

# **CHEM SPEC TANZANIA LIMITED**

## **PROPOSED BUSINESS PLAN FOR PLASTIC BOTTLES INDUSTRY AT NYAMHONGOLO INDUSTRIAL AREA, ILEMELA DISTRICT, MWANZA REGION, TANZANIA.**



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## List of Abbreviations

BSF- Blow-Fill-Seal  
CAPEX - Capital Expenditure  
COMESA- Common market for eastern and Southern Africa  
CSI - Corporate Social Investment  
EAC - East Africa community  
EIA - Environment Impact Assessment  
GDP - Growth Domestic Products  
KVA -Kilovolt Amperes  
MT - Metric Ton  
NBS - National Bureau of standard  
NEMC - National Environment Management Council  
OPEX - Operating Expenditure  
SADC -Southern Africa Development Community  
SWOC - strengths, weaknesses, opportunities and threats.  
TANESCO - Tanzania Electric Supply Company  
TIC- Tanzania Investment Centre  
TZS - Tanzania Shilling  
TZS-Tanzania Shillings  
US - United State Dollar  
US\$ - United State Dollar  
VAT - Value Added tax

## EXECUTIVE SUMMARY

Tanzania has become a key player in plastics and packaging industries. The industry has high growth rates as demand for plastic goods and machinery in Tanzania registers a steady growth. The country's overall economy is currently on a growth path. The country have experienced several years of strong economic growth (ranging from 6.5-7.2% in 2020 and it is now one of the fastest growing markets for plastic goods and machinery in eastern Africa.

In an effort to strengthening the country economy, the Government of Tanzania cited plastic bottle and caps manufacture industries as one of the potential revenue and job creation sector, its important is not only to social economic development, but has positive significantly towards economic development.

The Chem Spec Tanzania Limited decided to establish integrated industries in Mwanza region for production of plastic bottles and caps products whereas some of raw material will be collected locally and some will be imported for factory productions.

Chem Spec Tanzania Limited is a limited liability company, registered in Tanzania under Certificate of Incorporation No 159214303 issued on the 07<sup>th</sup> December, 2022. The project will be located at Nyamhongolo industrial area, Mwanza Region, Tanzania.

The proposed integrated project is estimated to cost a total of US\$ 985,503.74 The Current asset of US\$ 253,142 fixed assets 684,651.56US\$ and total liquidity of 413,436US\$. The business plan has an assumption all capital investment will be recovered within 4 years for projected economic life,

The production capacity of the plant is based on 300 working days excluding Holidays and Sunday. The factory capacity is 1,120MT and 640MT of plastic bottles and plastic caps annually. Capacity utilization of the plant is 60% - 75%. The proposed project is a complete set of modern technology with output capacity of 233KG of plastic bottles per Hours and plastic caps 133KG per hours. All machines are from well-known Asia brands (India/China), after being over hauled, run 20-25 years.

The development of a large and complex project such as Chem Spec Tanzania Limited is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach to manage risk must be taken into account. 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.

The development of this integrated plant will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 985,503.74US\$, the whole amount will be raised from shareholders.

## **1.0. INTRODUCTION**

### **1.1. Plastic Bottle Manufactures industry in Tanzania**

Tanzania has become a key player in plastics and packaging industry where plastic goods and expertise are in high demand. Tanzania's plastic industry is reporting high growth rates as demand for plastic goods and machinery in Tanzania registers a steady growth. The country's overall economy is currently on a growth path. The country have experienced several years of strong economic growth (ranging from 8-12% in 2020) and it is now one of the fastest growing markets for plastic goods and machinery in eastern Africa. Some of the areas identified as opportunities for international companies include plastics production machinery (PME) as well as plastics material resins (PMR). Not to mention the high demand for plastic goods that has been growing throughout Africa. Many entrepreneurs often see an opportunity where others see hurdles. As expected, the growing African economy is spurring growth in the continent's plastics industry.

CHEM SPEC TANZANIA LIMITED is matching grants opportunity for businesses in Tanzania that wish to develop or increase their ability to trade, support product quality improvement and the meeting of international standards to access potential markets within and outside Tanzania. In this respect the company is planning to establish integrated project of plastic manufacture in Mwanza region in Tanzania that will support government initiatives endeavour to develop the business sector as an engine of pro-poor economic growth, in line with Tanzania's National Strategy for Growth and Reduction of Poverty (MKUKUTA).

