

JC GEAR GROUP (T) LIMITED

PROPOSED BUSINESS PLAN

FOR

THE ESTABLISHMENT HYDROLIC CYLINDER FACTORY IN ILEMELA DISTRICT, MWANZA REGION, TANZANIA.



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List of Abbreviations

4WD - Four Wheel Driver
CAPEX - Capital Expenditure
CIF- Central in Flight
CIP- Carbon In Pulp
EU - European Union
GDP - Growth Domestic Products
IRR - Internal rate of return
Kg - kilo gram
LTD - Limited
MIS - Management Information System
MT - Metric Ton
MW - Mega Watts
MWAUWASA- Mwanza Urban Water Supply Authority
NBS - National Bureau of standard
NEMC - National Environment Management Council
OPEX - Operating Expenditure
SIDO- Small Development Organization
SWOC - Strength Weakness Opportunity Challenge
TANESCO - Tanzania Electric Supply Company
TIC- Tanzania Investment Centre
TZS - Tanzania Shilling
UK - United Kingdom
US\$ - United State Dollar
USA - United states of America
VAT - Value Added tax
VETA - Vocation Education Training Authority

EXECUTIVE SUMMARY

The contribution of the manufacturing sector to the overall GDP of the country has averaged 8% over the last decade, however activities within the sector have been registering an annual growth of over 4% and the sector is currently the third most important to the Tanzania economy behind agriculture and tourism.

JC Gear Group (T) Limited as a major supplier of Hydraulic cylinder products in Tanzania tap this opportunity by establish mechanical products for mobile and stationary operations in the industrial area: from the planning through the project engineering to the production and documentation of your hydraulic construction..

JC Gear Group (T) Limited will seek to exploit this dichotomy in manufacturers of hydraulic cylinders opportunities in Mwanza Tanzania;

The proposed company aimed to expand her business volume from importing, supply and selling of spare parts for machineries' plant and heavy equipment's to **the establishment of hydraulic cylinder factory in Tanzania** by purchasing modern machines for the hydraulic cylinder production. The plant will produce the following hydraulic cylinders; Telescopic cylinder, Plunger cylinder and Differential cylinder.

JC GEAR GROUP (T) LIMITED is a Tanzanian company registered in Tanzania with certificate of incorporation number 139238370 of 29th May, 2019. The company own temporary Business License No. 20000026232 issued by Business registrations and Licensing Agency for manufacture of metal forming machineries and machine tools, and import and sales of machineries and equipment's with Taxpayer Identification Number 139-238-370 and VAT registration No. 40-037700-0.

The company will purchase the following set of hydraulic cylinder with the following sets; Honning Machine 2, Testing bench 2, Disassembly and Assembly Machines 2, CNC Leather machine 3, CNC Machines 6. Air Compressor 2, Fork Lift 2 Maximum 1000Kg, Rolling Machines 3, Bending Machines 3, Plate Cutting machine 2, Facing machines 2, Milling Machines 2, Boring Machines 4, Hose Crumping machines 4, Mobile Crane 2, Pipe bending machine 2, Hydraulic Press Machines 2, Generator 2 and Tyre retreading machine line 2set. The plant productivity capacity of Hydraulic cylinder is estimated to. 96,000 pcs and annual sales is estimated to 626,067US\$

The whole process of production lines is looking at providing direct employment to at least 20 permanent jobs on full implementation and operation of the project. The industry is divided into 5 Departments; Administration and finance (3), Management (4), maintenance (5) Store and logistic (2) and Operation (6).

The proposed integrated project is estimated to cost a total of US\$ 817,217.39 this including, own equity of US\$ 434,759.65 as proceeds from capital contribution of the project ,total loan debt of 382,457.74US\$ with 8% interest rate. The Current asset of US\$ 205,891 during the first year of operation and it increase as the project

will be in full operation fixed assets 782,435US\$ and total liabilities of 1,591,0446US\$. The project will be implemented within 5 years.

The development of a large and complex project such as JC GEAR GROUP (T) LIMITED is necessarily accompanied by multiple risks during all the phases of 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.

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

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 project as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, JC GEAR GROUP (T) 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 plant facility is financed using a combination of equity debt ratio (53.2:46.2), it gives an IRR of about 15.20%. 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 4 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 not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

1.0. BUSINESS OVERVIEW AND BACK GROUND INFORMATION.

1.1. Overview - manufacture sector industry in Tanzania.

The contribution of the manufacturing sector to the overall GDP of the country has averaged 8% over the last decade, however activities within the sector have been registering an annual growth of over 4% and the sector is currently the third most important to the Tanzania economy behind agriculture and tourism. In 1986, the Tanzania government made the decision to liberalize trade and investment policies within the country. As a result of this decision and because they could not stand up to competition from import manufacturers, many firms began to fail. Therefore, with this in mind, a number of measures were taken to increase both the competitiveness of the local industries and their ability to penetrate the export markets.

