

# DUPRO INTERNATIONAL TRADE COMPANY LIMITED

## PROPOSED BUSINESS PLAN FOR ESTABLISHMENT OF REFINED OIL INDUSTRY IN KAHAMA TOWNSHIP, SHINYANGA REGION, TANZANIA.



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## **List of Abbreviations**

AGOA - African Growth Opportunity for Act  
BOT- bank of Tanzania  
CAPEX - Capital Expenditure  
EIA - Environment Impact Assessment  
EU - European Union  
GDP - Growth Domestic Products  
Kg - Kilo gram  
IRR - Internal rate of return  
MT - Metric Ton  
ML - Metric Litres  
TBS - Tanzania Bureau of standard  
NEMC - national Environment Management Council  
OPEX - Operating Expenditure  
MW - Mega Watts  
GEUWASA - Geita Urban Water Supply Authority  
SIDO- Small Development Organization  
SWOC- Strength Weakness Opportunity Challenge  
TANESCO - Tanzania Electric Supply Company  
TIC- Tanzania Investment Centre  
TZS - Tanzania Shilling  
USA - United state of America  
UK - United Kingdom  
US\$ - United State Dollar  
VETA - Vocation Education Training Authority  
VAT - Value Added tax

## EXECUTIVE SUMMARY.

Tanzania has the potential to become the granary of East Africa due to the growing demand in neighboring countries and a transportation advantage for supplying edible oils to the market in Africa. Moreover, Tanzania has large and relatively underutilized natural resources. Still 76 percent of the arable land, suitable for agriculture, is not cultivated. If Tanzania encourages the cultivation of arable land, it can expand both raw materials for industrial needs.

**DUPRO International Trade Company Limited** tap the opportunity and expect to develop sustainable high capacity, intergrated Refined Oil factory in Shinyanga Region, The company will expand the industry according to its business stratrgy for period of 2023 -2026 so as to meet domestic and international market as one of its business strategy. The intergrated project will be located at Kahama Municipality in Shinyanga Region, Tanzania.

This unique industry is primarily a legacy of Government policies that promote labor intensive and increases employment for Tanzanian. The project is expected to start early end of year 2023 whereas the raw material during the start of project will be from individual farmers, agricultural marketing co-operatives and additives ingredient will be imported from abroad.

The company intend to import machine from China with a plant capacity per day is 30 Metric litres per day of refined sunflower oil, 15 Metric litre of double refined sunflower oil, and 20 Metric Tons of solvent seed cake (assumed production will be for 300 days, that is 25 days per month). The plant will have a capacity of above commodities per day working 16 hours. However, for purposes of this study it is assumed that it will operate at 24 hours a day, 20 days a month, thus processing 65 MT or ML per day x 25 days x 12 months (equivalent to 300 days per year) and the revenue gain is estimated to 3,958,416.63US\$ per year.

The proposed integrated project is estimated to cost a total of 5,394,219.56US\$ (including own equity of US\$ 1,618,268.87 as own equality while 70% will be acquired from commercial banks at an interest rate of 8%. The Current asset of US\$ 1, 10795.68 fixed assets 4,253,423.68S\$ and total liquidity 3,467,025US\$. The project will be implemented within 5 years as economic life. Testing the project viability is positive whereas IRR is positive 14.59%, and payback period of project is within 3 years.

The development of a large and complex project such as DUPRO INTERNATIONAL TRADE COMPANY LIMITED Factory is necessarily accompanied by multiple risks during the project development, construction, operation and maintenance. The right approach to manage the project in a manner which is fairly and adequately address the multiple risks in a comprehensive as well as systematic manner is to use the risk analysis and management methodology which identifies the risk issues and their instrumental cause.

The project is also likely to have a positive impact on the economy of Lake Zone regions and Tanzania as a whole by creating employment, and contributing to Government revenues through various taxes, which will be paid. It also has potential for substantial exporting to foreign markets especially to neighboring countries in the Great Lakes Region. In summary the following table will show impact investment index framework

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the meat processing plant as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, the company through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of this factory facility is financed using a combination of equity debt ratio (30:70%), it gives an IRR of about 14.59%. The computed IRR is well above Dollar market of the annual loan interest rate of (8.00%) which is technically interpreted that the project is financially viable.

## 1.0. OVERVIEW OF OIL MILL INDUSTRY IN TANZANIA

### 1.1. Refined Oil Mills in Tanzania

Tanzania's edible oil sector stands at Tshs.676.2 billion (\$294 million). The sector is highly in need of investors to fill the supply gap that currently stands at 320,000 tones so as to slash the import bill that amounted to Tshs.191.3 billion (83.19 million) in 2019. The country's annual demand for edible oil is 500,000 tones and annual supply is 180,000 tones leaving the country with no choice but to import the remaining 320,000 tones.

The major sources of edible oil in Tanzania include sunflower, cotton, groundnuts, sesame, soya beans and palm. Oilseeds are produced in almost all regions in Tanzania. The major crop for edible oil production in Tanzania is the sunflower because it can be grown in most parts of the country as it is drought resistant, less susceptible to diseases and cheaper to cultivate compared to other oilseeds crops. However, production of sunflower remains low and benefits from its value chain have not been adequately realized.

The role of farmers in the oil producing products value chain is only confined at production level and selling oil seeds products. Processing is characterized by small and medium scale processors and is only limited to oil and animal cake. It was found that the low performance in this subsector is driven by a number of constraints. These include; poor farming practices, inadequate extension services, poor access to finance, depressed farm gate prices of products, inadequate processing facilities, threat from imported edible oil and inadequate technology. Overall, the findings indicate that there is a huge potential for producing sunflower seeds in Tanzania. This includes high demand of sunflower oil, large suitable land, availability of market/demand, presence of water bodies, favorable policies and regulations, availability of power in the rural areas (Rural Electrification Program through the Rural Electrification Authority {REA}), and possibility of a wide range of products that can be produced in the sunflower value chain.

Further findings indicate that performance in this subsector does not mirror the underlying opportunities. Production is characterized by small area of cultivation and low yield. On average, cultivation is on small-scale, with an average farmer cultivating 4.0 acres only, producing only 0.6 tons of sunflower seeds per acre. This level is far below productivity of 2.0 Tones to 3.0 Tons of sunflower seed per acre.

### 1.2. Demand of Refinery oil Industry in Tanzania



The demand forecast shows an increase from 500,000MT to 700,000 MT of edible oil by 2030 and Tanzania guarantees the market growth for investors in the

foreseeable future. Tanzania major source of edible oil in Tanzania include sunflower, palm, groundnuts, sesame, soya beans and cotton. Oilseeds are produced in almost all regions in Tanzania. The major crop for edible oil production in Tanzania is the sunflower because it can be grown in most parts of the country as it is drought resistant, less susceptible to diseases and cheaper to cultivate compared to other oilseeds crops.

However, production of sunflower remains low and benefits from its value chain have not been adequately realized. Due to this, the Bank of Tanzania (BoT) conducted a study to investigate potentialities of sunflower sub sector and its contribution to the economy. The study was carried out in areas where sunflower is grown, covering all Bank of Tanzania's (BoT) zones notably, Central Zone (Dodoma, Iringa, Singida and Tabora regions); Eastern Zone (Lindi, Morogoro and Mtwara regions); Lake Zone (Geita, Kigoma, Mara, Simiyu, Shinyanga, Kagera and Mwanza regions); Northern Zone (Manyara, Kilimanjaro, Tanga and Arusha regions); and Southern Highlands Zone (Katavi, Rukwa, Ruvuma, Mbeya, Njombe and Songwe regions).