The company has experience in plastic manufacture for several years in plastic productions but still the demand for packaging products to meets domestic demand is limited. Modern and quality storage of plastic bottles and caps products will helps to increase preservation, improve traditional method of storage by controlling drying, acidification, fermentation, sterilization, pasteurization, labeling, Increase fruits and fruit by product safety (traceability, food safety audits), trade development (effective trade fair participation, branding, supply chain management) and packaging.

### **1.2. Why plastic industry in Tanzania?**

In the East Africa region, one of the largest markets for plastics and packaging goods is Tanzania. The country has been importing plastic goods and machinery from all across the world in increasing quantities over the last five years and has emerged as a lucrative market for plastic goods in the region. Tanzania's plastic imports include plastics consumer items, writing instruments, rope & twines, plastics & metal spectacle frames, strainers, laminated & non laminated packaging material, bio-medical products, kitchenware, woven sacks & bags, pet preforms, gift & novelties & other plastic products. In fact some enterprising companies in

Tanzania are turning waste plastic bottles into Coronavirus face shields and meeting the rising demand for face shields in East Africa.

In an effort to strengthening the country economy, the Government of Tanzania cited integrated industry of plastic bottles industries as one of the potential revenue and job creation sector, its important is not only to social economic development, but has positive significantly towards economic development.

Chem Spec Tanzania Limited decided to expand integrated industry in Mwanza - Tanzania factories as major expansion of related products from importing raw materials plastic bottles production and few will be collected as end use products (recycling) as raw materials for production process to suit customer satisfaction in Tanzania.

Considering such level of market growth and demand driven variables with notably absence of local manufacturing facilities already functioning in Tanzania and neighboring countries, the investment venture will become potentially profitable business.

As a part of integrated project, Chem Spec Tanzania Limited considering packaging is alternatives of the synthetic polymer and help to enhance the shelf life of the liquid and food products while retaining their nutritional, biological and sensory quality. It helps in minimizing lipid oxidation; reducing weight loss, retarded respiration and enzymatic browning of the food products, that is, fruits & and others.

## 2.0. PROJECT OVERVIEW

### 2.1. The Industry ownership and share distribution

Chem Spec Tanzania Limited is a limited liability company, registered in Tanzania under certificate of incorporation No 159212303 issued on the 07<sup>th</sup> December, 2022. The project is located at Nyamhongolo industrial area. P O Box 624 Mwanza Region, Tanzania. Currently, the company is anticipated to employ 28+ direct and indirect in plastic bottles and plastic caps value chain.

Integrated factories will be located in Mwanza region. Anticipated raw material of factory will be imported and some will be collected from MSE (Recycle) in Tanzania. The establishment involves adding two line of production for plastic bottles and plastic caps factories. This will involves cost of machine and fixing, operational and management cost, distribution of commodities etc.

The initial Authorized Share Capital of the company is TZS 1,,000,000/= divided into 1,000/- ordinary shares of Tshs 1,000/- 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 1: Company Ownership and Principal Shareholders**

S/No.	Shareholder's Name	Address	Number of Shares
1	Miss. Pooja Vijay Sharma, (Business women)	P Karnataka, No. 5/22-22 <sup>ND</sup> Cross, Cox Town, Heera Chand Layout, Bengaluru, 560005, India	500
2	SAI GLOBAL FZE	Umma Al Quwain, Al Shmookh Business Centre,One UAQ, UAQ free trade Zone, +971, United Arab Emirate.	500

The address for this company is;  
CHEM SPEC TANZANIA LIMITED;  
P O Box 624,  
Nyamhongolo Industrial Areas,  
MWANZA,  
TANZANIA.

## **2.2. Project Description**

### **2.2.1. Plastic bottles and caps factoría overview**

CHEM SPEC TANZANIA LIMITED is part of plastic manufacturing industry which include different types and shapes of plastic bottles and caps in Tanzania. Proposed company produce plastic packaging whereas, the automated technology used is Blow-Fill-Seal (or BFS for Short) three-in-one technology is a sterile package technology. The machine adopting this technology achieves whole process of blow, fill and seal under sterile circumstance. The Technology combines all technical advantages to innovate and develop a Series plastic bottle blow-fill-seal machine self-independently. The machine has the advantages of good sterile stability, high inner quality and low cross contamination rate with low production cost and management cost. It could be widely used in production area for final sterilization products and sterile products, raising high attention of manufacturer for sterile fruits and food products.

