio commercials and Newspaper advertisements etc.

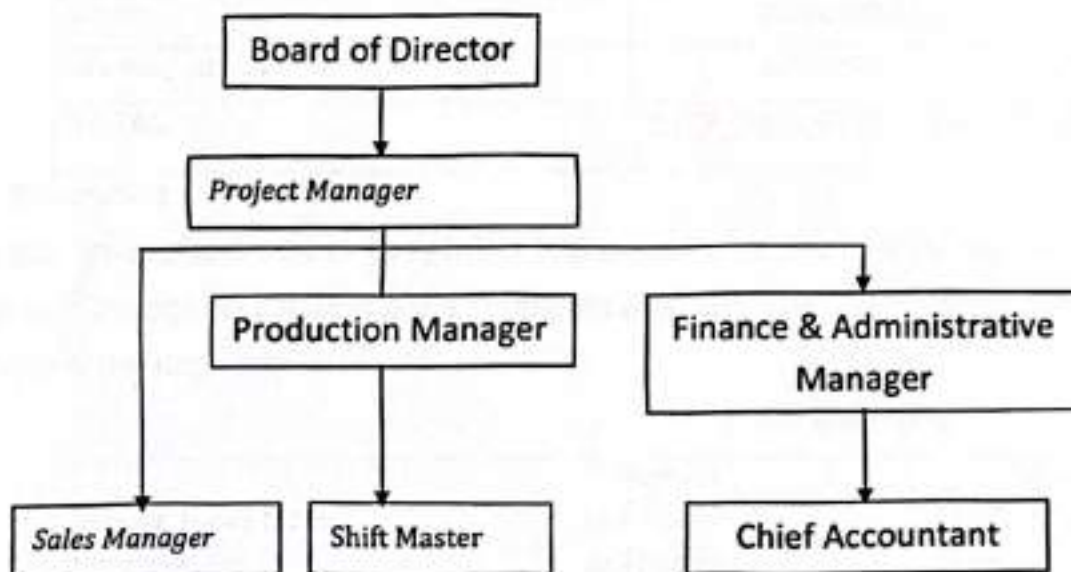
6.0 MANAGEMENT

6.1 Staff Recruitment Strategy

The strategy shall be to fill in key managerial positions with people who have extensive experience and sound qualifications in managing companies those who have experience in Palm oil industry . The staff would include a General Manager who will be assisted by departmental managers namely as shown in the organisation structure.

6.2 Organisation Structure

The organisation structure of the project is proposal to be as follows:



6.3 Manpower Requirement

The company intends to employ 2000 people both in **(Permanent And Temporary Terms)**. Total employment will be 2000 people excluding expatriates' persons who will be recruited as and when needed .

7.0 CAPITAL INVESTMENT COSTS

M/S Mufindi Paper Mills proposes to invest **USD 107,888,900** for developing this project. It is planned that some investment cost will be financed by personal shareholders' contribution and other funds will be sought from Banks. Furthermore, the sister company's Self-Generated Funds shall be utilized at a later stage for working capital funds. Following is the projects investment plan and sources of financing:

The breakdown of the relevant costs is as shown below:

| Item | Amount | Total |
|--|--------------------|--------------------|
| Land/Building (<i>land development, irrigation and factory building</i>) | 30,000,000 | 30,000,000 |
| Plant | 50,000,000 | 50,000,000 |
| Vehicles | 15,000,000 | 15,000,000 |
| Furniture & Fittings | 888,900 | 888,900 |
| Pre-expenses | 5,000,000 | 5,000,000 |
| Others | 2,000,000 | 2,000,000 |
| Working Capital | 5,000,000 | 5,000,000 |
| TOTAL | 107,888,900 | 107,888,900 |

7.1 Financing

The total investment cost of the project is planned to be financed by the shareholders retained earnings and shareholders contribution equity. The shareholders will seek for the loan if the need arises.

USD 000

| | Amount | Total |
|-----------------------------|--------------------|--------------------|
| Owners' Equity (25%) | 26,972,225 | 26,972,225 |
| Long term loan | 80,916,675 | 80,916,675 |
| Grand Total | 107,888,900 | 107,888,900 |

7.2 Machinery and equipment's costs are based on quotation from supplier. It should be noted that duty and VAT tax have not been included, meanwhile the allowance on corporate tax will be determined in the course of the project approval.