As such there is a residual manufacturing capacity present that could be assisted to survive and over time compete with imports. It will, however, require heavy capital investments and new technology. A much encouraged mean in this direction is the establishment of joint ventures with foreign partners, who can supply capital and technology, or outright privatization through direct private investment.

1.2. Sub-Sector overview - Establishment of Hydraulic industry

CJ Gera Group (T) Limited is a major supplier of Hydraulic cylinder products in Tanzania, the company as one has a long-time experience in the field of engineering design. The company offer contains the modernization, design and redesign of complete hydraulic systems for the industrial engineering products. The main focus of the company is the system of hydraulic equipment for mobile and stationary operations in the industrial area: from the planning through the project engineering to the production and documentation of your hydraulic construction.

Currently in Tanzania there is a dichotomy between the large multinational manufacture companies and the artisanal mobile and stationed machineries'. JC Gear Group (T) Limited will seek to exploit this dichotomy in manufacturers of hydraulic cylinders opportunities in Mwanza Tanzania; it will operate in a way that will add value to users of machineries' and equipment's while not troubling the larger companies.

The company will provide various hydraulic cylinders for steel mills, which are known for their high performance, high efficiency and durability. These Hydraulic Cylinder for Steel Plant are provided to customers in standard and customized specifications. The company will use of advanced CNC machine tools, automatic electroplating and painting equipment process processing, to ensure that all parts have a lower surface roughness and a higher level of performance.

It has an advanced special buffer device with independent intellectual property rights, which can effectively absorb shocks and protect the cylinder to work smoothly and with reliable performance.

1.3. Project concept in Mwanza Region

The proposed company aimed to expand her business volume from importing, supply and selling of spare parts for machineries' plant and heavy equipment's to **the establishment of hydraulic cylinder factory in Tanzania** by purchasing modern machines for the hydraulic cylinder production. The plant will produce the following hydraulic cylinders; Telescopic cylinder, Plunger cylinder and Differential cylinder.

However the company is already involve in purchasing of said cylinders equipment's as will result of the significant investment in Tanzanian operations, the company is looking to register at the Tanzania investment Center. For that purpose, this business plan is prepared to outline the required information about the company and the operations being conducted for the Tanzania Investment Centre only. It is to be considered private and confidential.

The company main office is located in Plot No. 2323, Mbezi Beach Street, Kawe district, in Dar Es Salaam, Tanzania. The company will be established hydraulic cylinder plant all equipment and machines in Mwanza region. The plant will be located at Nyamhongolo ward and the branch office will be located in Nyerere road Igogo industrial area, in Nyagamana District, Mwanza region. Whereas the yard is already secured with necessary building requirement for plant facilities. Other major capital expenditure will involve procurement of machineries' and equipment's for industrial productions.

1.4. The company objectives include the followings;

- i. To carry on the business of heavy plant, equipment's and machineries repairs and maintenance,
- ii. To carry out the business of hiring, leasing and renting of heavy equipment and machineries,
- iii. To carry out the business of importing, supplying and selling of spare parts for machineries, plant and heavy equipment's,
- iv. To carry out the business of metal fabrication and panel bearing,
- v. To carry out the business of mining operation and quarrying and stone crushing,
- vi. To carry out the business of manufacturing of heavy equipment and machines

1.5. Project setup at Nyam'hongolo industrial area - Mwanza.

The second phase of this project proposal entails setting up yard for hydraulic cylinder manufacture facilities, providing testing facilities so that customers may be equipped of all laboratories facilities from using modern technology. The project will be created in the said site above. The proposed project will therefore involve the following activities:

- ❖ Additional Acquisition of adequate processing facilities to ensure maximum production of final hydraulic cylinders products
- ❖ Development of processing camps and infrastructure
- ❖ Construction of laboratories building, storage warehouses, workshops and offices
- ❖ Importation and installation of hydraulic cylinder processing plants, laboratory for noble metal testing
- ❖ Procurement and installation of environmental protection plant equipment
- ❖ Importation and installation of equipment, machinery and plants for hydraulic cylinder processing
- ❖ Procurement of trucks fleet for transportation of hydraulic cylinder and raw materials and other utility vehicles will also be procured for the project. This will include pickups, 4-WD station wagons to facilitate movement. Armored vehicles will also be procured for transportation.
- ❖ Purchase of furniture, equipment, fittings and administration motor vehicles, fencing of the factory compound and storage yard.

2.0. PROJECT OVERVIEW

2.1. The Industry

JC GEAR GROUP (T) LIMITED is a Tanzanian company registered in Tanzania with certificate of incorporation number 139238370 of 29th May, 2019. The company own temporary Business License No. 20000026232 issued by Business registrations and Licensing Agency for manufacture of metal forming machineries and machine tools, and import and sales of machineries and equipment's with Taxpayer Identification Number 139-238-370 and VAT registration No. 40-037700-0.