## **2.2. Technicality of the project.**

### **2.2.1. Production line capacity.**

Chem Spec Tanzania Limited aimed at establishing her own production line by importing complete set of two lines of productions by importing Machine and equipments, the company will produce plastic bottles and caps products of different types according to market and demand of her customers. The machines will have the capacity of producing 233 Kg and 133 Kg of plastic bottles and caps per hour respectively which is equivalent of 3.733MT and 2.133MT per day in a double shift of 16 hours per day. Estimated production per years is 1,120MT and 640MT respectively. The project is expected to start by early December 2023 whereas raw materials some will be imported and some will be purchased to a local market as recycling products.

### **2.2.2. Production process.**

Production process of plastic involves heated and pushing through a heated chamber by a screw molding. The plastic is forced though a die that creates the final stage of the part. Cooling the extruded plastic is cooled, cut or spool, continues shape is spoiled or cut into length.

The most popular and widely used methods are,

- ✚ Blow Molding,
- ✚ CNC Machining,
- ✚ Vacuum forming,
- ✚ Polymer casting,
- ✚ Injection Molding,

- ✚ 3D Printing,
- ✚ Extraction and Rotational Molding.

The project envisages setting up modern equipment in installation of complete set for both production lines from Asian countries, all machines and equipments will cost 288,564.61US\$ this includes plastic bottles and caps production line and flight charges.

### 2.3. Project Cost & Financing Pattern

The proposed integrated project is estimated to cost a total of US\$ 985,503.74 this including, own equity of 100% as proceeds from capital contribution of the project and total loan debt of zero. The Current asset of US\$ 253,142 fixed assets 684,561.56US\$ and total liquidity of 413,436US\$. The project will be implemented within 5 years.

<b>Equity + Loan</b>	
<b>Equity 100%</b>	<b>985,503.74</b>
<b>Loan 0%</b>	<b>-</b>
<b>Total Equity</b>	<b>985,503.74</b>

### 2.4. Business Plan Objectives

The objectives of this study are two-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).

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.

### 2.5. Product: Demand and Market Analysis

#### 2.5.1. Market analysis - Plastic Products

The market analysis conducted indicates that there are few industries in Mwanza region producing plastic bottles and caps products and other packaging products. The trade volume is still highly needed no other high volume suppliers of different design according to customer demand and the company as consumable product for beverage and foods. At present, companies source their requirements in Dar es

Salaam and some are imported from Kenya and Uganda. . The plastic supply base in Mwanza is geared towards the manufacturing of low volume, hand-crafted, expensive products to service a niche market; this market requires the supply of a quality, volume fulfillment and pack-off service.

The Chem Spec Tanzania Limited produce plastic products in different uses some includes, for water, fruits packaging, soft drinks, hard drinks, chemical etc. the company will sales at a whole marketing price so as to provide profit margin to other distributors. The company will sales her products at a wholesale price of start at 1677TZS equivalent to 0.65US\$ per KG of bottles, and plastic caps 676TZS equivalent to 0.27USD per KG. The price depends on customer design and preference.<sup>1</sup>

### **2.5.2. Market potential for the Plastic products:**

As indicated in the previous section, a plastic market has been identified. Market research indicates the Lake zone regions market for plastic products is estimated to be US\$813.75 million annually. Chem Spec Tanzania Limited has set its sales target at US\$ 1,004,800USD in year one, increasing to 1,221,341USD in fifth year of project economic life. Year one target equates to a 4.9% , the sales increases by 5% There is the possibility of extending the business to unfulfilled areas outside the lake zone. This will lead to efficiency, costs savings and shortened lead-time for potential customers. However, it is the director's intention not to enter this sector in the initial three years of operation.

The market for plastic products in world is still remain dominant for the highest growth in revenue as compared to other regions over the forecasted period, 2017-2025. The market in East Africa for plastic products is expected to witness above average growth for the further few years. The economic development in East Africa is projected to have a positive impact on the market for plastic products. In Tanzania plastic market is expected to have considerable growth in terms of market value owing to technological advancements in the plastic industries for these emerging economies which will witness a sizeable increase in the revenue contribution of the sales.

