

AGRO AFRICA GENERAL TRADING COMPANY LIMITED



BUSINESS PLAN

For TIC Registration of a LED Products Assembling Project

AUGUST 2024

1.0 DISCLAIMER

This Business Plan is developed for the sole purposes of registering a new Project with Tanzania Investment Centre (TIC). The plan details issues and projections on the business idea conceived by the promoters of the company. Situations on the ground can drive the results to different results but the company will use the best experts in the field to ensure that the project is a success.

2.0 EXECUTIVE SUMMARY

This is a business plan detailing projections for a USD 2,915,000 project aimed at assembling of LED products in Tanzania. The project targets the local Tanzanian market where the plant will be erected and the regional markets of the neighboring countries. At full capacity during year 5 the capacity of the project is planned to be 90,774 units.

Among the benefits of the project are job creations (200 direct jobs and 6,000 indirect jobs), tax revenue to the government of Tanzania, cash flows to household and firms, reduction of imports and increasing of exports of LED products and so forth.

The business plan has analyzed the various aspects of the project and the promoters are confident of success of their business idea. As such, the plan is presented to TIC in order that the project enjoys soft landing in terms of incentives to the greater good of Tanzania's economy.

3.0 CONTENTS

- 1.0 DISCLAIMER 0
- 2.0 EXECUTIVE SUMMARY 2
- 3.0 CONTENTS 3
- 4.0 INTRODUCTION 5
- 5.0 THE PROJECT AND PRODUCTS 6
 - 5.1 Project Scope 6
 - 5.2 The Products 7
 - 5.3 Project Financing 10
 - 5.4 Items Financing 11
 - 5.5 Investment Plans 12
- 6.0 MARKET ANALYSIS 13
 - 6.1 Market Overview 13
 - 6.2 Target Market 13
 - 6.3 The Trade Perspective 13
 - 6.3.1 Global Trade of LED Products 13
 - 6.3.2 The Regional Market Trade in LED Products 15
 - 6.3.4 The Tanzanian Market 16
 - 6.4 SWOCT Analysis 16
 - 6.4.1 The Internal Environment 16
 - 6.4.2 The External Environment 19
 - 6.5 PESTEL Analysis 22
 - 6.6 The Markets 26
 - 6.7 The Marketing Strategies 26
- 7.0 FINANCIAL PROJECTIONS 29
 - 7.1 Production Projections 29

| | |
|---|----|
| 7.2 Sales Projections | 30 |
| 7.3 Gross Profit Projections | 30 |
| 7.4 Projected Income Statement | 31 |
| 7.5 Projected Cash Flow Statement | 32 |
| 8.0 BENEFITS OF THE PROJECT..... | 33 |
| 9.0 CONCLUSION..... | 34 |
| 10.0 RECOMMENDATIONS..... | 34 |

4.0 INTRODUCTION

4.1 The Company

Agro Africa General Trading Company Limited is a company registered under the laws of the United Republic of Tanzania and issued with certificate of incorporation no. 173554214 of April 3rd, 2024. Its TIN Number is 173-554-214.

The authorized share capital of the company is TShs. 20,000,000 divided into 100 shares of TShs. 200,000 each. All the authorized shares have been taken in a 50:50 proportion between 2 shareholders as shown below.

| NO. | SHAREHOLDER | NATIONALITY | SHARES TAKEN | % SHAREHOLDING |
|-----|---------------------|-------------|--------------|----------------|
| 1. | Rahul Pratap Gumber | Indian | 50 | 50% |
| 2. | Sachin Thakur | Indian | 50 | 50% |
| | TOTAL | N/A | 100 | 100% |

4.2 The Project

Agro Africa General Trading Company Limited plans to establish a project of assembling of LED (Light Emitting Diode) electronics, mainly LED TVs and LED Lights as well as Plastics molding machine to manufacture plastic parts of LED TV and LED lights in Tanzania. The global electronics market has witnessed significant advancements and transformations over the past two decades, with LED television and LED lights Products technology leading the charge in delivering superior viewing experiences. Recognizing the increasing demand for high-quality visual entertainment, we propose the establishment of an LED TV and LED Lights assembling project aimed at producing state-of-the-art LED televisions and lights that meet the diverse needs of consumers in Tanzania and I the neighboring countries.