The main office of the company is located at Mbezi beach street, Makonde, plot no. 2323 block H, Kawe area, Kinondoni District Dar Es Salaam City in Tanzania. The anticipated project site will be located at plot No. 636 Block B, Nyamhongolo Industrial Area, Ilemela District in Mwanza Region. The permanent address is P O Box 105, Sengerema, Mwanza region in Tanzania. The project is site in is Just 16.55Km from Mwanza City Centre with driving time of 40mins.

The initial Authorized Share Capital of the company is TZS 10,000,000/= divided into 5,000 ordinary shares of TZS 2,000/= 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 the company ownership and principal shareholding as illustrated on Table 1 below.

Table 2.1. Company Ownership and Principal Shareholders

S/No.	Shareholder's Name	Address	Occupation of Subscriber	Number of Shares
1.	MR. JAMES CHARLES MAKANYAGA	P O BOX 105, SENGEREMA DISTRICT, MWANZA, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number 139238370	3000
2.	MS. QIUYING Li	P O BOX 105, SENGEREMA DISTRICT, MWANZA, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number 139238370	2000

2.2. 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, it will be presented to Banks/Financial Institutions for application of Term Loan 382,457.74US\$ to support smooth implementation and running of the proposed projects. The project promoters have commissioned a reputable engineering and project planning consulting firm to advice 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.

2.3. Project Technical aspect - Hydraulic Cylinder processing manufacturing:

2.3.1. Explanatory note of Hydraulic Cylinder: and factory establishment

A hydraulic cylinder is the actuator or "motor" side of this system. The "generator" side of the hydraulic system is the hydraulic pump which delivers a fixed or regulated flow of oil to the hydraulic cylinder, to move the piston. There are three types of pump widely used: hydraulic hand pump, hydraulic air pump, and hydraulic electric pump.^[1] The piston pushes the oil in the other chamber back to the reservoir. If we assume that the oil enters from the cap end, during extension stroke, and the oil pressure in the rod end/head end is approximately zero, the force F on the piston rod equals the pressure P in the cylinder times the piston area.

Hydraulic cylinders and pneumatic cylinders are devices that change fluid pressure energy into mechanical energy. There are many component parts that make up the internal portion of a hydraulic cylinder. All of these pieces combine to create a fully functioning component, these includes, Cylinder base connection, Cushions, Internal Threaded Ductile Heads, Head Glands, Polypak Pistons, Cylinder Head Caps, Butt Plates, Eye Brackets/Clevis Brackets, MP Detachable Mounts, Rod Eyes/Rod Clevis, Pivot Pins, Spherical Ball Bushings, Spherical Rod Eye, Alignment Coupler and Ports and Fittings.

With more than 3 years of experience, CJ Gera Group T Limited in carrying on the business of heavy plant, equipment's and machineries repairs maintenance; hiring, leasing and renting of heavy equipment and machineries;; importing, supplying and selling of spare parts for machineries, plant and heavy equipment's. The company find out manufacture and refurbish hydraulic cylinders for various

industries will increase trade volume and decreases cost of importing hydraulic cylinder in Tanzania.

The company will produce Hydraulic cylinder for steel plants, cement plants, mining equipment's, earthmoving and construction equipment's. In nearest future, the company will manufacture and refurbish hydraulic cylinders for various applications. Such as;

1. Heavy Duty Hydraulic Press Cylinder is suitable for general forging presses and is widely used in beam hoisting machines, bridge erecting machines, beam frames, etc.
2. Bridge erecting machines and beam transport trunk lines are used to transport and install heavy objects such as bridges. The equipment is often operated in the open field for a long time, and the maintenance and replacement of the cylinder is difficult and requires high reliability.

2.3.2. The 3 Main - Special hydraulic cylinders

A. Telescopic cylinder

The length of a hydraulic cylinder is the total of the stroke, the thickness of the piston, the thickness of bottom and head and the length of the connections. Often this length does not fit in the machine. In that case the piston rod is also used as a piston barrel and a second piston rod is used. These kinds of cylinders are called telescopic cylinders. If we call a normal rod cylinder single stage, telescopic cylinders are multi-stage units of two, three, four, five, or more stages. In general telescopic cylinders are much more expensive than normal cylinders. Most telescopic cylinders are single acting (push). Double acting telescopic cylinders must be specially designed and manufactured.

B. Plunger cylinder

A hydraulic cylinder without a piston or with a piston without seals is called a plunger cylinder. A plunger cylinder can only be used as a pushing cylinder; the maximum force is piston rod area multiplied by pressure. This means that a plunger cylinder in general has a relatively thick piston rod.

C. Differential cylinder

A differential cylinder acts like a normal cylinder when pulling. If the cylinder however has to push, the oil from the piston rod side of the cylinder is not returned to the reservoir but goes to the bottom side of the cylinder. In such a way, the cylinder goes much faster, but the maximum force the cylinder can give is like a plunger cylinder. A differential cylinder can be manufactured like a normal cylinder, and only a special control is added.