Tanzania has the potential to become the granary of East Africa due to the growing demand in neighboring countries and a transportation advantage for supplying Edible oils to Kenya and to the market in the Horn of Africa. Moreover, Tanzania has large and relatively underutilized natural resources. Still 76 percent of the arable land, suitable for agriculture, is not cultivated. If Tanzania encourages the cultivation of arable land, it can expand its oil production and export its surplus. If we process the oil we produce, it will create more jobs in oil mill and thereby benefit a lot of people.

### **1.3. Significant of establishment of DUPRO INTERNATIONAL TRADE COMPANY LIMITED toward industrialization in Tanzania.**

Tanzania, after a long-standing dependency on imports for major food commodities, such as sugar and edible oils, intends to transform its agriculture sector to a level that meets local demand for food commodities through domestic production. The private sector is seen as a crucial in filling the gap of industrialization for refinery edible oil mill processing in Tanzania. The agricultural sector provides raw materials for the anticipated integrated industrial such as *DUPRO International Trade Company Limited*. Therefore, any transformation strategy that results in an increase in agricultural output is vital for feeding Tanzanian growing population and meeting demand from the industrial sector.

DUPRO INTERNATIONAL TRADE COMPANY LIMITED tap the opportunity and expect to develop sustainable high capacity, Refinery Oil factory in Kahama Township in Shinyanga region.

The company will establish refined and double refined sunflower oil so as to meet domestic and international market as one of its business strategy. The intergrated project will be located to plot No. 171, block A, Nyihogo street,

Kahama Urban area, in Shinyanga region. The company believes it has the capacity to produce enough of the required edible oil so undertook measures to boost production for both, national and international market as projected financial plans.

## 2.0. PROJECT OVERVIEW

### 2.1. The Industry ownership and share distribution

DUPRO INTERNATIONAL TRADE COMPANY LIMITED is a limited liability company, registered in Tanzania under certificate of incorporation No 16271613 issued on the 24<sup>th</sup> January, 2023. The office of the company is located at Nyihogo Street, Plot No. 171, Kahama Township in Shinyanga Region. The company aim to expand its production activities by establish refinery oil mills factory at Shinyanga Region whereas raw materials will collected from local farmers in Tanzania and additives ingredients will be imported from abroad. The expansion of project will involves purchasing machine and installation, operational, management and distribution of commodities so as to facilitate smooth implementation of the plant.

The initial Authorized Share Capital of the company is Tshs 20,000,000/= divided into 100 ordinary shares of Tshs 200,000 each and the company have the power to divide the original or any increased capital into several classes, and to attach thereto any preferential, deferred, qualified or other special rights privileges, restrictions or conditions. Unless the conditions of issues shall otherwise expressly declare, every issue of shares, whether preference or otherwise, or any such rights, privileges or conditions shall not be altered or modified except in accordance with the registered Articles or Association. The liability of the members is limited and the following names compromise.

**Table 1: Company Ownership and Principal Shareholders**

<i>S/NO.</i>	<i>SHAREHOLDER'S NAME</i>	<i>ADDRESS</i>	<i>NUMBER OF SHARES</i>
1	MR. PROSTAIS DUSHIRIMANA, (BURUNDIAN)	NTANANGWA, BUJUMBURA-MALRIE, BURUNDI	90
2	MR. VEDASTO JOHN KALELA (TANZANIAN)	P O BOX 857, KAHAMA, SHINYANGA	10

The address for this company is;  
DUPRO INTERNATIONAL TRADE COMPANY LIMITED;  
P O Box 857,  
KAHAMA,  
SHINYANGA.  
URT.

## 2.2. Project Description and production process

### 2.2.1. Refinery Oil Mill production process

DUPRO INTERNATIONAL TRADE COMPANY LIMITED; will produce oils from the remains **mainly from sunflower seeds**, other includes cotton, sun flowers, groundnuts etc This unique industry is primarily a legacy of Government policies that promote labor intensive and increases employment for Tanzanian. The project is expected to start early December 2023 whereas the raw material during the start of project will be from agricultural marketing co-operatives and additives ingredient will be imported from abroad.

**The technology used in the oil mills processing, the machine type used will press copra, sesame, walnut, sunflower seed, peanut, rapeseed, soybean, and so on. The company will offers a wide range of oil extraction machine, solutions and services tailored to customers' unique and oil processing needs to enable successful edible oil production.**

Whether its rapeseed, sunflower seeds, cottonseed or soybean, to obtain consistently high-quality edible oils from oil crops, all the oil production process steps interlinks smoothly and be problem free. The company will use collected edible integrated solutions that embrace entire manufacturing process! Oilseed Pretreatment, Oil Pressing, Solvent Extraction and Edible Oil Refinery are the 4 main steps of the edible oil production. We will show you detail below!

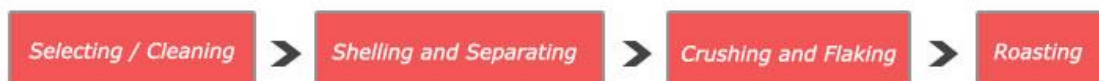
### Edible Oil Production Process and Related Oil Mill Machinery.

*Main Steps of Edible Oil Production Process*



#### Step1: Oil seed pretreatment.

Oilseed pretreatment refers to a series working steps of getting rid of impurities from the oil bearing materials, which can make the oilseeds in the best condition before being pressed and extracted and is able to make the most oil out. These impurities here generally refer to the following two items: The organic impurities: such as the stem leaf, cord, chemical fibers, velveteen and their seeds; the inorganic impurities: such as soil, metal, about oil-bearing impurities.



*Oil Mill Machinery Used in the Pretreatment Process*

During the process of oilseed pretreatment, a series of seed processing equipment are necessary, such as cleaning sieve, crusher, dehuller, flaking machine, cooker, screw extruder, dryer and the like.

### **Step2: Oil Pressing**

Oil Pressing or you can call it expeller pressing, is a traditional oil extraction method that has been used for centuries. The pressing process is chemical-free, it is a mechanical method for extracting oil from vegetables, nuts and seeds by physics pressure. Oil pressing ranges in capacity from less than 1 ton to over 50 tons per day, and today the expeller press is universally used for the continuous mechanical extraction of oil regardless of the size of the operation.

*Workshop view*



### **Step3: Solvent Extraction**

Solvent extraction is a chemical method to extract oil out from vegetables, oilseeds and nuts by solvent. Hexane-based processes have been in commercial operation for a long time. Industrial oil processing for the edible oil generally involves the solvent extraction step which may or may not be preceded by pressing. For such processes, it is possible to achieve oil yields in excess of 95% with a solvent recovery of over 95% which in compare to 60 to 70% oil yield by mechanical oil pressing method.

### **Step: 4 Edible Oil Refineries.**



The edible oil refinery can refine almost all types of oils. The refined oil quality depends on the type of crude oil and refinery process and technical. Edible oil refinery can be carried out by either chemical refining (batch or

continuous refining) or physical refining, and the main equipment involved are neutralizer, bleacher, deodorizer, heat exchanger, press filters etc.