From the analysis in the preceding chapter, the marketing of the final products in the country will not pose a problem either as even if the export markets collapsed the local market itself is able to take up whatever the project will produce.

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

### **2.6.1. 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,

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<sup>1</sup> The exchange rate of 1USD equivalent to 2503TZS as today 14<sup>th</sup> November, 2023

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.

### **2.6.2. Buildings and related fixed cost**

The floor plan and elevation of buildings and other related structures will be rehabilitating to Chem Spec Tanzania Limited as rented by the shareholders. However, the total cost of Land acquisition and registration, factory buildings, Storage of raw materials and finished plastic products structure has been done by the owner, the estimated cost of the land and structure is estimated to 350,000US\$ as cost associate to rehabilitation of the structure, project fixed cost have been calculated which includes structure rehabilitation.

The industry also set budget as working capital which involves purchase of raw materials and factory overhead cost of 152,174US\$.. 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.

### **2.6.3. 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 China and are estimated to cost 288,564.61US\$, this includes, complete set bottle and caps plastic production, laboratory equipment for testing quality, flight charge. 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 45,276US\$. Others working facilities have already in place this includes weighing scales, mini

laboratory equipment, communications, computers and other office equipment, standby power generator and miscellaneous machinery and equipment.

#### 2.6.4. Motor Vehicles

A light Box body trucks will purchased in the first of production whereas truck will be purchased at a price of 20,000US\$ and other vehicles will be hired by the company for collection and distribution of plastic products.

#### 2.6.5. 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 4,347.83US\$ 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.

#### 2.6.6. 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 5,200US\$

#### 2.6.7. 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 295,652.17US\$.

#### 2.6.8. Project Capital Investment Summary

<b><i>INVESTMENT SUMMARY</i></b>	
<b><i>FIXED ASSETS</i></b>	
<b><i>A. LAND AND BUILDINGS</i></b>	
<i>LAND COST+STRUCTURE</i>	<i>350,000.00</i>
<b><i>B. MOTOVEHICLES</i></b>	
<i>LIGHT VEHICLE LORRIES @20,000</i>	<i>20,000.00</i>
<b><i>SUBTOTAL - MOTOVEHICLES</i></b>	

	<b>20,000.00</b>
<b>C. MACHINERIES AND EQUIPMENTS</b>	
COMPLETE SET PLASTIC PRODUCTION LINE	152,173.91
COMPLETE SET OF PLASTIC CAPS PRODUCTION LINE	69,565.22
LABORATORY + EQUIPMENTS	4,347.83
GENERATOR	58,695.00
FLIGHT CHARGES	3,782.65
<b>SUB TOTAL MACHINERIES</b>	<b>288,564.61</b>
FENITURE AND FITTINGS	4,347.83
CONTINGES	21,739.13
<b>SUB TOTAL FIXED ASSETS</b>	<b>26,086.96</b>
<b>TOTAL FIXED ASSET</b>	<b>684,651.56</b>
<b>CURRENT ASSET</b>	
PRE OPERATIONAL EXPENSES	5,200.00
INTIAL WORKING CAPITAL	295,652.17
SUB TOTLA CURRENT ASSET	300,852.17
<b>SUB TOTAL CURRENT ASSETS</b>	<b>300,852.17</b>
<b>TOTAL INVESTMENT</b>	<b>985,503.74</b>
<b>EQUITY + LOAN</b>	
<b>EQUITY 100%</b>	<b>985,503.74</b>
<b>LOAN 0%</b>	-
<b>TOTAL EQUITY</b>	<b>985,503.74</b>

### **2.6.9. 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 shareholders own resources 100%. Working capital requirements will be financed by shareholder or seeking short term bank financing in form of overdraft facility. The project promoters are planning to finance project cost in the following pattern:

### **2.6.10. Project Implementation**

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

### **2.6.11. Explanatory Notes**

The production capacity of the plant is based on 300 working days excluding Holidays and Sunday. The factory capacity is 1120MT and 640MT of plastic bottles and plastic caps annually. Capacity utilization of the plant is 60% - 75%. The proposed project is a complete set of modern technology with output capacity of 233KG of plastic bottles per Hours and plastic caps 133KG per hours.. All machines are from well-known Asia brands (India/China), after being over hauled, run 20-25 years.