The above differential cylinder is also called a regenerative cylinder control circuit. This term means that the cylinder is a single rod, double-acting hydraulic cylinder. The control circuit includes a valve and piping which during the extension of the piston, conducts the oil from the rod side of the piston to the other side of the piston instead of to the pump's reservoir. The oil which is conducted to the other side of the piston is referred to as the regenerative oil.

2.4. Project objective and Description

JC GEAR GROUP (T) LIMITED aimed at expanding her Business volume by establish hydraulic cylinder factory in Nyam'hongolo industrial area, Ilemela district in Mwanza region. The company will manufacture and refurbish hydraulic cylinders for various applications for industrial machinery, maintenance and replacement of the cylinder, refurbish hydraulic cylinders for various industries including mining equipment's, steel plants, cement plants, earthmoving and construction equipment industries.

The company will purchase the following set of hydraulic cylinder with the following sets; Honning Machine 2, Testing bench 2, Disassembly and Assembly Machines 2, CNC Leather machine 3, CNC Machines 6. Air Compressor 2, Fork Lift 2Maximum 1000Kg, Rolling Machines 3, Bending Machines 3, Plate Cutting machine 2, Facing machines 2, Milling Machines 2, Boring Machines 4, Hose Crumping machines 4, Mobile Crane 2, Pipe bending machine 2, Hydraulic Press Machines 2, Generator 2 and Tyre retreading machine line 2set. The plant productivity capacity for producing hydraulic cylinder will be 8,000 cylinder per month with a minimum price of 15,000TZS

The basis for pricing has been from observations and data collected from various parts of Tanzania, market value for exploration is estimated to 15,000TZS equivalent to 6.52US\$ per pcs. Average production of Hydraulic cylinder is estimated to. 96,000 pcs and annual sales is estimated to 626,067US\$

Sales in US\$	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
Yearly expected sales of Hydraulic Gas cylinder tube	626,087	657,391	690,261	724,774	761,013	3,459,526

2.5. Technical Characteristic of the project.

2.5.1. Project Location and site analysis

The project is located at Nyam'hongolo new Industrial area, Ilemela district in Mwanza region. Based on physical inspection of the proposed site at Nyam'hongolo, 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.

2.5.2. Buildings and related fixed cost

The floor plan and elevation of buildings and other related structures will be rehabilitating to JC GEAR GROUP (T) LIMITED as rented at Mkuyuni New industrial area by the owner. However, the total major rehabilitation of the yard and buildings, Storage of raw materials and finished processing a structure, the estimated cost of buildings 42,173.91US\$\$, the cost includes Renting, rehabilitation of administration building and offices, Laboratories, storages of chemicals and spare parts, workshop, and camp. Project land and buildings cost have been estimated at US\$ 21,739.13 (see investment summary), which includes purchasing of machines, motor vehicles and structure rehabilitation.

The industry also set budget as working capital which involves purchase of raw materials and factory overhead cost of 21,739.13US\$. The minor rehabilitations costs are inclusive of contingency and reflect prevailing cost of building materials and other cost.

2.5.3. Machinery and Equipment.

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 alternatives, 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 of 16 hours a day, 25 days a month or a total of 300 days a year.

The projects machinery and equipment will be sourced from Europe and are estimated to cost 17,923,940US\$, this includes, Honning Machine 2, Testing bench 2, Disassembly and Assembly Machines 2, CNC Leather machine 3, CNC Machines 6. Air Compressor 2, Fork Lift 2Maximum 1000Kg, Rolling Machines 3, Bending Machines 3, Plate Cutting machine 2, Facing machines 2, Milling

Machines 2, Boring Machines 4, Hose Crumping machines 4, Mobile Crane 2, Pipe bending machine 2, Hydraulic Press Machines 2, Generator 2 and Tyre retreading machine line 2set. The plant productivity capacity for producing hydraulic cylinder will be 8,000 cylinder per month. Equivalent to 96,000 pcs per year and increase tremendously.

The total cost of machineries and equipments is estimated to 293,304.35US\$, these cost assumptions are C.I.F Dar es Salaam and include installation, commissioning, consultancy, port charges and transport to the project site. Calculated depreciation of machines and other working facilities is estimated to cost 33,794US\$ and increases tremendously.

2.5.4.. Motor Vehicles

2 heavy trucks worth 304,347.83US\$, Lighting plants 5 worth 108.695.65US\$ and 2 Light Vehicle worth 21,739.13US\$ will purchased for this project totaling to 434,792.61US\$

2.5.5. 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 1,304.35US\$ 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.