Edible oil can be refined by either a chemical or a physical refining process. The decision which process to use depends on the types and qualities of the crude oil to be processed. The process of edible oil refinery generally comprises of Degumming, Neutralization, Bleaching and Deodorization and Winterization. Chemical Refining is the most widely used process for vegetable oils, especially seed oils. It is particularly suitable for refining crude seed oils like soybean oil, canola oil, corn oil, cottonseed oil, sunflower oil, safflower oil etc.

### **2.3. Business Plan Objectives**

The objectives of this study are three-fold. First is to determine the viability of the proposed project and serve as a business plan for the company's development program. Secondly, the business plan will act as a supporting document in the company's application for Tanzania Investment Centre (TIC) Certificate of Incentives so as to access exemptions on duties, VAT deferments and other benefits and protections as statutorily provided for under Tanzania Investment Act (1997).

Thirdly, the plan will be presented to the bank, it will be presented to Banks/Financial Institutions for application of Term Loan 3,775,953.69 US\$ (70% total investment cost) to support smooth implementation and running of the proposed projects. The project promoters have commissioned a reputable engineering and project planning consulting firm to advise on detailed technical and economic evaluation of the project and in determining its viability. As the report will be used to raise debt financing for the project, it is tailored to meet standard requirements of financial institutions in the region.

### **2.4. Plant capacity and Pricing Analysis**

Capacity refers to an upper limit or ceiling on the load that an operating unit can handle. Capacity can be referred as the rate of a facility can produce according to their capability. It is usually expressed as volume of output per period of time. The company machine capacity will be produce in any organization, the capacity of the company can be measured by looking at how it combines and utilizes the capacity it has purchased to perform work.

In this context the plant capacity per day is 30 Metric litres per day of refined sunflower oil, 15 Metric litre of double refined sunflower oil, and 20 Metric Tons of solvent seed cake (assumed production will be for 300 days, that is 25 days per month). Average price per Metric Litres is 4,398.24US\$ ML of refined oil, 5,997.60US\$ for double refined oil and 2,798.88US\$ of sunflower cake.

Table 2.1.

<b><i>Refinery oil and extracted solvent cake production assumptions</i></b>	
<i>Working days per month</i>	25.00
<i>Annual working days per year</i>	300.00
<i>Average production of refined sun flower seed per day in ML</i>	30.00
<i>Average production of double Refined oil seed per day in ML</i>	15.00
<i>Average production of Extract solvent cake per day in MT</i>	20.00

The plant will have a capacity of above commodities per day working 16 hours. However, for purposes of this study it is assumed that it will operate at 24 hours a day, 20 days a month, thus processing 65 MT or ML per day x 25 days x 12 months (equivalent to 300 days per year).

### **Table 2.2. Annual Production phases and sales volume.**

The basis for pricing has been from observations and data collected from various parts of Tanzania, market behavior of raw materials and by-products, production costs and profit margins. Packaging will be done in good quality material and together with other materials, the pricing has been estimated at annual sales increase of 5% and this should allow a very high standard of packing.

<b><i>REFINERY OIL AND EXTRACTED SOLVENT CAKE PRODUCTION SALES</i></b>	
<i>Annual sale of refinery sun flower seed oil</i>	1,319,472.21
<i>Annual sale double refinery sun flower seed oil</i>	1,799,280.29
<i>Annual sale of extract solvent cake per day in MT</i>	839,664.13
<b><i>TOTAL SALES REVENUE</i></b>	<b>3,958,416.63</b>

## **2.5. Marketing Organization**

***DUPRO International Trade Company Limited***; will produce products and sell at wholesale level. Importers from the neighboring countries will be expected to orders for their requirements to the company by mails, phones, and their orders will send to country of their destinations, but arrangements can also be made for the promoters to deliver directly to importer from Kenya, Burundi, Rwanda, Democratic Republic of Congo and south Sudan. Likewise, local buyers are expected to collect their requirements of the various products for the produced products, but the promoters will be flexible to deliver the goods on demand. With availability of demand in the local market, the company will create market for these products depend upon the entrepreneur's ability to push the same in the market. Apart from retails segment, the products are being widely used by community. ***Dupro International Trade Company Limited***; Production will be

mainly for domestic and EAC market, the company expects to export 40% of its products and the remaining balance will be sold locally.

## **2.6. Technical Characteristic of the project.**

### **2.6.1. Project Location**

The project will be developed at Nyihogo Street, Plot No. 171, Kahama Township in Shinyanga Region. For the economic benefit, the industry will be established in the same area as there is a room to establish other plants.

### **2.6.2. Project Site analysis**

Based on physical inspection of the proposed site, the availability of basic and essential industrial infrastructure such transport, water supply, effluent disposal, electric power supply, telecommunication system and security were all checked out and are ok for factory establishment. The realization of the project development requires successful completion of a number of necessary activities and facilities to enable a successful development of the project. The project location is already installed necessary utilities such as reliable supplies of energy, water, transportation, telecommunications services, waste disposal and other services are in place.

### **2.6.3. Land and Buildings**

The floor plan and elevation of buildings and other related structures are in place. However, the total cost of Land acquisition and registration, factory buildings, Storage of raw materials and finished products structure are in place. The minor rehabilitations costs are inclusive of contingency and reflect prevailing cost of building materials and labour costs in the country. Mostly local building materials will be used in the construction of the same. The associated cost includes: land acquisition, Processing factory Building structure, Warehouse structure for finished goods, Warehouse structure for collected goods, Fencing and gates, Laboratory for quality testing, Packaging room, Reserve water tanks -durable and TP and waste disposal. Others includes; Semi-permanent Building and office, Total investment of land and structure building is estimated to 1,414,151.72US\$.

### **2.6.4. Machinery, vehicles and supporting equipments**

Proper machinery selection is one of the key problems in the development of an industry. The machinery must suit the two-fold requirements of the developing countries, i.e. it should be up-to-date to allow for competitive production. In view of the foregoing, an effort has been made to choose from modern technological from China a level that strikes a balance between fixed costs based on depreciation and variable costs based essentially on wages.

The requirements of various items of equipment have been worked out taking into consideration the production programs, average equipment utilization and normal productivity level of an average worker etc. While working out details of equipment required, it has been assumed that the plant will be working in a double shift 16 hours a day, 25 days a month or a total of 300 days a year. In second years onward all machines will operate for 24hrs after all operational staff to be equipped with knowledge of machines operation.

The projects machinery and equipment will be sourced from China are estimated to cost 1,821,456.49US\$ which includes CIF price and installation of machines which include miscellaneous of 19,992.00US\$ in case unforgotten assembling equipments.

The company will purchase standby generator 105,635.00 US\$, oil Mill Equipment includes chassis,, oil Refinery plant complete set, weighing scale Max 100MT, laboratory Diagnosis Equipment for testing flour and oil mill qualities, small and medium, Weighing Measures - 0.1 to 100Kg, Transformers, Draying, Sorting and Packaging machines, -durable Reserve water tanks, Computer and accessories. These cost assumptions are C.I.F Dar es Salaam and include installation, commissioning, consultancy, port charges and transport to the project site.