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

Falling under this category is plastic packing 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 Mara 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 install a heavy duty 100KVA power generator automated generator that will be connected to the plant and premises for standby power supply costing to 58,6955US\$

The Chem Spec Tanzania Limited will install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems. The client manufactures plastic products in a high-temperature, high-pressure environment, in which electricity interruptions cause economic and material losses. The total cost of generator not included to business plan as it's already in place.

**(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 MWAUWASA water network, the agency is major supplier of water to urban and peri urban area in the city. While depending on water supply from MWAUWASA, the main line is close to the proposed industry from Mwanza city to Nyamhongolo industrial area. 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, five (5) trucks with a capacity of 32 MT will be purchased and other 5 Light trucks will be purchased and some will be hired for plastic bottle distribution and collections.
- 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.

### **2.6.13...Warehousing and distribution**

Chem Spec Tanzania Limited's warehousing service is ready to meet 24/7/365 with produced plastic products and raw materials 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.

### **2.6.14. 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 Chem Spec Tanzania Limited; 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 REQUIREMENT - SALARY PROJECTION**

#### **3.1. Employment**

The whole process of production lines is looking at providing direct employment to at least 28 permanent jobs on full implementation and operation of the project. The industry is divided into 3 Departments; Administrative (3), finance and marketing (3) and Production (22).

#### **3.2. Recruitment**

Recruitment of the 22 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 Plastic factories in Tanzania, based on demonstration of skills and aptitude basis and their willingness to work for Chem Spec Tanzania 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:

<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>
EXCUTIVE DIRECTOR	1	1,000	12,000
LOGISTIC	2	500	12,000
<b>SUB TOTAL</b>	<b>3</b>	<b>1770</b>	<b>24,000</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>
MARKETING	2	600	14,400
ACCOUNTANT	1	500	6,000
<b>TOTAL</b>	<b>3</b>	<b>1370</b>	<b>20,400</b>
<b>C. OPERATIONAL 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>
<b>PRODUCTION</b>			
QUALITY CONTROL	1	650	7,800
OPERATORS	2	320	7,680
MOLDING EXPERT	4	200	9,600
HELPERS	5	250	15,000
SUPPORTING STAFFS	10	200	24,000
<b>TOTAL</b>	<b>22</b>	<b>1820</b>	<b>64,080</b>
<b>GRAND TOTAL</b>	<b>28.00</b>	<b>4,960.00</b>	<b>108,480.00</b>

## 4.0. FINANCIAL ANALYSIS

### 4.1. Production, Revenue and project viability

- ❑ The estimated revenue gain in selling plastic bottles and caps average annually 908,800US\$ in the first year of production whereas plastic bottles will contribute 728,000US\$ and caps will contribute 172,000US\$ excluding Value Added Tax. Sales volume during the second years will increase to 945,840US\$
- ❑ Net profit before tax is 413,436US\$, second year earning is 443,855US\$ which show the profit is increasing,
- ❑ Net profit after tax is 253,142US\$, second year earning is 271,767 US\$, which show the profit is increasing,
- ❑ Gross sales contribution in the first year of production is 46% which increases tremendously in the second years up to 5 year,
- ❑ The expected sales increase annually is 5% while increase production cost is 3% which depends on inflation rate of the country,
- ❑ Total investment cost of the project is 985,503.74US\$ whereas the own equity is 100% and loan-able amount ZERO, project current assets for the first year is 253,142US\$, fixed asset 684,651.56US\$,
- ❑ The end balance of project in cash flow statement is positive and increases tremendous.
- ❑ Testing the project viability is positive whereas IRR is positive 14%, and payback period of project is within 4 years. The Discounted Cash flow yields an Internal Rate of Return (IRR) of which is well above the assumed cost of capital.
- ❑ The end balance of project in cash flow statement is positive and increases tremendous.
- ❑ Cash generated from operation and net cash from operational activities increases positively of project (see cash flow sheet)
- ❑ Depreciation of fixed assets and amortization of the pre-operational expenses rates used are as follows: land 5%, Civil Works/ Structures/Buildings 5.00% on straight line basis, Plant Machinery & Technical Equipment 12.50% on straight line basis, Motor Vehicles. 20.00% on straight line basis. The business plan use 12.5% as depreciation factors. Depreciation is amounted to 36,176US\$
- ❑ Salaries and Wages have been based on the prevailing scales in the industry. There is provision of 20% to cover company contribution to NSSF (10%) and other social welfare (10%). Included to the total amount (see Income statement,
- ❑ Corporate Tax is fixed at 30% of taxable profits. The project is able to pay tax hence increase government revenue via GDP by 124,119US\$
- ❑ The business plan has an assumption all capital investment will be recovered within 4 years for the projected economic life,

## 5.0. 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 Chem Spec Tanzania 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.

