VISION CONTROL AND SUPERINDENT LIMITED

ESTABLISHMENT AND OPERATION OF POLYPROPLENE (PP) WOVEN SACKS PROJECT

BUSINESS PLAN

29th December, 2022

VISION CONTROL AND SUPERINDENT LMITED

Projects Location: Mbalari, Mbeya, Tanzania

1. PROJECT INFORMATION

Project Name:	Construction of Polypropylene (PP) Woven Sacks Project.
Project Description:	The project is involving capital investment for PP Woven Sacks Production Plant-1,000 pcs/hourCapacity
Product:	PP Woven Sacks
Type of Project/Sector:	Manufacturing Industry
Project Proponent:	Vision Control and Superintendent Limited
Target Customers:	Farmers, Fertilizers Importers, Agro-processors and Traders
Shareholders:	Mr. Joseph Salema (50%) and Edwin A. Riwa (50%).
Project Location:	Mbarali District in Mbeya Region
Project costs:	TZS 1,278,200,000
Financing Requirement:	Debt Finance-TZS 521,200,000 and Equity-TZS 757,000,000
Project Justification:	Present and future demand growth for PP woven sacks to farmers, agro-processors and traders as packaging materials.
Project Partners:	Farmers, Agro-Processors, Traders and Banks

2. COMPANY BACKGROUND

2.1 Background information

Vision Control & Superintendence Limited (''VCSL'') is a private limited liability company incorporated on 9th August 2002 under the laws of the United Republic of Tanzania. Since its inception until now, the company has been dealing with the following activities:

a. Lashing and unlashing activities
b. Vessel inspections
c. Marine inspection
d. Warehousing cargo movement
e. Containerized and wagon/truck cargo inspection

f. Fumigation services
g. Collateral management services
h. Monitoring services

2.2 Past Financial Highlight

The past financial performance for the company is based on the current business of control and superintendence services are indicated in the table below

Table 1: Past Financial Performance (Amount in TZS Currency)

Particular/Year	2020	2021
Turnover	3,061,394,523	3,434,157,923
Total Assets	1,438,393,455	1,641,688,430
Total Liabilities	636,285,652	717,534,427
Total Equity	802,107,803	924,154,004
Net Profit	84,472,300	122,046,201

Source: Audited Accounts 2020 and 2021

2.3 The Shareholders

VCSL is owned by the following shareholders:

Table 2: Details of Shareholders

Sn	Name of Shareholder	Shareholding Percentage(%)
1	Joseph E. Salema	50%
2	Edwin A. Riwa	50%
	Total	**100%**

The authorized and fully paid-up share capital TZS 10 million divided into 1,000 shares of TZS 10,000 each.

3. EXPANSION PROGRAM

3.1 Overview

VCSL is planning to expand and diversify its current business operation by constructing Polypropylene Woven Sacks Production Plant. Decision to expand and diversify its business operations is due to the following reasons:

a. To add revenue stream in the existing business lines as part of the company growth strategy.
b. To reduce the overall risk exposure of the company in the existing business line through diversification projects.

4. BUSINESS STRATEGIES, VISION, MISSION AND OBJECTIVES

4.1 Business Strategy

To construct warehouses and establish and operate paddy milling plants, PP woven sacks production plant and coffee curing and grading plant in Mbeya, Katavi and Kagera Regions, which are considered as strategic locations contain farmers, traders and agro-processors demanding milling and curing services and packing materials for coffee, rice and paddy.

4.2 Vision

Become one of the leading paddy milling and PP woven sacks production company in East and SADC countries.

4.3 Mission

Providing Paddy Milling, Coffee curing and grading Services to farmers, agro-processors traders and produce PP woven sacks at highest standards of industrial practices, creating sustainable value to shareholders, employees, suppliers, customers, business partners, host communities and environment sustainability through optimizing company resources.

4.4 Objectives/goals

The company will create new capacity of PP woven sacks in the Packaging Industry by introducing a new plant that will use modern machinery and technology from China. The new PP woven production plant will have production capacity of 1,000 bags of PP woven sacks per hour. So, through effective production and marketing of PP Woven Sack, the company needs toachieve the following objectives/goals:

a. Generate Revenues of TZS 3.915 billion and profit of TZS 42.853 million when project starts production at 80% capacity utilization in the first year of operation.
b. To reach at least 250,000 smallholders' farmers, traders and agro-processors through selling PP woven sacks.
c. To create employment of more than 100 people for the local people (unskilled workforce and professionals/technicians).
d. To contribute reduction of post-harvest loses due to relative available pp woven sacks at affordable prices
e. To contribute to the country's economy through taxes and other levies at least TZS20 million per annum.