#### **2.6.5. MOTOR VEHICLES**



10 heavy trucks , 10 Light truck and 2 utility vehicles will be purchased at a price of 895,641.74US\$ of Euro standard, proposed truck will be imported from Chinese company SINOTRUCK HUBEL HUAWIN SPECIAL VEHICLES CO.LTD, model type is HOWO 6x4 stake Truck. Loading capacity front axles is 1X7000KG and rear axles loading capacity 2X16, 000KG. The total pay loading is 30,000KG.

Apart from purchasing motor vehicle, the industry will purchase 2 fork lift with a capacity of 3.5MT will cost 15,993US\$ respectively.

#### **2.6.6. Furniture & Fittings and computers**

This cost item includes the purchase of various office furniture: tables, chairs cabinets, safes, telecommunication gadgets, firefighting equipment, air conditioners etc. A budget of 21,7390US\$ will be allocated from general administration budget for furniture fittings and computer accessories. The total budget for furniture and fittings is small due to nature of industry as few or minor requirement of furniture and fittings.

## 2.6.7. Pre-Operational Expenses

Under pre-operational expenses are considered costs like company formation, preliminary project studies, business plan preparation costs, licenses, permits and authorization, including processing of TIC Certificate of Incentives, and legal fees, travelling expenses, initial recruitment and training expenses, and interest accrued during project construction period. Budget allocated for this is 10,795.68US\$.

## 2.6.8. Initial investment and Working Capital

This item will mainly cover initial imports of raw materials estimated to last for the first three months of operations. Otherwise, raw materials will generally be maintained at one month's stock and debtors at one month's sales volume constitute the biggest portion of current assets. Trade credits will be 15 days for the items listed. The initial working capital allocated budget is 1,100,000US\$ the table below shows Capital Investment Summary.

INVESTMENT SUMMARY - DITCO COMPANY LTD				
S/NO.	CAPITAL ITEM	No. OF UNITS	UNIT OF MEASURE	ESTIMATED COST US\$
NB	ALL FIGURES IN USD			
	A. LAND AND BUILDINGS FOR		Exchange rate per US\$ as today is 2501TZS	
1	Land acquisition			11,995.20
2	Processing factory Building structure	1		74,782.61
3	Semi-permanent Building and office	1		43,478.26
4	Warehouse structure for finished goods	2		317,139.13
5	Warehouse structure for collected goods	2		545,000.00
6	Fencing and gates			86,956.52
7	Laboratory for quality testing	2		21,739.13
8	Packaging room			65,217.39
9	Reserve water tanks -durable	2	100,000Lts	173,930.43
10	TP and waste disposal			73,913.04
	<b>SUB TOTAL</b>			<b>1,414,151.72</b>
	<b>B. MACHINERY EQUIPMENT</b>			
11	Agricultural equipment			600,000.00
12	Automated refinery plant full sets	1	set	822,510.82
13	Weighing scale Max 100MT	1	set	25,217.39

14	Diagnosis Equipment for testing quality	1	set	17,391.30
15	Weighing Measures - 0.1 to 100Kg	10		5,217.39
16	CCTV Set and Installation	complete set		3,998.40
17	Transformer/Station	2	unit	32,608.70
18	Draying, Sorting and Packaging machines	1	Complete set	64,935.06
19	boilers and extensive piping network			79,968.01
20	Laboratory Equipments for testing the quality			43,982.41
21	Generator 100kVA	1		105,635.00
22	Miscellaneous Tools and Equipment	1	unit	19,992.00
<b>SUB TOTAL</b>				<b>1,821,456.49</b>
<b>C. MOTOR VEHICLES</b>				
23	Folk lift 3.5MT	2	unit	15,993.60
24	Heavy trucks with trailers (HOWO 6x4 Stake Truck) 32MT	10	unit	599,760.10
25	Light Trucks up to 20MT	10	unit	259,896.04
26	Utility Vehicles	2	unit	19,992.00
<b>SUB TOTAL</b>				<b>895,641.74</b>
<b>D. FURNITURE</b>				
27	Office Furniture	set in lump sum		10,869.57
28	Computer and accessories	Office sets		10,869.57
29	Other cost			130,434.78
<b>SUB TOTAL</b>				<b>152,173.91</b>
A	<b>TOTAL FIXED ASSET</b>			<b>4,283,423.88</b>
<b>E. CURRENT ASSETS</b>				
30	Pre operational expenses			10,795.68
31	Initial working capital			1,100,000.00
B	<b>TOTAL CURENT ASSETS</b>			<b>1,110,795.68</b>
<b>TOTAL INVESTMENT</b>				<b>5,394,219.56</b>
<b>EQUITY + LOAN</b>				
1	<b>LOAN (70%)</b>			<b>3,775,953.69</b>
2	<b>EQUITY (30%)</b>			<b>1,618,265.87</b>
<b>TOTAL FINANCING</b>				<b>5,394,219.56</b>

### **2.6.9. Project Cost & Financing Pattern**

The project costs, including fixed costs (machinery, equipment, building renovations, motor vehicles, office furniture and equipment and pre-operation expenses will be financed by a combination of bank term loan and shareholders own resources. Working capital requirements will be financed by short term bank financing in form of overdraft facility. The project promoters are planning to finance project cost in the following pattern:

The proposed integrated project is estimated to cost a total of 5,394,219.56US\$ (including own equity of US\$ 1,618,265.87(30%) as own equality while bank loan 3,775,953.69US\$ (70%) with bank interest rate of 8%. The Current asset of US\$ 1,110,795.68 fixed assets 4,283,423.56S\$ and total liquidity 3,467,025US\$. The project will be implemented within 5 years as economic life.

### **2.6.10. Project Implementation**

Full implementation of the project is planned to take place by December, 2023 whereas Machineries and motor vehicles will be imported immediately while construction/renovation works are in process.

### **2.6.11. Explanatory Notes**

The factory runs per day with a maximum of 65ML of MT per day for the three products, which include refined and double refined sunflower oil and cake production per day respectively. Capacity utilization of the plant is 60% - 75%. The production capacity of the plant will be expanded to make use of 100% after the first year in production. The proposed project is a complete set of modern technology with output capacity of the said above information's. All machines are from well-known Asia brands (China), after being over hauled, run 20-25 years.

### **2.6.12. Auxiliary Materials/ services**

**Utilities and service facilities that will need to be provided in this plant are as follows:**

- a) Workshop
- b) Electric power
- c) Water supply
- d) Miscellaneous facilities {Canteen; First Aid Kit, Storage and transport and Office Facilities}

#### **(i) Workshop**

It is necessary to make provision for a small workshop in the plant premises so that certain maintenance operations could be carried out following sudden breakdowns and major routine matters. The facility will comprise of necessary machines like small centre lathe, drilling machine, welding set, soldering and gas-cutting equipment including complete electrical kit to take care of necessary

electrical maintenance as well as to replace worn-out parts and periodic oil and greases needs for the plant. Equipment provision has been restricted to the minimum.