8.0 PROJECT FINANCIALS

8.1 PROJECT FINANCIAL VIABILITY

The financial analysis indicates that the proposed project would be a profitable venture.

8.2 Projected Profit and Loss Accounts

The project is expected to make a post-tax profit during its first year of operation.

8.3 Projected Cash flows

The projected cash flows show that the project would be able to honour its financial obligations as they fall due throughout the project's economic life and still remain with reserve of cumulative cash that could be re-invested in the project.

10.0 ECONOMIC DEVELOPMENT CONSIDERATIONS

Upon completion of the Implementation programme of the a large-scale Oil Palm Plantation and Crude Palm Oil (CPO) facilities, the project will be capable of creating the following:

- ◆ The project would aim at Improving the livelihood of the communities of Katavi Region and surrounding Districts of Kigoma region and would include modern farming technologies and best agricultural practices.
- ◆ As the Palm oil project would focus on sustainable drip irrigation-based cultivation, with the best modern technology, it will ensure the most efficient use of water and optimising requirements for the plant to maximise yield.
- ◆ Generating foreign exchange through exports
- ◆ Create employment for the local indigenous people of about 2000 people ;
- ◆ Promote inter-regional trade through exports to neighboring Democratic Republic of Congo; Uganda and Burundi just to mention a few.
- Enable the creation of forward linkages between production and distribution sector.
- Building of genuine and efficient import substitution industries so as to reduce the import bill, especially in the importing of industrial sugar.
- Will impart modern farming methods to indigenous Tanzanian who are engaging in palm oil cultivation. About 30,000 outgrowers will benefit
- Lay the foundation for the development of other industries.
- Will bring a ready made market for the palm oil farmers and hence improve their life and bring economic growth effect in the country . the project would produce 50,000 tons of Palm oil annually which would reduce the palm imports .

11.0 CONCLUSION

The investment and development of this Palm oil Integrated Industries undertaking is in line with the Government objective of encouraging proper development industries in the country. In addition, it will have a positive impact on the development of the region, as it would generate a number of benefits and more positive impact on the economy of the area. As noted above, this undertaking will bring about a generation of a number of benefits and reliable incomes for the employees of the project and providers of the services and goods demanded by the project's workforce /their families.

In the context of the immense useful potential of this project, the Management of M/S Mufindi Paper Mills anticipates that all interested parties in the region/ and the Government of Tanzania will give their full support so as to ensure timely implementation of the project and apprehension of successful operation.

MUFINDI PAPER MILLS LIMITED

PALM OIL CULTIVATION AND PROCESSING FACILITIES

CAPITAL INVESTMENTS COSTS

US \$

| Item | Amount | Total |
|--|--------------------|--------------------|
| Land/Building (<i>land development, irrigation and factory building</i>) | 30,000,000 | 30,000,000 |
| Plant | 50,000,000 | 50,000,000 |
| Vehicles | 15,000,000 | 15,000,000 |
| Furniture & Fittings | 888,900 | 888,900 |
| Pre-expenses | 5,000,000 | 5,000,000 |
| Others | 2,000,000 | 2,000,000 |
| Working Capital | 5,000,000 | 5,000,000 |
| TOTAL | 107,888,900 | 107,888,900 |

MUFINDI PAPER MILLS LIMITED

PALM OIL CULTIVATION AND PROCESSING FACILITIES

FINANCING PLAN

US \$

| | Amount | Total |
|----------------------|-------------|-------------|
| Owners' Equity (25%) | 26,972,225 | 26,972,225 |
| Long term loan | 80,916,675 | 80,916,675 |
| Grand Total | 107,888,900 | 107,888,900 |

MUFINDI PAPER MILLS LIMITED
PALM OIL CULTIVATION AND PROCESSING FACILITIES

Depreciation Schedule

| Year | costs | Rates | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---------------------------|--------------------|-------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Land and Building | 30,000,000 | 5% | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 |
| Machinery and Equipment | 50,000,000 | 10% | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 |
| Motor Vehicles | 15,000,000 | 25% | 3,750,000 | 3,750,000 | 3,750,000 | 3,750,000 | - | - | - | - | - | - |
| Furniture and Fittings | 888,900 | 10% | 88,890 | 88,890 | 88,890 | 88,890 | 88,890 | 88,890 | 88,890 | 88,890 | 88,890 | 88,890 |
| Pre-operation Expenses | 5,000,000 | 20% | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | - | - | - | - | - |
| Total depreciation | 100,888,900 | | 11,338,890 | 11,338,890 | 11,338,890 | 11,338,890 | 7,588,890 | 6,588,890 | 6,588,890 | 6,588,890 | 6,588,890 | 6,588,890 |