### 5.1. 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.

### 5.2. 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 plastic production are in rudimentary stages all of which contribute to reducing production efficiency. Also quality, safety and standards consideration in the production environment is limited. In Chem Spec production 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.

### 5.3. 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.

### 5.4. Mitigating potential risk

The development of a large and complex project such as Chem Spec Tanzania 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. PROJECT SWOC ANALYSIS

The SWOC (Strengths, Weaknesses, Opportunities and Challenges) analysis provides a quantitative and qualitative review of internal strengths and weaknesses and their relationship with external challenges and opportunities. The results of the analysis provide a basis for determining the project future goals and for identifying strategies and initiatives that would be required to develop the project. The matrix below summarizes the project strengths, weaknesses, opportunities and threats.

**Table 6.1: SWOC Analysis - Chem Spec Tanzania Limited**

<b>SWOC ANALYSIS</b>	
<p style="text-align: center;"><b>Strengths</b></p> <ul style="list-style-type: none"> <li>(a) Close proximity market and SME,</li> <li>(b) Preferential operational and incentives scheme enshrined in the TIC law</li> <li>(c) Political will, the government's legal and policy framework support development of the project</li> </ul>	<p style="text-align: center;"><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>i) Skilled labour to run factory,</li> <li>ii) Inadequate electric power,</li> <li>iii) Lack of working tools and machinery,</li> <li>iv) Inadequate ICT system in place thus hindering effective and efficient service delivery.</li> <li>v) Weak collaboration/facilitative links with TRA,TPA,TANESCO and other Government departments which may create bottlenecks in investor facilitation;</li> </ul>
<p style="text-align: center;"><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>(a) Strategic location of Tanzania which is a hub for international business,</li> <li>(b) Existence of preferential markets,</li> <li>(c) e.g. EU, COMESA, EAC, USA; and Regional markets like EAC,SADC and COMESA,</li> <li>(d) Political and macroeconomic stability of the country,</li> <li>(e) Goodwill and support from the</li> <li>(f) Government and the parent ministry;</li> </ul>	<p style="text-align: center;"><b>Challenges</b></p> <ul style="list-style-type: none"> <li>i) High cost of doing business due to inefficiencies in the infrastructure system e.g. electricity, roads and air;</li> <li>ii) Lack of industrial linkages between research institutions and investors;</li> <li>iii) Government activities not fully coordinated and lack of appreciation of the TIC programs by other arms of the Government,</li> <li>iv) Regional competition from other countries investment and markets.</li> </ul>

## 7. 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.

### 7.1. Impact Investment Index Framework.

Impact Investment Index		
Frame Work for CHEM SPEC TANZANIA LIMITED		
Performance Area	Quantitative Indicator	Remarks
<b>Investment Capital</b>	Total investment capital, CAPEX and OPEX US\$ 985,503.74US\$	Substantial amount of capital invested into the domestic economy.
<b>Export Earnings</b>	Indicative Annual sales of 100% earnings of 900,800US\$ out of annual average collection	Increased foreign earnings.
<b>Job requirements</b>	Job creation after plant in operation 2020-2021. DIRECT TANZANIAN JOBS 28 local employed	<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> </ul>

- Applied technology which is free from environmental pollution,

#### **Other Implied Project Benefits**

- 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 0.985US\$ 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, **Chem Spec Tanzania 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.