**(ii) Electric Power and Generator**

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Tabora to Shinyanga Region. As part of an alternative power supply, the company will buy a heavy duty 100KVA Power generator automated generator that will be connected to the plant and premises for standby power supply. In the near future, the company plans to install and use solar power for administration and other miscellaneous activities and not processing activities. The DUPRO INTERNATIONAL TRADE COMPANY LIMITED will install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems A total amount of US\$ 105,635 has been budgeted for purchasing a stand by Generator of 100KVA power capacity.

**(iii) Water Supply**

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed will used KASHUWASA as a source of water supply from Mwanza region, the agency is major supplier of water to urban and peri urban area in the region. While depending on water supply from KASHUWASA, the main line is close to the proposed industry from Kahama Township. The main line from this source will be tapped and let to the land site and water collected in an overhead reservoir provided at the top of the building of the plant. Adequate provision has been made in the project cost for the overhead tank and supply and laying of pipelines etc.

**(iv) Miscellaneous Facilities e.g. First Aid Kit, Storage and Transport, Office Facilities etc**

- Provision has been made in the project costs for necessary facilities for external telephones and fire alarm system;
- Sickness and ill-health are recognized to be among the cause of absenteeism and low morale leading to decreased production, increased waste and bad employee-management relations. Therefore, necessary provision has been made for the canteen and first aid facilities in case of accidents, sudden sickness etc.
- Storage and transport needs of the plant have been duly recognized and been attempted mostly manual. Regarding transport, ten (10) Heavy trucks, (10) Light Vehicles and 2 Utility vehicle with a capacity 32MT, 10-20MT, respectively for trucks will be purchased and other light trucks will be hired for raw materials collection and distribution,

- Necessary provision for furniture and office equipment has been made in the Capital Cost estimates.
- Provision has also been made for the various types of weighing equipment in various sections for material-handling equipment etc.

#### **2.6.12. Warehousing and distribution.**

DITC's warehousing service is ready to meet 24/7/365 with produced raw materials and imported raw material. The efficiency of on-site combined with 2 loading docks (focal lift) will accommodate all needs and reduce supply chain costs. The industry will use electronics inventory management system means will ready for the efficiently movements of goods to next level. The industry will use quick dispatch for fast distribution of final products and packed by manual means or by semi-automatic machines. The industry will take Extra care is therefore taken to make it hygienic so that the products do not get spoiled during storage.

#### **2.6.13. Waste management for industry.**

In order to create a sustainable society, it is necessary to develop effective utilization of all sorts of wastes. One of the major wastes from our living is fiber wastes. Fiber wastes are generally divided to nonindustrial (organic chemicals) and industrial wastes (inorganic Chemicals). In his strategic management for a DITC the industry has to move from an understanding of improvement at all costs to an understanding of continuous and balanced improvement once established. In modern times, environmental protection is being implemented not because it is enforced law, but as an administrative philosophy.

Rapid degradation in environmental conditions has changed at attitude of industrial managers toward ecological environment and had them consider ecology a significant factor while taking decisions related to industrial management. Parameters responsible for environmental pollution include chemicals discharged into air, water and soil as well as energy pollution all these will taken into consideration of the proposed project.

Noise pollution caused by poorly planned settlement programs is also included in this plan. Furthermore, safety and health of those working in production will be also taken into account by installing modern machines free from noise pollution.

### **3.0. ORGANIZATION AND MANPOWER REQUIREMENT.**

#### **3.1. Employment**

The whole process of production lines is looking at providing direct employment to at least 47 permanent jobs on full implementation and operation of the project. The industry is divided into 3 Departments; administration (8), finance and marketing (7), Operation (32). Two of these workers will be expatriate staff from China who will train the rest of the workers during the first 6 months of operation (Not included to this chart). Thereafter most of the production supervision will be taken over by local Tanzanians who by then will be expected to have acquired adequate experience in the operations and management of the project.

#### **3.2. Recruitment**

Recruitment of the 32 persons will be carried out by giving first preference to ex-technician from our local technical institutes such as Vocation Education Training Authority "VETA" and employees of Oil factory in Tanzania, based on demonstration of skills and aptitude basis and their willingness to work for DUPRO INTERNATIONAL TRADE COMPANY LIMITED. Careful methodology is being worked out by a competent management consultant who will set the job descriptions etc. To ensure that the right calibre is recruited. Recruitment of expatriate personnel will be carried out in consultation with the relevant authorities in Government and the collaborating agencies.

#### **3.3. Training and the use of Consultants**

The Company plans to initially carry out on the job training for most of the technical staff by a Indian expert (depending on the source of technology) to be dispatched to the project site by the suppliers of the plant which will be specified under sales agreement. Later on, the maintenance staff will be sponsored to go on field trips outside the country with the manufacturers of the machinery in China so as to familiarize themselves with the operations of the plant and machinery. In general the company will ensure that employees acquire new skills and procedures to increase their productivity fourfold. Educational materials will be subsidized or paid for to motivate the workers to develop themselves.

Whereas the company will endeavor to obtain the best talents to fill the permanent posts in the organization, it is intended where necessary, to continue with the policy of hiring out some specialized skills by way of consultants. Alternatively, those skills not required throughout the year will be left to consultants. These include legal counsels, systems and management consultants. To ensure efficient and scientific management, operational manuals will be prepared for the core functions of the company.

### 3.4. Organization and Management

The project will be managed by qualified professionals given the vast experience that the promoters have acquired over years in running and managing similar businesses. The Board of Directors formulates policy and offer strategic business guidance to management and regularly monitor and evaluate performance of the company.

All the production line will have its own management under which the day to day leader/management of each production line will be vested in the management team headed by a Production Manager. The Production Manager is to be assisted by qualified and experienced personnel. The Production Managers will report to a General Manager who will be directly responsible to the Board of Directors. The table below shows proposed organization and manpower requirement for the plant and salary structures as follows:

<b>A.ADMINISTRATION DEPARTMENT</b>	<b>FULL TIME STAFF</b>	<b>MONTHLY SALARY FULL TIME STAFF</b>	<b>TOTAL ANNUAL SALARY</b>
<b>DEPARTMENT</b>	<b>POSTS</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>
GENERAL MANAGER	1	1,000	12,000
ADMINISTRATOR	1	700	8,400
DRIVER	1	270	3,240
SECURITY GUARD	5	250	15,000
<b>SUB TOTAL</b>	<b>8</b>	<b>2220</b>	<b>38,640</b>
<b>B.FINANCE AND MARKETING DEPARTMENT</b>	<b>FULL TIME STAFF</b>	<b>MONTHLY SALARY FULL TIME STAFF</b>	<b>TOTAL ANNUAL SALARY</b>
<b>DEPARTMENT</b>	<b>POSTS</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>
ACCOUNTANT	2	600	14,400
PROCUREMENT OFFICER	2	500	12,000
MARKETING OFFICER	2	500	12,000
DRIVER	1	270	3,240
<b>TOTAL</b>	<b>7</b>	<b>1870</b>	<b>41,640</b>
<b>C. OPERATIONAL DEPARTMENT</b>	<b>FULL TIME STAFF</b>	<b>MONTHLY SALARY FULL TIME STAFF</b>	<b>TOTAL ANNUAL SALARY</b>