4.5 SWOT Analysis

4.5.1 Strengths

a. Strong managerial skills to be recruited
b. Focused and committed to the business
c. There is an opportunity untapped
d. Adequate market survey done

e. Established good relationship with farmers, agro-processors and banks

4.5.2 Weakness

a. Lack of skilled manpower (this has been possible through poaching of skilled labor from other PP bags manufacturers).
b. Expertise-needed to be imported to train the local ones (cost acquainted to this)
c. Capital intensive project

4.5.3 Opportunities:

a. There is increased demand for the PP bags due to the increase in agriculture and agriculture related activities.
b. There is increase in the private sector participation in the economy.
c. The movement is heavily promoting investments in Tanzania especially Industrial Development Initiative.
d. There is a growth in the provision and access of financial services to businesses and hence easy to access finance.
e. There is increased population with high consumption of agriculture products

4.5.4 Threats:

f. Lack of skills in the employment sector
g. Changes in the government policies
h. Huge investments in the economy can hamper investments by local entrepreneurs
i. The East Africa community common market can also act as a threat to small and new projects

5. PROJECT OVERVIEW

The company has decided to expand its business operation by adding a new productionline which will involve setting up Polypropylene (PP) Woven Sacks Project to produce PP woven Sacks. The project will be set up at Plot No. 429 & 430 Block DD Chimala Urban Area in Mbarali District, Mbeya Region, Tanzania. The company decided to invest in PP Woven sacks by entering into a new business because packaging industry is a promising sector in Tanzania.

The significant of setting up the project is to meet demand for PP woven sacks which is currently supplied by manufacturers from Dar es Salaam and Coast Regions. The fact that demand for PP woven sacks in Mbeya and Southern Region is higher than supply as a result, the unmet demand is met by suppliers/traders who buy PP woven sacks from Dares Salaam and Coast Regions and sell them to Southern Region at higher prices due transportation charges. The demand for PP woven sacks is increasing because the rate of supply of PP woven sacks in Southern Region does not match with the demand due to the following reasons:

a. There is a rapid growth in the sectors of agriculture, processing industries, fishing, construction and mining which require PP woven sacks as packaging materials.
b. There are no PP woven sacks production projects and hence create low supply.

Therefore, Vision Control and Superintendence Limited takes advantages of current and future short supply of PP woven Sacks in Southern Highland Regions by creating new capacity in order increase production of PP woven sacks to meet current and future demand of PP woven sacks at competitive price.

6. PRODUCT DESCRIPTION

Polypropylene woven sacks are specializing in packing and transporting bulk commodities. Due to its strength, flexibility, durability and lower production cost, polypropylene woven sacks are most popular products in the packaging industrial for packing grain, animal feeds, fertilizer, seeds, soap powders, sugar, cement, salt and chemical in granulated form. PP woven sacks have the following advantages:

a. Affordable at lower cost
b. Flexible and high strength, persistent durability
c. Can be printed on both sides
d. Can be stored in an open area due to UV-stability, up to 6 months
e. Water and dust proof design due to inside PE liners or laminated on the outside; hence, packed materials are protected from outside humidity.
f. Twisted weave and anti-skid print to prevent slipping; and
g. Can be fully recycled.

As compared to jute and paper sacks, the PP sacks have higher mechanical strength, non-contaminant, excellent appearance, flexible to be manufactured at customers' needs (preferred colour and texture), easy to print logos, symbols or writings and versatility ofthe product.