2.5.6. 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 13,043.48US\$

2.5.7. Initial 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 21,739.13US\$.

2.5.8. Project Financing

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:

2.5.9. Project Implementation

Full implementation of the project is planned to take place by early June, 2022. Machineries and motor vehicles will be imported immediately while construction/renovation works are in process.

2.5.10. Auxiliary Materials/ services

Falling under this category is packing bags, paper for bags for bran, lubricants, grease and other miscellaneous items.

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

- (i) Workshop
- (ii) Electric power
- (iii) Water supply
- (iv) 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 Shinyanga to Mwanza Region. There also a thermal power plant located at Nyakato Industrial area known as 60MW power plant that save as alternative two for power supply from government agency. As part of an alternative power supply, the company is already installing a heavy duty 100KVA power generator automated generator in

place to a premises for standby power supply.

(iii) Water Supply

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed site has close to Mwanza Urban water supply and Authority "MWAUWASA" water network, the agency is major supplier of water to urban and peri urban area in the region. 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.
- 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.

2.5.12. Warehousing and distribution

The CJ GEAR GROUP T LIMITED's warehousing service is ready to meet 24/7/365 in provision of drilling services and necessary material and chemicals imported. The efficiency of on-site combined with focal lift is already accommodated all needs and reduce supply chain costs. The industry uses 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.

2.5.13. 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 CJ GEAR GROUP T LIMITED's; 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 be 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. MANPOWER AND SALARY BUDGET

3.1. Employment

The whole process of production lines is looking at providing direct employment to at least 20 permanent jobs on full implementation and operation of the project. The industry is divided into 5 Departments; Administration and finance (3), Management (4), maintenance (5) Store and logistic (2) and Operation (6).

3.2. Recruitment

Recruitment of the 16 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 JC GEAR GROUP (T) LIMITED in Tanzania, based on demonstration of skills and aptitude basis and their willingness to work for CJ GEAR GROUP T LIMITED. Careful methodology is being worked out by a competent management consultant who will set the job descriptions. 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 to be dispatched to the project site by the suppliers of the plant which will be specified under sales agreement. 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 be under the administrator under which the day to day leader/management of production line will be vested in the management team headed by a Administrator. The Administrator is to be assisted by qualified and experienced personnel.

Table 3.1. Proposed organization and manpower requirement for the plant is as follows:

S/No.	DEPARTMENT	STRENGTH /NUMBERS	MONTHLY SALARY US\$	ANNUAL BUDGET US\$
A	ADMINISTRATION AND FINANCE			
	Office Administrator	1	695.65	8,347.83
	Drivers	1	195.65	2,347.83
	Marketing officer	1	391.30	4,695.65
	SUB TOTAL	3	1,282.61	15,391.30
B	MANAGEMENT			
	Project Manager	1	913.04	10,956.52
	Accountant	2	521.74	12,521.74
	Drivers	1	330.43	3,965.22
	SUB TOTAL	4	1,765.22	27,443.48
C	MAINTAINANCE			
	Mechanics	1	339.13	4,069.57
	Laboratory Technician	1	334.78	4,017.39
	Maintenance Planners	1	347.83	4,173.91
	Drivers	1	326.09	3,913.04
	ICT	1	391.30	4,695.65
D	SUB TOTAL	5	1,739.13	20,869.57
	OPERATION			

	Production supervisor	1	521.74	6,260.87
	Training Coordinator	1	783.00	9,396.00
	Quality controller	1	430.43	5,165.22
	Utility worker	3	217.39	7,826.09
	SUB TOTAL	6	1,952.57	28,648.17
E	STORE AND LOGISTIC			
	Store person	1	326.09	3,913.04
	Drivers	1	330.43	3,965.22
	SUB TOTAL	2	326.09	3,913.04
	GRAND TOTAL	20	7,065.61	96,265.57

4.0. PROJECT FINANCING AND CAPITAL INVESTMENT SUMMARY

4.1. Project Cost & Financing Pattern

The proposed integrated project is estimated to cost a total of US\$ 817,217.39 this including, own equity of US\$ 434,759.65 as proceeds from capital contribution of the project ,total loan debt of 382,457.74US\$ with 8% interest rate. The Current asset of US\$ 205,891 during the first year of operation and it increase as the project will be in full operation (see income statement), fixed assets 782,435US\$ and total liabilities of 1,591,0446US\$. The project will be implemented within 5 years.