## 8.0. FINANCIAL MODELLING AND ANALYSIS

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the Chem Spec Tanzania 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 integrated plant is to speed up the country's economic development by being a catalyst for restructuring the existing local plastic industrial set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

### 8.1. Project investment inputs

<i><b>SALES PROJECTION</b></i>	<i><b>UNIT/KG/M CUBIC</b></i>		
<i>WORKING DAYS PER MONTH</i>	25.00		
<i>ANNUAL WORKING DAYS</i>	300.00		
<i>HOURS FOR PRODUCTION PER DAY</i>	16.00		
<i>NUMBER OF MACHINES FOR PLASTIC MOULDING</i>	1.00		
<i>NUMBER OF MACHINES FOR PLASTICCAPS MOULDING</i>	1.00	<i>PER DAY</i>	<i>PER HOUR</i>
<i>TOTAL PRODUCTION FOR MACHINES PER DAY IN KG PLASTIC MOULDING 16 HOURS</i>	1,120,000.00	3,733.33	233.33
<i>AVERAGE PRODUCTION OF PLASTIC CAPS IN KG MOULDING 16 HOURS</i>	640,000.00	2,133.33	133.33
<i>PRICE PER UNIT PLASTIC BOTTLES KG IN USD</i>	0.65		
<i>PRICE PER UNIT PLASTIC CAPS KG IN USD</i>	0.27		
<i><b>TOTAL SALES ANNUALLY PLASTIC PRODUCTS</b></i>	<b>728,000.00</b>		
<i><b>TOTAL SALES ANNUALLY PLASTIC CAPS PRODUCTS</b></i>	<b>172,800.00</b>		
<i><b>SALES IN USD</b></i>	<b>900,800.00</b>		

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

### **8.2.1. 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 Chem Spec Tanzania 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.

### **8.2.2. 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 integrated 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\$)

<u>Revenue</u>	<u>Year</u> <u>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>
<b>Total sales annually plastic products</b>	-	728,000	764,400	802,620	842,751	884,889		4,022,660
			-	-	-	-		-
<b>Total sales annually plastic caps products</b>	-	172,800	181,440	190,512	200,038	210,039		954,829
<b>Total Operating Revenue</b>	-	900,800	945,840	993,132	1,042,789	1,094,928		4,977,489
<u>Expenses</u>	<u>Year</u> <u>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		108,480	111,734	115,086	118,539	122,095		575,935
Social Charges & Pension Payments		21,696	22,347	23,017	23,708	24,419		115,187
Purchase of Raw Materials		152,174	156,739	161,441	166,285	171,273		807,912
Fuel and Lubricants		29,325	30,204	31,110	32,044	33,005		155,688
Electricity and Water (Utilities)		26,087	26,870	28,213	29,624	31,105		141,898
Factory overhead cost		141,292	145,531	149,897	154,394	159,026		750,139
Insurance/licensing/other charges		5,702	5,873	6,049	6,230	6,417		30,271
Other Costs		2,609	2,687	2,768	2,851	2,936		13,850
<b>Total Operating Costs</b>		487,364	501,985	517,582	533,674	550,276		2,590,881
<b>Operational Net Earnings before Depreciation, Interest &amp;</b>								

<b>Tax</b>		413,436	443,855	475,550	509,115	544,652	2,386,608
<i>%age Gross Contribution</i>		46	47	48	49	50	1
<b>Depreciation at 12.5%</b>		36,176	38,837	41,611	44,548	47,657	214,795
<b>Net Earnings before Tax &amp; Interest</b>		377,260	405,018	433,939	464,567	496,995	2,171,813
<b>Interest Paid (Bank Loan)</b>		-	-	-	-	-	-
<b>Tax (30%)</b>		124,119	133,251	142,766	152,843	163,511	716,490
<b>Net Earnings</b>		253,142	271,767	291,173	311,725	333,483	1,461,290

## ANNEX II CASH FLOW

(all numbers in US\$)