Vision Control & Superintendence Limited is planning to set up PP woven SacksProduction project to produce PP Woven Sacks to cater for Southern Highland Regions. The proposed plant will have production capacity of 1,000 bags of PP Woven Sacks per hour and will involve capital investment in the following areas:

a. Construction of factory buildings to house the new plant and machinery
b. Procurement and Installation of PP woven sacks production machinery.
c. Procurement of raw materials to cater 3-three months' production as working capital

7. MARKET ANALYSIS

7.1 Target Market

Upon commencement of production, the company will sell PP Woven Sacks to the following customers:

a. Fertilizers Importers

According to Tanzania Revenues Authority (TRA), the importation of fertilizers stands at 417,242 tons equivalent to 417,242,000kg. The fertilizers importation is done in bulk through shipping consignment from abroad. Once the ship arrives at the port, the importers off-load fertilizers and re-bagging in the PP woven sacks of various sizes ranging from 5kg, 10kg, 25kg and 50kg for onward distribution to various farmers insideand outside the country. Based on the industrial experience, high percentage of fertilizersis re-bagged in 25kg and 50kg of PP Woven Sacks under the assumption of 50% by 50% respectively. Therefore, demand for PP Woven sacks to re-bag the fertilizer in 25kg and 50kg will be 8,344,840 pieces and 4,172,420 pieces respectively per annum.

The fertilizers importers face challenges from most of the existing suppliers of PP Woven Sacks including delays to get their sacks on time as a result they incur extra charges at theport. Furthermore, the existing suppliers deliver low quality bags as a result there has been frequently bag busting during re-bagging process at the port.

The company will have production capacity of 1,000 bags of PP Woven Sacks per hour which can produce. So, it will be possible to sell PP woven sacks to the fertilizer importers.

b. Animal feed Manufacturers

PP woven Sacks are used by the animal feeds manufacturers as packaging materials for animal feeds. According to Tanzania Animal Feed Manufacturers Association (TAFMA), animal feeds production in Tanzania stands at 1,903,000 tons per annum. This production, demands for PP woven sacks of 38,060,000 PP woven Sacks per annum for packing animal feeds for 50kg pack.

The animal feeds manufacturers face challenges from most of the existing suppliers of PP Woven Sacks including delays to get their sacks on time and low quality of PP Woven sacks.

c. Agro processors

The agro-processing industry comprised of maize flour, wheat and rice millers using PP Woven Sacks for Packing flour, rice and wheat. Demand for PP Woven Sacks required by agro-processors is analyzed as follows:

d. Maize flour:

The current per capita maize flour consumption in Tanzania stands at 135kg per annum.The current population of Tanzania is 58,000,000 people translating demand maizeflour to be 7,830,000 tons per annum. This demand requires about 313,200,000 PP woven

sacks per annum of 25kg pack. Assuming 50% of the population is located in the urban areas and used to buy maize flour packed in the PP Woven Sacks from the millers. This translate demand for PP Woven Sacks for packing maize flour to be 156,600,000 pieces per annum

e. Wheat:

Wheat consumption in Tanzania stands at 1,000,000 tons per annum which is supplied by the local big millers in Tanzania like 21st Century and Packaging Limited. Demand for PP Woven Sacks for packing wheat at this level of consumptions is 40,000,000 pieces per annum assuming 25kg pack.

f. Rice:

Milled rice production in Tanzania stands at 1,948,000 tons per annum which is done by local millers. At this level of production, the PP woven sacks requirement will be 77,920,000 pieces of 25kg pack.

g. Farmers:

Farmers produce food and cash crops like maize, rice, wheat, sorghum/millet, beans/legume, cotton, sesame, potatoes etc. and production season vary from one region to another. There is a huge demand for PP Woven Sacks for packing food and cash crops. According grain report of the year 2020, grain production in Tanzania stands at 10,000,000 tons per annum which demand 100,000,000 pieces of PP Woven Sacks per annum of 100kg pack.

h. Sugar Producers

Currently, Tanzania has four big sugar factories with a total production capacity of 300,000 tons per annum. At this production capacity, demand for PP woven sacks is 12,000,000 pieces of 25kg pack.

i. Salt Producers

Currently, Tanzania produces about 100,000 tons of salt per annum which demands about 4,000,000 pieces of PP Woven sacks of 25kg pack.

j. Exports

Export trade is done by the businessmen who buy beans/legume and sesame from farmers and they process, grading and packing using PP Woven Sacks for export. Export is approximated at more than 500,000 tons per annum for beans/legume and sesame. At this level of exportation requires a minimum of 10,000,000 pieces of woven sacks per annum.