DEPARTMENT	POSTS	AMOUNT USD	AMOUNT USD
PRODUCTION MANAGER	1	800	9,600
QUALITY CONTROL	2	650	15,600
ICT EXPERT	1	650	7,800
OPERATORS	12	320	46,080
MACHINES TECHNICIAN	2	200	4,800
DRIVERS	15	270	48,600
<b>TOTAL</b>	<b>32</b>	<b>1820</b>	<b>122,880</b>
<b>GRAND TOTAL</b>	<b>47.00</b>	<b>5,910.00</b>	<b>203,160.00</b>

## **4.0. FINANCIAL ANALYSIS AND MODELING**

### **4.1. Financial analysis for Production, Revenue and project viability**

- The estimated revenue gain in selling of refined and double sunflower oil, sun flower cake Oil and by products cakes is estimated to 3,958,417US\$ excluding Value Added Tax.
- Gross sales contribution in the first year of production is 88% which increases positive to the remaining years.
- The expected sales increase annually is 5% while increase production cost is 3% which depends on inflation rate, for Tanzania inflation rate is less than 4%. In this case inflation rate will not affect the factory performance.
- The discount rate has been assumed to be 8% for dollar market value
- Total investment cost of the project is 5,398,219.56US\$ whereas the own equity 30% (1,618,265.879US\$) and loan-able amount 70% (3,775,953.69US\$)
- The end balance of project in cash flow statement is positive and increases tremendous for the first year the end balance is 8,878,920US\$, the second years will decrease due to start of term loan payment, but still increase positively,
- The yearly loan payment schedule of project is 945,711.97US\$ for 5 year loan recovery schedule,
- Testing the project viability is positive whereas IRR is positive 14.59%, and payback period of project is within 3 years.

### **4.2. Financial Modeling**

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the DUPRO INTERNATIONAL TRADE COMPANY LIMITED; the analysis is based on the assumptions that have been taken for the implementation of the site development, demand and the associated potential investment requirements for a 5 year time period. The purpose of establishing this factory is to speed up the country's economic development by being a catalyst for restructuring the existing local Mills industrial set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

#### **4.2.1. Objective and Scope of Financial Model**

##### **a. Objective**

The main objective of the financial modelling and analysis is to setup a financial model framework for potential generated revenues and operational & maintenance costs for the full operation of the factory on the assumptions taken for the Market

Analysis, the plan for the facility development, unit production costs and other overhead and operational charges.

**b. Scope**

The scope consists of a financial model that will be used to analyse the potential financial viability of the project based on the assumptions taken for the concept and scope of the Mills processing factory on the Market Analysis. The financial model has been developed in excel spread sheet and include information on costs, expenses and the subsequent sales revenue based on the average market prices and linked to the financial cash flow.

## ANNEX I - INCOME STATEMENT

(all numbers in US\$)

### Revenue

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	-	<u>TOTAL</u>
Annual sale of refinery sun flower seed oil	-	1,319,472	1,385,446	1,454,718	1,527,454	1,603,827		7,290,917
Annual sale double refinery sun flower seed oil		1,799,280	1,889,244	1,983,707	2,082,892	2,187,036		9,942,159
Annual sale of of Extract solvent cake per day in MT		839,664	881,647	925,730	972,016	1,020,617		4,639,674
<b>Total Operating Revenue</b>	-	<b>3,958,417</b>	<b>4,156,337</b>	<b>4,364,154</b>	<b>4,582,362</b>	<b>4,811,480</b>		<b>21,872,751</b>
Export 40%		1,583,366.65						

### Expected Expenses

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	-	<u>Total</u>
Salaries		203,160	209,255	215,532	221,998	221,998		1,071,944
Social Charges & Pension Payments		40,632	41,851	43,106	44,400	44,400		214,389
Consumable goods - raw materials		24,000	24,720	25,462	26,225	26,225		126,632
Administrative expenses		48,000	49,440	50,923	52,451	52,451		253,265
Fuel and lubricants for machineries and generators		28,800	29,664	31,147	32,705	32,705		155,020
Security services		43,200	44,496	45,831	47,206	47,206		227,938
Work wear and other related facilities		45,000	46,350	47,741	49,173	49,173		237,436
Insurance/licensing/healthy premium/other charges		3,600	3,708	3,819	3,934	3,934		18,995
Utilities - Electricity and water services		14,000	14,420	14,853	15,298	15,298		73,869
Other Costs		41,000						

		42,230	43,497	44,802	44,802	216,331
<b>Total Operating Costs</b>	<b>491,392</b>	<b>506,134</b>	<b>521,911</b>	<b>538,191</b>	<b>538,191</b>	<b>2,595,819</b>
<b>Operational Net Earnings before Depreciation, Interest &amp; Tax</b>	<b>3,467,025</b>	<b>3,650,204</b>	<b>3,842,243</b>	<b>4,044,171</b>	<b>4,273,289</b>	<b>19,276,931</b>
<i>%age Gross Contribution</i>	88	89	90	91	93	1
<b>Depreciation at 12.5% (Machines, Equipt.)</b>	<b>303,365</b>	<b>319,393</b>	<b>336,196</b>	<b>353,865</b>	<b>373,913</b>	<b>1,734,924</b>
<b>Net Earnings before Tax &amp; Interest</b>	<b>3,163,660</b>	<b>3,330,811</b>	<b>3,506,047</b>	<b>3,690,306</b>	<b>3,899,376</b>	<b>17,542,007</b>
<b>Interest Paid (Bank Loan)</b>	<b>302,076</b>	<b>250,585</b>	<b>194,975</b>	<b>134,916</b>	<b>70,053</b>	<b>952,606</b>
<b>Tax (30%)</b>	<b>949,098</b>	<b>999,243</b>	<b>1,051,814</b>	<b>1,107,092</b>	<b>1,169,813</b>	<b>5,277,060</b>
<b>Net Earnings</b>	<b>1,912,486</b>	<b>2,080,982</b>	<b>2,259,258</b>	<b>2,448,298</b>	<b>2,659,511</b>	<b>11,360,534</b>

## ANNEX II - CASH FLOW

<i>(ALL NUMBERS IN US\$)</i>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>
<b><u>CASH FLOW FROM OPERATING ACTIVITIES</u></b>					
CASH RECEIPTS FROM SALES	3,958,417	4,156,337	4,364,154	4,582,362	4,811,480
CASH PAID TO SUPPLIERS AND EMPLOYEES	(491,392)	(506,134)	(521,911)	(538,191)	(538,191)
CASH GENERATED FROM OPERATIONS	3,467,025	3,650,204	3,842,243	4,044,171	4,273,289
DIVIDENDS RECEIVED*	0	0	0	0	0
INTEREST RECEIVED	0	0	0	0	0
INTEREST PAID	(302,076)	(250,585)	(194,975)	(134,916)	(70,053)
TAX PAID	(949,098)	(999,243)	(1,051,814)	(1,107,092)	(1,169,813)
<b>NET CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>2,215,850</b>	<b>2,400,375</b>	<b>2,595,454</b>	<b>2,802,163</b>	<b>3,033,423</b>
<b><u>CASH FLOW FROM INVESTING ACTIVITIES</u></b>					
REPLACEMENT OF EQUIPMENT	0	0	0	0	0
PROCEEDS** FROM SALE OF EQUIPMENT	0	0	0	0	0
<b>NET CASH FLOW FROM INVESTING ACTIVITIES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><u>CASH FLOW FROM FINANCING ACTIVITIES</u></b>					
PROCEEDS FROM CAPITAL CONTRIBUTED	1,618,266	0	0	0	0
PROCEEDS FROM LOAN	3,775,954	0	0	0	0
PAYMENT OF LOAN	(643,636)	(695,127)	(750,737)	(810,796)	(875,659)
<b>NET CASH FLOW FROM FINANCING ACTIVITIES</b>	<b>4,750,584</b>	<b>(695,127)</b>	<b>(750,737)</b>	<b>(810,796)</b>	<b>(875,659)</b>
<b><u>NET INCREASE/ DECREASE IN CASH</u></b>	<b>6,966,434</b>	<b>1,705,248</b>	<b>1,844,717</b>	<b>1,991,367</b>	<b>2,157,764</b>
CASH AT THE BEGINNING OF THE PERIOD	1,912,486	2,080,982	2,259,258	2,448,298	2,659,511
CASH AT THE END OF THE PERIOD	<b>8,878,920</b>	<b>3,786,231</b>	<b>4,103,975</b>	<b>4,439,665</b>	<b>4,817,275</b>