4.2. Project Capital Investment Summary

Investment Summary		
	land and Buildings	
1	land and Buildings	21,739.13
2	Buildings (administration block)	8,695.65
3	Laboratory building	2,173.91
4	Store for chemical, spare parts, etc.	5,217.39
5	Workshop	4,347.83
	Sub total Fixed Assets	42,173.91
6	Machineries and Equipment's	
7	Honing Machine 2	8,695.65
8	Testing bench 2	2,608.70
9	Disassembly and Assembly Machines 2	4,347.83
10	CNC Leather machine 3	19,565.22
11	CNC Machines 6	31,304.35
12	Air Compressor 2	869.57
13	Fork Lift 2Maximum 100Kg	39,130.43
14	Rolling Machines 3	32,608.70
15	Bending Machines 3	14,347.83
16	Plate Cutting machine 2	695.65
17	Facing machines 2	2,608.70
18	Milling Machines 2	11,304.35
19	Boring Machines 4	2,608.70
20	Hose Crumping machines 4	1,739.13
21	Mobile Crane 2	12,173.91
22	Pipe bending machine 2	7,826.09
23	Hydraulic Press Machines 2	18,260.87
24	Genrator 2	65,217.39
25	Tyre retreading machine line 2set	17,391.30
	Sub total Fixed Assets	293,304.35
	Motor vehicles	
11	Heavy Truck 2	304,347.83

12	Light Truck for Distribution 5	108,695.65
13	Light Vehicles 2	21,739.13
	Sub total Fixed Assets	434,782.61
	Other Facilities	
14	Furniture and fittings	1,304.35
15	Office Equipment's	6,521.74
16	Continges/ other cost	4,347.83
	Sub total Fixed Assets	12,173.91
	Sub total Fixed Assets	782,434.78
	Current Asset	
17	Pre operational expenses	13,043.48
18	Working capital	21,739.13
	Sub total current Assets	34,782.61
	Total Investment	817,217.39
	Equity + Loan	
1	Loan (46.8%)	382,457.74
2	equity (53.2)	434,759.65
	Total Equity	817,217.39

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 CJ GEAR GROUP (T) 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 gold processing are 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 Hydraulic cylinder 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, distributor are not aware of the selling price mostly are controlled by world market.

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.
- 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.

5.4. Mitigating potential risk

The development of a large and complex project such as JC GEAR GROUP (T) LIMITED is necessarily accompanied by multiple risks during all the phases of 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

6.1. Impact Investment Index Framework

Impact Investment Index		
Frame Work for CJ GEAR GROUP T LIMITED		
Performance Area	Quantitative Indicator	Remarks
Investment Capital	Total investment capital, CAPEX and OPEX 817,217.39 US\$	Substantial amount of capital invested into the domestic economy.
Export Earnings	Indicative Annual sales of earnings of 626,087US\$ out of annual average collection	Increased foreign earnings.
Job requirements	Job creation after plant in operation 2020-2021. DIRECT TANZANIAN JOBS 21 local employed	<ul style="list-style-type: none"> • Reasonable number of direct job created to local Tanzanians with direct impact on poverty reduction through enhanced income generation; and • Improving skills development for Industrial production
Technology applied	High Tech Environmentally friendly machinery	<ul style="list-style-type: none"> • Enhancing technological transfer; and • Applied technology which is free from environmental pollution,
Other Implied Project Benefits		
<ul style="list-style-type: none"> ▪ Increased sales to the Utility Companies providing services of electricity, water and sewerage, telecommunications; ▪ Increased business transacted by local banks and institutions providing financial services; 		

- Business opportunities for local entrepreneurs in market distribution channels,
- Business opportunities to contractors and sub-contractors during the minor construction phase;
- Increased regional intra-trade and international trade due to better infrastructure facility and links to markets;
- Increase of technology transfer & expertise to local employed staff,
- Capital spends in local economy over 817,217.38US\$ 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, JC GEAR GROUP (T) 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. FINANCIAL MODELLING AND ANALYSIS

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the CJ GEAR GROUP (T) 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 project is to speed up the country's economic development by being a catalyst for restructuring the existing local industrial set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

7.1. Project investment inputs and revenue projects

The basis for pricing has been from observations and data collected from various parts of Tanzania, market value for exploration is estimated to 15,000TZS equivalent to 6.52US\$ per pcs. Average production of Hydraulic cylinder is estimated to. 96,000 pcs and annual sales is estimated to 626,067US\$

Sales in US\$	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
Yearly expected sales of Hydraulic Gas cylinder tube	626,087	657,391	690,261	724,774	761,013	3,459,526

7.2. Production, Revenue and project viability

- ✚ The estimated revenue gain in production of Hydraulic cylinder is estimated to. 96,000 pcs and annual sales is estimated to 626,067US\$ and increases to the second year of production by 5%
- ✚ Net profit before tax is 382,220US\$US\$, second year increases to 412,727US\$, which show the profit is increasing, (see Income statement)
- ✚ Net profit after tax for the first years in production is **205,881US\$** and second year is increasing to 227,127US\$ for remaining year increasing positively, (see Income statement). But this first year of production the company had negative provision to shareholders (see balance sheet)
- ✚ Gross sales contribution in the first year of service is quietly promising (see Income statement)
- ✚ The expected sales increase in a second year over 5%, this is due to the company will utilize all necessary machine and equipment during the operation of the project after imposed with additional loan facilities of 35,000,000US\$ at discounted rate of 8%

- ✦ Total investment cost of the project is 817,217.39US\$ whereas the own equity is 53.2% and loan-able amount 382,457.74 US\$ (see investment summary)
- ✦ The end balance of project in cash flow statement is positive and increases tremendous.(see cash flow statement)
- ✦ The yearly loan payment schedule of project is 95,789.01US\$ for 5 year loan recovery schedule, the total interest for 5 years to bank is 96,487.31US\$ (see loan payment schedule)
- ✦ Testing the project viability is positive whereas IRR is positive 115.20% which is above bank loan interest of 8%, and payback period of project is within 4 years.
- ✦ Return on investment is posit positive and increases tremendously (see balance sheet)
- ✦ Breakeven point is positive from the first year of operation.