Generally, demand for PP woven sacks is summarized in the table belowTable 4:

Summary of Demand for PP Woven Sacks

Sn	Category	25Kg PP Pack	50Kg PP Pack	100Kg PP Pack
1	Fertilizers Importers	8,344,840	4,176,420	
2	Animal Feed Manufacturers		38,060,000	
3	Maize Flour Millers	156,600,000		
4	Wheat Flour Millers	40,000,000		
5	Rice Millers	77,920,000		
6	Famers			100,000,000
7	Sugar Producers	12,000,000		
8	Salt Producers	4,000,000		
9	Exportation	10,000,000		
Total		**308,864,840**	**38,060,000**	**100,000,000**

Source: Consultant

The existing suppliers can supply up to 60% of the total demand while 40% of the demand is imported particularly from Kenya. VCSL will have production capacity of 1,000 bags per hour of PP Woven Sacks equivalent which is possible to sell the products in the local market of Tanzania.

7.2 Demand Projection for PP Woven Sacks

The future demand for PP Woven Sacks is projected to grow due to the following reasons

a. Tanzania Industrials Development Policy will increase investment in industrials projects including sugar production and other agro-processing industries. As a result, will increase production of goods which require packaging materials including PP woven sacks
b. Tanzania is transforming agricultural sector using a mechanized and modern farming equipment as well as increase investment in irrigation infrastructure in order to increase crops productivity. As a result, more crops will be produced which require packaging materials for storage and preserving.
c. There is the market opportunity in SADC Countries which require packaging materials

7.3 Marketing and Sales Strategies

Market analysis shows that demand for the PP woven sacks is met by local production and imported. The challenge faced by the local supply is due to production inefficient, lack of adequate working capital to purchase raw materials, lack of competent operators and fluctuation of raw materials prices in the world market as results goods are not delivered to customers as scheduled and low-quality supply as well.

The company has developed the following market and sales strategies in order to capture adequate market share and generate adequate revenues to meet its objectives:

To do intensives business development to get enough customers who needs PP woven sacks and understanding their other source of supply. The approach will be persuading the customers to buy the products promising them to give good trading terms like transportation etc.

a. To make sure that the company has adequate working capital to purchase raw materials so that there will be a regular supply of PP Woven sacks to customers throughout the year.
b. To recruit a General Manager, Business Development Manager and Production Manager who have adequate skills and experience in the PP woven Sacks Industries. These three key people must have already established good network in the PP Woven Sacks Packaging Industry. In additional to that, the company will recruit competent machinery operators to ensure production efficiency.
c. To ensure that source of plant and machinery supply produce better quality.
d. Monitoring the price of raw materials in order to control cost of raw materials
e. Establish various distribution centers particularly in the Regions which have higher crops production

7.4 Competition

Competition is expected from the following main PP woven sacks producers in Tanzania:

a. Azam Poly Sacks
b. East African Polysacks
c. Hill Packaging
d. Tansack Ltd
e. Hasho Packaging
f. Lakairo Packaging
g. Global packaging

The company competitive advantage will focus on the following areas:

a. Competitive pricing will be offered
b. Convenient order size will be produced
c. Fast and site delivery will be assured
d. Producing quality demanded by the customers
e. Customer service – including provision of branding.
f. New and modern machinery to produce PP woven sacks at lower cost

8. TECHNICAL ASPECTS

8.1 Technical Know-how

The technical know-how for the project will be provided by the foreign supplier based in China. This supplier will manufacture, supply, install and make trial run and commissioning of the production plant. Necessary agreement will be executed with supplier by incorporating all essential features. The main features which will be includedin the contract as follows:

a. Taking out successfully trial run of the plant
b. Acceptable quality of the final product in the market
c. Imparting necessary training to employees in the production process
d. Taking out successfully commercial production for the plant
e. Penalty clause for non-performance of the plant
f. Performance guarantee for a specified number of years after a commercial production

8.2 Technology

The technology that will be used to produce PP woven sacks will come from China. The technology requires minimum supervision and low labor cost and has negative environmental impact. In additional, the technology is proven as is currently used by many countries in the world for a more than a decade including Tanzania.

8.3 Plants Capacity

Given the demand for PP Woven sacks and the planned technology and investment, the envisage plant is set to produce 1,000 of PP woven sacks per hour. Assuming that the envisage plants starts operation by 2023/24, this capacity is only 20% of the projected demand for sacks. Based on this production capacity, the envisaged plant is categorisedas a medium scale PP woven sacks production plant. The company' choice of this scale of operation is based on the following factors:

a. Adequate capability of the company to raise fund from the external source to part finance the project as well as adequate managerial capability to implement the project.
b. There is adequate market to absorb production capacity of 1,000 of sacks per hour.
c. At this scale of production, the project will operate financially, economically and commercially feasible.