## ANNEX III - BALANCE SHEET

<i>(ALL NUMBERS IN US\$</i>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>
<b><u>ASSET</u></b>					
<i>CURRENT ASSET</i>	1,912,486	2,080,982	2,259,258	2,448,298	2,659,511
<i>FIXED ASSET</i>	4,283,424	3,980,059	3,660,666	3,324,470	2,970,605
<i>LIQUIDITY</i>	3,467,025	3,650,204	3,842,243	4,044,171	4,273,289
<b>TOTAL ASSET</b>	9,662,934	9,711,245	9,762,167	9,816,939	9,903,404
<b>NET ASSET MINUS DEPRECIATION</b>	<b>9,359,570</b>	<b>9,391,852</b>	<b>9,425,971</b>	<b>9,463,074</b>	<b>9,529,492</b>
<b><u>EQUITY &amp; LIABILITIES</u></b>					
<b>EQUITY</b>	1,618,266	1,537,353	1,460,485	1,387,461	1,318,088
<b>RESERVES</b>	0	0	0	0	0
<b>TOTAL OWN EQUITY</b>	<b>1,618,266</b>	<b>1,537,353</b>	<b>1,460,485</b>	<b>1,387,461</b>	<b>1,318,088</b>
<b>PROVISIONS</b>	5,543,129	5,590,152	5,631,764	5,668,944	5,721,967
<b>LONG TERM LOAN</b>	945,712	945,712	945,712	945,712	945,712
<b>SHORT TERM LIABILITIES</b>	1,252,463	1,318,636	1,388,010	1,460,957	1,543,726
<b>TOTAL EQUITY &amp; LIABILITIES</b>	<b>9,359,570</b>	<b>9,391,852</b>	<b>9,425,971</b>	<b>9,463,074</b>	<b>9,529,492</b>
<b>NET FA/CL</b>	4.53	4.21	3.87	3.52	3.14
<b>CL/CA</b>	0.65	0.63	0.61	0.60	0.58
<b>DEBIT/CAPITAL RATIOS</b>	0.83	0.84	0.85	0.85	0.86
<b>ROI</b>	118.2	135.4	154.7	176.5	201.8
<b>BREAK EVEN POINT</b>	1.24	1.09	0.95	0.82	0.70
<b>BREAK EVEN RATIO</b>	0.78	0.76	0.74	0.73	0.71
<b>EQUITY/TOTAL LIABILITIES</b>	17	16	15	15	14

## ANNEX IV - LOAN PAYMENT SCHEDULE

Loan Information and Payment Schedule					
Loan Data	All number in US\$		Loan Summary		
Original Principal	3,775,953.69		Scheduled Payments		945,711.97
Loan Term (Years)	5.00		Scheduled number of payment		5.00
Annual Interest Rate	8%		Actual number of payment		5.00
Payments per Year	1.00		Total Early Payment		-
Payment	945,711.97		Total Interest		952,606.18

Year	Payment	Interest	Cumulative Interest	Principal	Balance
-					3,775,953.69
1.00	945,711.97	302,076.30	302,076.30	643,635.68	3,132,318.01
2.00	945,711.97	250,585.44	552,661.74	695,126.53	2,437,191.48
3.00	945,711.97	194,975.32	747,637.05	750,736.66	1,686,454.82
4.00	945,711.97	134,916.39	882,553.44	810,795.59	875,659.23
5.00	945,711.97	70,052.74	952,606.18	875,659.23	-
		952,606.18			

**ANNEX V - IRR**

(all numbers in US\$)

	Initial Investment	-5,394,220
Year 1	Additional Annual Net Profit	1,912,486
Year 2	Additional Annual Net Profit	2,080,982
Year 3	Additional Annual Net Profit	2,259,258
Year 4	Additional Annual Net Profit	2,448,298
Year 5	Additional Annual Net Profit	2,659,511
	<b>IRR (in5 years)</b>	<b>14.59%</b>

**The IRR above indicates that the expected return on the 5,394,220 USD initial investment after 5 years is 14.59%.**

**ANNEX VI - PAY BACK PERIOD**

<b>Payback Period Analysis</b>				
	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	5,394,219.56	0.00	5,394,219.56
	1.00	5,394,219.56	1,912,485.69	3,481,733.87
	2.00	3,481,733.87	2,080,982.18	1,400,751.69
	3.00	1,400,751.69	2,259,257.58	858,505.89
	4.00	858,505.89	2,448,297.67	3,306,803.55
	5.00	3,306,803.55	2,659,510.50	5,966,314.06

<b>Payback Period</b>	<b>3.00</b>	<b>Years</b>
=		

## 5.0. RISK ANALYSIS

### 5.1. Risk Analysis

Risk is the probability that an event or action will adversely affect the organization. Risk assessment is the identification and analysis of risks associated with the achievement of operations, financial reporting and compliance goals and objectives. Risk management is a central part of the DUPRO INTERNATIONAL TRADE COMPANY LIMITED. The Industry's management will determine the level of operations, financial and compliance risk they are willing to assume. Risk assessment is one of the Company's management responsibilities.

### 5.2. Macroeconomic risk analysis

Since early 1986, the Government of Tanzania has launched a comprehensive economic policy and stabilization plan with the aim to enhance the amount of infrastructure construction and improve the lives of the poor. During this time the main economic indicators significantly improved. However, uneven development of various region in the country, lack of relevant infrastructure in transportation, telecommunications, networking, health facilities, electricity and water supplies have proven to be investment barriers. Overall, Tanzania has a weak economic foundation but the project can achieve a greater impact in attaining social and economic goals for the country.

### 5.3. Finance risk analysis

- a) **Supply Risk:** The risk in Primary production relates to supply of raw material, transportation and price fluctuations. There is no assurance of enough supply of raw materials in the local market instead mostly of raw materials are imported.
- b) **Processing Risks:** The technology, machines and equipment used in cooking oil production in rudimentary stages all of which contribute to reducing production efficiency. Also quality/food safety and standards consideration in the production environment is limited. In this factory facilities operation know-how is very low as there are notarized labourers.
- c) **Sales/market risk:** Placing value added products on the consumer markets bears risk of demand fluctuations and rejections through retailers. Furthermore, consumers are not aware of the production quality and safety criteria and are usually very price sensitive.