7.3. Objective and Scope of Financial Model

7.3.1. 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 JC GEAR GROUP (T) LIMITED based on the assumptions taken for the Market Analysis, the plan for the facility development, unit production costs and other overhead and operational charges.

7.3.2. 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 project 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.

7.3.3. Project financial plan.

The project financial plan primarily consists of income statement, cash flow projection and balance sheet. From these 3 financial statements the project will derive Break even points, internal rate of returns, loan payment schedules, payback period and other financial ratios. These reports constitute reasonable estimate of company financial future. More importantly, the process of thinking through the financial plan improves insight into inner financial working of company.

ANNEX I INCOM STATEMENT

(all numbers in US\$)

<u>Revenue</u>							
	<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>
Yearly expected sales of Hydraulic Gas cylinder tube		626,087	657,391	690,261	724,774	761,013	3,459,526
Total Operating Revenue	-	626,087	657,391	690,261	724,774	761,013	3,459,526
<u>Expenses</u>							
	<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		96,266	98,191	100,155	102,158	104,201	500,970
Social Charges & Pension Payments		19,253	19,638	20,031	20,432	20,840	100,194
purchase of Raw materials		43,478	44,348	45,235	46,139	47,062	226,263
Fuel		31,304	31,930	32,569	33,220	33,885	162,909
Lubricants		5,217	5,322	5,428	5,537	5,647	27,152
Repair and Maintenance		7,826	7,983	8,142	8,305	8,471	40,727
Insurance/licensing/other charges		26,087	26,609	27,141	27,684	28,237	135,758
Other Costs		10,435	10,643	10,856	11,073	11,295	54,303
Total Operating Costs		239,867	244,664	249,557	254,548	259,639	1,248,275
Operational Net Earnings before Depreciation, Interest & Tax		386,220	412,727	440,704	470,226	501,373	2,211,251
<i>%age Gross Contribution</i>		62	63	64	65	66	1
Depreciation at 5 -12.5 % (mostly civil works)		33,794	36,114	38,562	41,145	43,870	199,013
Net Earnings before Tax & Interest		352,426	376,614	402,142	429,081	457,503	2,012,238
Interest Paid (Bank Loan)		30,597	25,381	19,749	13,665	7,095	96,487
Tax (30%)		115,948	123,906	132,305	141,168	150,519	663,845
Net Earnings		205,881	227,327	250,089	274,248	299,889	1,257,434

ANNEX II CASH FLOW

Cash Flow statement from Investing Activities for 5 years						
(all numbers in US\$)						
	Year 1	Year 2	Year 3	Year 4	Year 5	
<u>CASH FLOW FROM OPERATING ACTIVITIES</u>						
Cash receipts from Sales	626,087	657,391	690,261	724,774	761,013	
Cash paid to suppliers and employees	10,435	10,643	10,856	11,073	11,295	
Cash generated from operations	636,522	668,035	701,117	735,847	772,308	
Dividends received*	0	0	0	0	0	
Interest received	0	0	0	0	0	
Interest paid	(30,597)	(25,381)	(19,749)	(13,665)	(7,095)	
Tax paid	(115,948)	(123,906)	(132,305)	(141,168)	(150,519)	
Net cash flow from operating activities	489,977	518,748	549,064	581,014	614,694	
<u>CASH FLOW FROM INVESTING ACTIVITIES</u>						
Replacement of equipment	0	0	0	0	0	
Proceeds** from sale of equipment	0	0	0	0	0	
Net cash flow from investing activities	0	0	0	0	0	
<u>CASH FLOW FROM FINANCING ACTIVITIES</u>						
Proceeds from capital contributed	0	0	0	0	0	
Proceeds from loan	382,458	0	0	0	0	
Payment of loan	(65,192)	(70,408)	(76,040)	(82,124)	(88,694)	
Net cash flow from financing activities	317,265	(70,408)	(76,040)	(82,124)	(88,694)	
<u>NET INCREASE/ DECREASE IN CASH</u>	807,242	448,340	473,023	498,891	526,000	
Cash at the beginning of the period	205,881	227,327	250,089	274,248	299,889	
Cash at the end of the period	1,013,124	675,666	723,112	773,139	825,889	