8.4 Production Program

The production program is scheduled based on the consideration that the envisaged plant will work for 312 days in a year, where the remaining days will be holidays and for maintenance. During the first year of operation the plant will operate at 60 percent capacity and then at 70 percent in the 2^{nd} year and 80 percent in the 3^{rd} year. The

capacity will grow to 90 percent starting from the 4th year onwards. This consideration is developed based on the assumption that logistical barriers, staff incompetence, problemfor availability of raw materials would be eliminated gradually within the first three years of operation.

8.5 Raw Materials and Utilities

The main raw materials required in the production of PP woven sacks for packing agro-sacks are as follows:

a. PP Raffia
b. Calcium Carbonate-Filler
c. Other Consumables-Ink, Thinner and master batch

8.6 Location and site

The project will be located at Chimala Area, Mbalari District, Mbeya Region. The area is close to the market and Utilities as well as transportation network to facilitate production and products delivery are available.

8.7 Manufacturing Process

The manufacturing of PP woven sacks has the following process:

a. **Extrusions:** This is the preparation of weaving materials with various colors and size.
b. **Quality control:** This takes place in two stages namely, during production of the extruder and after production of sacks.
c. **Weaving:** This is the second stage for the manufacturing of PP sacks which consists of several machines. This is a process which requires more workforces in the manufacturing plant.
d. **Cutting section:** This is the section which deals with the cutting of the PP sacks according to the size to be produced and as per customer requirement
e. **Printing section:** This section deals with printing of labels of the PP sacks according tothe customer demands.
f. **Bearing section:** This section deals with pressing and packaging of PP sacks into various quantities.

8.8 Machinery and Equipment

The proposed PP woven sacks production line will consist of the following machineries

a. Tape stretching line
b. Winding machinery
c. Water chilling machinery

d. Circular looms
e. Aluminum bobbin
f. Roll to roll printing machinery
g. Cutting machinery
h. Bale press
i. Compressor
j. Transformer
k. Stitching machinery
l. Control Panel
m. Standby generator

8.9 Land and Building

Land and building for the project will be contributed by the company to install the plant. The land and construction cost are estimated at TZS 717 million

8.10 Staff Plan

The envisaged project will create 100 jobs with various supporting staff. The professionals, support staff and unskilled staff for the envisaged project shall be recruitedlocally while few experts will be sourced outside the country. Training of key personnel shall be conducted in collaboration with the suppliers of the plant. The training will primarily focus on the production technology, machinery maintenance and trouble shooting.

The technicians from the suppliers of the machinery will train and transfer technical knowledge to the local workforce that will be employed by the company. The company will recruit the experienced Project manager to oversee the plant implementation and operation. The company will arrange to get experienced people from other PP sacks manufacturers who have experience in operating machinery for producing agro-sacks.

Table 5: Details of Human Resource

Sn	Category	Name	No.	Total per months	Total Per Month
I	Administration	Plant Manager	1	5,000,000	5,000,000
		Senior Accountant	1	2,500,000	2,500,000
		Commercial Manager	1	2,000,000	2,000,000
		Human Resource & Administration M	1	2,000,000	2,000,000
		Sales & Cashier	1	700,000	700,000
		Receptionist	1	400,000	400,000
		Human Resource Officer	1	800,000	800,000
		Accountant	2	1,000,000	2,000,000