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>					
Cash receipts from Sales	900,800	945,840	993,132	1,042,789	1,094,928
Cash paid to suppliers and employees	(487,364)	(501,985)	(517,582)	(533,674)	(550,276)
Cash generated from operations	413,436	510,455	673,837	813,021	948,505
Dividends received*	0	0	0	0	0
Interest received	0	0	0	0	0
Interest paid	0	0	0	0	0
Tax paid	(124,119)	(133,251)	(142,766)	(152,843)	(163,511)
<b>Net cash flow from operating activities</b>	<b>289,317</b>	<b>377,204</b>	<b>531,071</b>	<b>660,178</b>	<b>784,994</b>
<b>CASH FLOW FROM INVESTING ACTIVITIES</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>CASH FLOW FROM FINANCING ACTIVITIES</b>					
Proceeds from capital contributed	985,504	0	0	0	0
Proceeds from loan	0	0	0	0	0
Payment of loan	0	0	0	0	0
<b>Net cash flow from financing activities</b>	<b>985,504</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>NET INCREASE/ DECREASE IN CASH</b>					
Cash at the beginning of the period	253,142	271,767	291,173	311,725	333,483
Cash at the end of the period	<b>1,527,963</b>	<b>648,971</b>	<b>822,244</b>	<b>971,903</b>	<b>1,118,477</b>

## ANNEX III BALANCE SHEET

(all numbers in US\$)	Year 1	Year 2	Year 3	Year 4	Year 5
<b>ASSET</b>					
Current asset	253,142	271,767	291,173	311,725	333,483
Fixed asset	684,652	602,493	530,194	466,571	410,582
Liquidity	413,436	510,455	673,837	813,021	948,505
<b>TOTAL ASSET</b>	<b>1,351,229</b>	<b>1,384,715</b>	<b>1,495,205</b>	<b>1,591,317</b>	<b>1,692,571</b>
<b>NET ASSET MINUS DEPRECIATION</b>	<b>1,315,054</b>	<b>1,345,878</b>	<b>1,453,594</b>	<b>1,546,769</b>	<b>1,644,914</b>
<b>EQUITY &amp; LIABILITIES</b>					
Equity	985,504	1,011,521	1,101,182	1,198,791	1,305,052
Reserves					
<b>Total Own Equity</b>	<b>985,504</b>	<b>1,011,521</b>	<b>1,101,182</b>	<b>1,198,791</b>	<b>1,305,052</b>
Provisions	169,256	162,269	168,035	150,588	128,694
Long term loan	0	0	0	0	0
Short term Liabilities	160,294	172,088	184,377	197,390	211,168
<b>Total Equity &amp; Liabilities</b>	<b>1,315,054</b>	<b>1,345,878</b>	<b>1,453,594</b>	<b>1,546,769</b>	<b>1,644,914</b>
CL/CA	0.63	0.63	0.63	0.63	0.63
<b>DEBIT/CAPITAL RATIOS</b>	<b>0.25</b>	<b>0.25</b>	<b>0.24</b>	<b>0.22</b>	<b>0.21</b>
ROI	25.7	26.9	26.4	26.0	25.6
<b>BREAK EVEN POINT</b>	<b>1.66</b>	<b>1.36</b>	<b>1.11</b>	<b>0.92</b>	<b>0.75</b>
<b>BREAK EVEN RATIO</b>	<b>1.57</b>	<b>1.52</b>	<b>1.48</b>	<b>1.44</b>	<b>1.40</b>
<b>EQUITY/TOTAL LIABILITIES</b>	<b>75</b>	<b>75</b>	<b>76</b>	<b>78</b>	<b>79</b>

**ANNEX V - PAYBACK PERIOD**

<b>Payback Period Analysis</b>				
	<b>Year</b>	<b>Beginning Balance</b>	<b>Net Cash Flows</b>	<b>Ending Balance</b>
Cost of investment	0.00	985,503.74	0.00	985,503.74
	1.00	985,503.74	253,141.69	732,362.04
	2.00	732,362.04	271,766.91	460,595.13
	3.00	460,595.13	291,173.40	169,421.72
	4.00	169,421.72	311,724.76	142,303.04
	5.00	142,303.04	333,483.47	475,786.51

<b>Payback Period</b>	<b>4.00</b>	<b>Years</b>
<b>=</b>		

## **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 meat processing plant as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, *Chem Spec Tanzania 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 integrated plant facility is financed 100% by shareholders it gives an IRR of about 8+%. 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 Chem Spec Tanzania 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 (2015-2025); Prioritize 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 II (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 Chem Spec Tanzania Limited to ensure development of one among the ultra-integrated plant to be developed in Ilemela, 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 integrated plant will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 985,503.74US\$, the whole amount will be raised from shareholders. 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 integrated Industrial requirement**

The company should engage a firm to make minor rehabilitation of existing structure that will suit integrated 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 inasmuch 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 the integrated 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 Investment.