MUFINDI PAPER MILLS LIMITED
PALM OIL CULTIVATION AND PROCESSING FACILITIES

| Year | CAPACITY OF PALM OIL | | | | | | | | | | | | | | TONS | | |
|--|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | | | | | | |
| % | 60 | 70 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Capacity Per Annum in TONS Of Palm Oil | 168,000 | 196,000 | 224,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 |
| Total Capacity | 168,000 | 196,000 | 224,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 | 280,000 |

MUFINDI PAPER MILLS LIMITED
PALM OIL CULTIVATION AND PROCESSING FACILITIES
ESTIMATED OF PALM OIL OTHER DOWNSTREAMS

USD 000

| Year | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Capacity Per Annum in TONS Of Palm Oil and other downstream products | 90,000 | 105,000 | 120,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 |
| Palm oil and other downstream products revenue (USD 1,217 per metric tons)000 | 109,530 | 127,785 | 146,040 | 182,550 | 182,550 | 182,550 | 182,550 | 182,550 | 182,550 | 182,550 |

MUFINDI PAPER MILLS LIMITED
PALM OIL CULTIVATION AND PROCESSING FACILITIES

PROJECT PROFIT AND LOSS STATEMENT

US \$'000

| Year | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---------------------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Sales Revenue | 109,530 | 127,785 | 146,040 | 182,550 | 182,550 | 182,550 | 182,550 | 182,550 | 182,550 | 182,550 |
| Cost Of Sales | 76,671 | 89,495 | 102,228 | 127,785 | 127,785 | 127,785 | 127,785 | 127,785 | 127,785 | 127,785 |
| Contribution margin | 32,859 | 38,290 | 43,812 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 |
| Gross Profit | 32,859 | 38,290 | 43,812 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 |
| Operating Profit | 32,859 | 38,290 | 43,812 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 |
| Less | | | | | | | | | | |
| Depreciation | 11,339 | 11,339 | 11,339 | 11,339 | 7,589 | 6,589 | 6,589 | 6,589 | 6,589 | 6,589 |
| Profit before Tax | 21,520 | 26,951 | 32,473 | 47,176 | 48,176 | 48,176 | 48,176 | 48,176 | 48,176 | 48,176 |
| Taxes 30% | 6,456 | 8,085 | 9,742 | 13,028 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 |
| Profit after tax | 15,064 | 18,866 | 22,731 | 30,398 | 33,023 | 33,723 | 33,723 | 33,723 | 33,723 | 33,723 |
| Accumulated Profit | 15,064 | 33,930 | 56,661 | 87,059 | 120,082 | 153,805 | 187,528 | 221,251 | 254,974 | 288,697 |

MUFINDI PAPER MILLS LIMITED

PALM OIL CULTIVATION AND PROCESSING FACILITIES

CASH FLOW PROJECTIONS USD \$ '000

| Year | 0 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|----------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sources | | | | | | | | | | | |
| Profit Before Tax & Depreciation | - | 32,859 | 38,290 | 43,812 | 58,515 | 55,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 |
| Equity | 107,888 | - | - | - | - | - | - | - | - | - | - |
| Total Sources | 107,888 | 32,859 | 38,290 | 43,812 | 58,515 | 55,765 | 54,765 | 54,765 | 54,765 | 54,765 | 54,765 |
| Applications | | | | | | | | | | | |
| Capital Expenditure | 107,888 | - | - | - | - | - | - | - | - | - | - |
| Taxation | | 6,456 | 8,085 | 9,742 | 13,028 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 |
| Sub Total | 107,888 | 6,456 | 8,085 | 9,742 | 13,028 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 |
| Total application | 107,888 | 6,456 | 8,085 | 9,742 | 13,028 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 | 14,153 |
| Net Working Capital | - | 26,403 | 30,205 | 34,070 | 45,487 | 41,612 | 40,612 | 40,612 | 40,612 | 40,612 | 40,612 |