ANNEX III BALANCE SHEET

Pro forma balance sheet					
(all numbers in US\$)	Year 1	Year 2	Year 3	Year 4	Year 5
ASSET					
Current asset	205,881	227,327	250,089	274,248	299,889
Fixed asset	782,435	748,640	710,079	668,934	625,064
Liquidity	636,522	668,035	701,117	735,847	772,308
TOTAL ASSET	1,624,838	1,644,002	1,661,285	1,679,029	1,697,261
NET ASSET MINUS DEPRECIATION	1,591,044	1,607,888	1,622,723	1,637,885	1,653,391
EQUITY & LIABILITIES					
Equity	434,760	413,022	392,371	372,752	354,114
Reserves					
Total Own Equity	434,760	413,022	392,371	372,752	354,114
Provisions	910,752	939,058	963,697	987,031	1,009,098
Long term loan	95,789	95,789	95,789	95,789	95,789
Short term Liabilities	149,742	160,020	170,866	182,312	194,389
Total Equity & Liabilities	1,591,044	1,607,888	1,622,723	1,637,885	1,653,391
NET FA/CL	0.48	0.46	0.43	0.40	0.37
CL/CA	0.73	0.70	0.68	0.66	0.65
DEBIT/CAPITAL RATIOS	0.73	0.74	0.76	0.77	0.79
ROI	47.4	55.0	63.7	73.6	84.7
BREAK EVEN POINT	2.03	1.81	1.61	1.42	1.25
BREAK EVEN RATIO	1.26	1.21	1.17	1.13	1.10
EQUITY/TOTAL LIABILITIES	27	26	24	23	21

ANNEX IV LOAN PAYMENT SCHEDULE

Loan Information and Payment Schedule					
Loan Data			Loan Summary		
Original Principal	382,457.74		Scheduled Payments		95,789.01
Loan Term (Years)	5.00		Scheduled number of payment		5.00
Annual Interest Rate	0.08		Actual number of payment		5.00
Payments per Year	1.00		Total Early Payment		-
Payment	95,789.01		Total Interest		1,470,885.00

Year	Payment	Interest	Cumulative Interest	Principal	Balance
-					382,457.74
1.00	95,789.01	30,596.62	30,596.62	65,192.39	317,265.35
2.00	95,789.01	25,381.23	55,977.85	70,407.78	246,857.57
3.00	95,789.01	19,748.61	75,726.45	76,040.40	170,817.16
4.00	95,789.01	13,665.37	89,391.83	82,123.64	88,693.53
5.00	95,789.01	7,095.48	96,487.31	88,693.53	-
		96,487.31			

ANNEX V IRR

IRR for the Project		
(all numbers in US\$)		
	Initial Investment	-817,217
Year 1	Additional Annual Net Profit	205,881
Year 2	Additional Annual Net Profit	227,327
Year 3	Additional Annual Net Profit	250,089
Year 4	Additional Annual Net Profit	274,248
Year 5	Additional Annual Net Profit	299,889
	IRR (in 5 years)	15.20%

The IRR above indicates that the expected return on the \$ 817,217 initial investment after 5 years is 15.20%.

ANNEX VI PAYBACK PERIOD

Payback Period Analysis				
	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	817,217.39	0.00	817,217.39
	1.00	817,217.39	205,881.34	611,336.06
	2.00	611,336.06	227,326.64	384,009.41
	3.00	384,009.41	250,088.80	133,920.62
	4.00	133,920.62	274,247.92	140,327.31
	5.00	140,327.31	299,889.18	440,216.48

Payback Period =	4.00	Years
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8.0. CONCLUDING REMARKS AND WAY FORWARD

8.1. 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 project as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, JC GEAR GROUP (T) 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 plant facility is financed using a combination of equity debt ratio (53.2:46.2), it gives an IRR of about 15.20%. 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 4 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 not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

8.2. Policy Framework Support

The development of the JC GEAR GROUP (T) LIMITED is designed to take 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 (2015-2030); Prioritize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2021-2025) 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 Tanzania'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 JC GEAR GROUP (T) LIMITED to ensure development of one among the ultra-modern

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

8.3. Conclusive Remarks and Way Forward

The development of this project will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 817,217US\$ and the amount of US\$ 382,457.74 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) Conduct Environmental Impact Assessment.

The company has to engage a consultant to conduct EIA in order to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and project development. The EIA Directive aims at introducing systematic assessment of the environmental effects of strategic land use related plans and programs. It typically applies to regional and local, development, waste and transport plans, within the country. EIA ensures that plans and programs take into consideration the environmental effects they cause.

c) Minor rehabilitation to suit project Industrial requirement

The company should engage a firm to make minor rehabilitation of existing structure that will suit project 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.

d) Mobilizing Funds

As previously discussed on the Financial Analysis of this business plan, financing mechanism for plant 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.