		Drivers	2	350,000	700,000
		Services Supervisor	1	620,000	620,000
		Cook	1	300,000	300,000
		Office Helper	1	400,000	400,000
		Supervisor and Mechanics	2	900,000	1,800,000
		Securities	5	400,000	2,000,000
		Guardener	2	200,000	400,000
		SubTotal	**23**	**17,570,000**	**21,620,000**
II	Tapeline	Operators	2	420,000	840,000
		Winder	6	270,000	1,620,000
		Helpers	3	170,000	510,000
		Mechanics	1	400,000	400,000
		Sub Total	**12**	**1,260,000**	**3,370,000**
III	Looms	Operators	22	270,000	5,940,000
		Helpers	2	170,000	340,000
		Supervisors	2	500,000	1,000,000
		Mechanics	1	400,000	400,000
		SubTotal	**27**	**1,340,000**	**7,680,000**
IV	Finishing	Operators	12	220,000	2,640,000
		Helpers	10	170,000	1,700,000
		Cutting O/P	2	270,000	540,000
		Printing O/P	2	270,000	540,000
		Helpers	3	170,000	510,000
		Counting	3	170,000	510,000
		Bailers	2	220,000	440,000
		Supervisor	1	450,000	450,000
		SubTotal	**35**	**1,940,000**	**7,330,000**
V	Stores & Procu	Incharge	1	857,000	857,000
		Helpers	2	270,000	540,000
		SubTotal	**3**	**1,127,000**	**1,397,000**
		Grand Total	**100**	**23,237,000**	**41,397,000**
		Add: Pension 10% & SDL 4.5%			6,209,550
		Workers Compensation-1%			2,069,850
		Total			**49,676,400**

8.11 Project Implementation Schedule

Project implementation schedule covers the activities starting from the project planning and evaluation and approval, building construction, procurement plant and machinery, trial-run and commissioning. It is envisaged that the complete implementation program requires a total of 12 months starting from the project approval and contracting. The project implementation cost are pre-operational expenses which include costs of project management, detail engineering of equipment and civil works, erection andcommissioning, consultancy services and personnel training and pre-marketing expenses.

The implementation of the project for setting up manufacturing facilities consisting of the following stages

Table 3: Implementation Schedule

PROCESS	ACTIVITIES	TIME FRAME
Project Planning, evaluation andfinancing	• Preparing of Business Plan • Business Plan Evaluation • Obtaining all permits, approvals andlicenses • Project Engineering & design • Identification, application andapproval of funds	*6-Months*
Implementation	**a. Contracting** Drawing up legal contracts with respectto: • Project Financing-Banks/Investors • Contractors/Suppliers • Technical and Marketing Experts	*2-Months*
	b. Construction& Supply • Buildings and civil works Preparation • Erection and installation of plantand machinery and equipment • Training of technicians and workers	*12-Months*

Commissioning	• Installation, Trial running and commissioning • Set up Maintenance and operationprogram • Pre-marketing	***2-Months***
Operation	• Commencing Commercialproduction • Accounting & Documentations • Quality control • R&D	**2-Months**

9 INVESTMENT AND FINANCING PLAN

9.1 Investment cost

The total project cost for the proposed plants is made up of the following items

a. Land and Building
b. Procurement and installation of new PP woven sacks production plants
c. Furniture and Fixtures
d. Pre-operating expenses for project implementation
e. Initial Working capital to cater for three-month operations

The table 6: Details of estimated investment cost

Sn	Details	Amount (TZS)
1	Land and Building	717,000,000
2	Plant & Machinery	421,200,000
3	Furniture & Fixtures	10,000,000
4	Pre-operation Expenses	30,000,000
5	Initial Working Capital	100,000,000
Total		**1,278,200,000**

9.2 Financing Plan

Table 7: Details of Financing Plan

Item	Equity-TZS	Loan-TZS	Total-TZS
Land & Building	717,000,000		717,000,000
Plant & Machinery		421,200,000	421,200,000
Furniture & Fixtures	10,000,000		10,000,000
Pre-Operation Expenses	30,000,000		30,000,000
Working Capital		100,000,000	100,000,000
Total	**757,000,000**	**521,200,000**	**1,278,200,000**

Debt to Equity Ratio is 59% by 41%

10 PERMITS & REGULATION

To set up and operate the PP woven sacks Project requires the following permits**Table**

8: Details of Permits and Licenses

Certificates
National Environment Certificate
OSHA
TBS

Industrial License
TIC Certificates
Business License
Local Government Authority

The company will liaise with Government Authorities in order to get permits

11 ENVIRONMENT ISSUES

In adherence to regulations, the company has in place environment certificate from the National Environmental Management Council for the existing business operations. The environment factors will be considered in order to protect environment as well as to comply with other regulatory bodies including OSHA.

11.1 Factory Design

The factory designs are planned not only be environmentally friendly but also aesthetically appealing. The facility will comprise of the processing plant, office space, warehouse, an open and a reserve water tank which will be designed to allow adequate ventilation and lightning to minimize energy consumption.