### 5.4. Other potential external risk

- a) **Lack of Governance:** the governance mechanism in the value chain is underdeveloped, actors operate in an uncoordinated and unorganized fashion, and if rules exist they are often ignored;
- b) **Lack of market coordination:** No lead organization has a coordinating role in relation to markets, technology and information such that producers and processors have no incentives for improving neither their product nor the chain process to promote sustainable income earning opportunities;

- c) **Unclear and conflicting roles regulatory authorities:** Regulatory Agencies are responsible for quality control as well as enforcing TBS, NEMC, etc, are regulatory role in issuing licensing etc
- d) **Industry associations:** Associations are weak at all levels of the chain;
- e) **Operating procedures:** Standard procedures are inadequately enforced, or not enforced at all, because of relaxed production and trade regulations; and
- f) **Integration:** there is little vertical integration of importers, mid chain actors and processors.

## 5.5. Mitigating potential risk

The development of a large and complex project such as DUPRO INTERNATIONAL TRADE COMPANY LIMITED Factory is necessarily accompanied by multiple risks during the project development, construction, operation and maintenance. The right approach to manage the project in a manner which is fairly and adequately address the multiple risks in a comprehensive as well as systematic manner is to use the risk analysis and management methodology which identifies the risk issues and their instrumental cause. In this regard, the risk is eliminated or effectively managed by the party best suited with capacity to handle or deal with the risk factors.

## 6.0. ECONOMIC AND SOCIAL ASPECTS

The project is also likely to have a positive impact on the economy of Lake Zone regions and Tanzania as a whole by creating employment, and contributing to Government revenues through various taxes, which will be paid. It also has potential for substantial exporting to foreign markets especially to neighboring countries in the Great Lakes Region. In summary the following table will show impact investment index framework

### Impact Investment Index Framework

Impact Investment Index		
Frame Work for DUPRO INTERNATIONAL TRADE COMPANY LIMITED		
Performance Area	Quantitative Indicator	Remarks
<b>Investment Capital</b>	Total investment capital, CAPEX and OPEX US\$ 5.934Million US\$	Substantial amount of capital invested into the domestic economy.
<b>Export Earnings</b>	Indicative Annual sales of 40% earnings of 3,948,417US\$ out of annual average collection of 1,583,366.66US\$ for the project will be exported. And the remain 60% will be for domestic supply.	Increased foreign earnings.
<b>Job requirement</b>	Job creation after plant in operation 2023-2026 Direct Tanzanian Jobs 47 (45 Local and 2 foreigner employed for facilitating establishment of factory just for 6 months)	<ul style="list-style-type: none"> <li>Reasonable number of direct job created to local Tanzanians with direct impact on poverty reduction through enhanced income generation; and</li> <li>Improving skills development for Industrial production</li> </ul>
<b>Technology applied</b>	High Tech Environmentally friendly machinery	<ul style="list-style-type: none"> <li>Enhancing technological transfer; and</li> <li>Applied technology which is free from environmental pollution,</li> </ul>
Other Implied Project Benefits		
<ul style="list-style-type: none"> <li>Increased sales to the Utility Companies providing services of electricity, water and sewerage, telecommunications;</li> <li>Increased business transacted by local banks and institutions providing financial services;</li> <li>Business opportunities for local entrepreneurs in market distribution channels,</li> <li>Business opportunities to contractors and sub-contractors during the minor construction phase;</li> <li>Increased regional intra-trade and international trade due to better infrastructure facility and links to markets;</li> </ul>		

- Increase of technology transfer & expertise to local employed staff,
- Capital spends in local economy over 5.394US\$ Millions and
- Contribution to GDP growth through increased economic activities

Based on the Impact Investment Index analysis, the company can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements. In this regard therefore, DUPRO INTERNATIONAL TRADE COMPANY LIMITED will promote the industrialization process in the country, create employment, attract new technologies, expand foreign exchange earnings and ultimately contribute substantially to the country's economic growth.

## **7.0. CONCLUDING REMARKS AND WAY FORWARD**

### **7.1. Evidence of project viability based on financial model and policy framework support.**

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the meat processing plant as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, DUPRO INTERNATIONAL TRADE COMPANY LIMITED through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of this factory facility is financed using a combination of equity debt ratio (30:67%), it gives an IRR of about 14.59%. The computed IRR is well above Dollar market of the annual loan interest rate of (8.00%) which is technically interpreted that the project is financially viable.

The payback period for the project is estimated at 3 years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will face reserves difficulties for the whole implementation plan which shows high demand of products, thereafter the project will, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

### **7.2. Policy Framework Support**

The development of mills factory is designed to tape advantages of the current Tanzanian market-oriented reforms. The Project will be developed and established to accelerate the industrialization process. The vision 2025 emphasizes the importance of the allocation of public funds for strategic investments and private sector financing for development investments.

The 15 years Perspective Plan (2020-2025); Poetize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2020-2025) recognizes the fundamental role of the private sector in enabling the Government to allocate its fund to strategic projects to facilitate a higher level of development. MKUKUTA III (2020-2025) identifies Public Private Partnership as a means of increasing the level of stakeholder participation and of easing the financial burden on the Government. It should be noted that existing public resources are clearly insufficient to meet Tanzanian's huge development needs. The increased use of private enterprises participation in development projects can help alleviate the financing gap.

This approach is now applied by DUPRO INTERNATIONAL TRADE COMPANY LIMITED to ensure development of one among the ultra-modern Mills Factory to be

developed in Shinyanga Region. Private sector and investment have been recognized as the most significant potential source of additional funding required to facilitate development projects.

### **7.3. Conclusive Remarks and Way Forward**

The development of this Factory will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 5,394,219.56 US\$ and the amount of US\$3,775,953.69 will be raised through borrowing from investment banks either within or outside the country. The company will fund the development of the project minor rehabilitations of factory building, business offices, bulk storage facilities and purchasing machines as stated on this business plan. Before the Company engages into the development of this project as a private enterprise, it needs to accomplish the pre development activities to make way for the development of the designated project. The company has to accomplish the following;

#### **a) Apply for TIC certificate**

The company by using this Business Plan and other required supporting documents should apply for the TIC Certificate at Tanzania investment centre or Mwanza zonal Office. With this certificate, the company will be able to access tax reliefs which to a large extent will help to in reducing project costs, particularly in the purchasing of machineries and minor building of area of proposed industrial area.

#### **b) Minor rehabilitation to suit Oil Mills Industrial requirement**

The company should engage a firm to make minor rehabilitation of existing structure that will suit Mills Factory manufacturing requirements. The structure should include all vital service facilities described in this business plan. When possible, the process of design of the facility should be consultative insomuch that it should allow and incorporate ideas from experienced professionals from the industry.

#### **c) Mobilizing Funds**

As previously discussed on the Financial Analysis of this business plan, financing mechanism for the factory should be scrutinized well before commencing the project implementation. There may be several options of financing the project development but the company will find the best option. The investment team should do consultation with relevant financial institutions (Banks and non-bank Financial Institutions), both within and outside the country. This exercise should be more effective if the team works closely with central Government agencies, particularly TIC and the Ministry of Industry & Trade and Ministry of Investment.