11.2 Plants, Machinery and Equipment

The equipment designs make and capacity ratings have been carefully selected based ontheir suitability and minimal environmental emissions.

11.2.1 Waste Disposal

The production process flow is environmentally friendly. Waste will be collected and disposed as per municipal regulation. The company will buy recycling machinery for recycling waste produced from the production process.

12. FINANCIAL PROJECTION

The financial viabilities for the proposed PP woven sacks project are evaluated based on the following financial parameters **(Excel Sheet is Appended)**

12.1 Profitability

Based on the projected profit and loss statement, the project will generate a profit throughout its operation life. Annual net profit after tax will grow from TZS 42.853 million to TZS 2.668 billion during the life of the project. Moreover, at the end of the project life the accumulated net cash flow amounting to TZS 12.986 billion

12.2 Ratios

In financial analysis, financial ratios and efficiency ratios are used as an index or yardstick for evaluating the financial position of a firm. It is also an indicator for the strength and weakness of the firm or a project. Using the year-end balance sheet figures and other relevant data, the most important ratios such as return on sales which is computed by dividing net income by revenue, return on assets (operating income divided by assets), return on equity (net profit divided by equity) and return on total investment (net profit plus interest divided by total investment) has been carried out over the period of the project life and all the results are found to be satisfactory.

12.3 Break-even analysis

The break-even analysis establishes a relationship between operation costs and revenues. It indicates the level at which costs and revenue are in equilibrium. To this end, the break-even point for capacity utilization and sales value estimated by using income statement projection are computed and the company has break-even capacity utilization of 55 tons of woven sacks.

12.4 Pay- back Period

The pay -back period, also called pay – off period is defined as the period required for recovering the original investment outlay through the accumulated net cash flows earned by the project.

Accordingly, based on the projected cash flow it is estimated that the project's initial investment will be fully recovered within 3.5 years.

12.5 Internal Rate of Return (IRR)

The internal rate of return (IRR) is the annualized effective compounded return rate that can be earned on the invested capital, i.e., the yield on the investment. Put another way, the internal rate of return for an investment is the discount rate that makes the net present value of the investment's income stream total to zero. It is an indicator of the efficiency or

quality of an investment. A project is a good investment proposition if its IRR is greater than the rate of return that could be earned by alternate investments or putting the money in a bank account. Accordingly, the IRR of this project is computed tobe 61.92% indicating the viability of the project.

12.6 Net Present Value

Net present value (NPV) is defined as the total present (discounted) value of a time seriesof cash flows. NPV aggregates cash flows that occur during different periods of time during the life of a project in to a common measuring unit i.e., present value. It is a standard method for using the time value of money to appraise long-term projects. NPV is an indicator of how much value an investment or project adds to the capital invested. In principle, a project is accepted if the NPV is non-negative. Accordingly, the net presentvalue of the project at 19% discount rate is found to be TZS 12.943 billion which is acceptable.

13. SOCIAL AND ECONOMIC IMPACT

The project will promote social-economic goals and objectives stated in the strategic plan of Tanzania to be industrialized country with the following benefits:

- The project is found to be financially viable and generate profit within the project life span. Such results induce the project promoters to reinvest the profit which therefore increase the investment magnitude in the region and hence increase employment opportunities and taxes.

- In the project life under consideration, the region will collect corporate tax. Such results create additional fund for the government that will be used in expanding social and other basic services.

- The analysis conducted revealed the presence of strong dependency on the imported sacks we learn that in the project life the foreign currency will be saved as a result of the proposed project. This will create a room for saved currency to use in other vital and other strategic sector.

- The project is expected to create employment opportunity to several citizens of the country. That is, it will provide employment of 100professionals as well as support staff.

- The project will provide multiplier effect to the people Chimala area

13. CONCLUSION

VCSL is planning to establish PP Woven Production Project. The promoters are confidence that the project will operate successfully of which investors and lender are assured return of

capital invested due to the following reasons

- The company will recruit competent management team to run the project.
- The technology used for production process is proven and will be sourced from China. The supplier will provide technology guarantee for the period of commercial production.
- Currently, demand for the PP woven sacks in Tanzania is met by imports and local production. The demand for PP woven sacks is growing due to industrialization and agricultural growth.
- The project will be implemented under turnkey contract and hence completion risk will be mitigated.