Project Objectives

The primary objectives of this project are as follows:-

- i) **Market Penetration:** To establish a strong presence in the growing electronics market and capture a significant share of the LED TV, Lights and other products sector.
- ii) **Quality Production:** To manufacture high-quality, reliable, and energy-efficient LED products using cutting-edge technology and components.
- iii) **Innovation and Design:** To introduce innovative designs and features that enhance the user experience, ensuring our products stand out in the ever-changing and highly competitive marketplace.
- iv) **Sustainability:** To implement eco-friendly assembling processes and promote energy-efficient products, aligning with global sustainability trends.
- v) **Job Creation:** To create employment opportunities within the local community and contribute to economic growth. The employment will be both direct and indirect. Also, the economic growth will be both direct and indirect as detailed under the "benefits of the project" section.

The LED Products assembling project is positioned to take advantage of a thriving market, driven by consumer demand for advanced technology and quality products. Through a commitment to excellence, innovation, and sustainability, this initiative aims to achieve commercial success while contributing positively to the economy and the environment. We are excited about the potential of this project and look forward to shaping the future of home entertainment through cutting-edge LED technology in Tanzania and its neighboring countries.

5.0 THE PROJECT AND PRODUCTS

5.1 Project Scope

The LED Products assembling project will involve the following:-

- i) **Research and Development:** Investing in R&D to stay ahead of industry trends, incorporating the latest technologies such as Smart TV features, 4K resolution, and advanced display technologies.
- ii) **Assembling Facility Setup:** Establishing a production facility equipped with modern machinery and automated processes to ensure high efficiency and quality control.
- iii) **Supply Chain Management:** Developing strong relationships with suppliers of raw materials and components, ensuring a steady supply of quality parts at competitive prices.
- iv) **Marketing and Sales Strategy:** Creating a robust marketing plan that highlights product features, competitive pricing, and brand positioning to effectively reach our target audience.
- v) **Distribution Channels:** Establishing partnerships with retailers, online platforms, and distributors to ensure broad market access.

5.2 The Products

LED (Light Emitting Diode) products have gained immense popularity due to their energy efficiency, long lifespan, and versatility in various applications. Below is an overview of various LED products across different categories:-

1. LED Lighting

- a) **LED Bulbs:** These are energy-efficient alternatives to traditional incandescent and fluorescent bulbs, suitable for both residential and commercial lighting.
- b) **LED Panels:** These are the flat lighting fixtures used in offices and homes, offering uniform light distribution for ceilings.
- c) **LED Strip Lights:** These are the flexible strips with adhesive backing used for decorative and accent lighting in homes, businesses, and vehicles.
- d) **LED Flood Lights:** These are the high-intensity lights used for outdoor lighting, security, and illuminating large areas like parking lots or sports fields.

e) LED Downlights: These are the recessed lighting fixtures that provide focused illumination in living spaces, commercial areas, and hallways.

f) LED High Bay Lights: These are designed for high-ceiling environments such as warehouses and industrial spaces, providing powerful illumination.

g) LED Street Lights: These are the energy-efficient lighting solutions for urban areas that enhance safety and visibility while reducing energy consumption.

2. LED Displays

a) LED TVs: These are the high-definition televisions that utilize LED backlighting for improved picture quality and energy efficiency.

b) LED Monitors: These are computer displays that use LED technology for vibrant colors and energy savings compared to traditional LCD monitors.

c) LED Billboards: These are the large outdoor advertising displays that use LED panels to produce bright and dynamic advertisements.

d) LED Video Walls: These are composed of multiple LED panels, used for events, concerts, and public displays to deliver large-scale visuals.

3. LED Signs

a) LED Neon Signs: These are the flexible LED technology that mimics the appearance of traditional neon signage for artistic and business applications.

b) Programmable LED Signs: These are the electronic signs that can display customizable messages and advertisements, ideal for businesses and events.

c) LED Exit Signs: These are the illuminated signs that indicate exits in buildings, designed for safety and compliance with building codes.

4. LED Automotive Products

- a) LED Headlights: These are the energy-efficient headlights providing enhanced visibility and longer lifespan compared to traditional halogen lights.
- b) LED Taillights: These are brake lights and signals designed to improve safety and reduce energy consumption in vehicles.
- c) LED Interior Lights: These are used in cars for dashboard illumination, footwells, and ambient lighting for aesthetics and safety.

5. Specialty LED Products

- a) LED Grow Lights: These are used in agriculture to promote plant growth by providing the specific wavelengths of light that plants need.
- b) LED Holiday Lighting: These are decorative lights used during festive seasons, available in various styles like string lights and net lights.
- c) LED Flashlights: These are the portable lighting devices utilizing LED technology for bright, energy-efficient illumination.

6. LED Medical Products

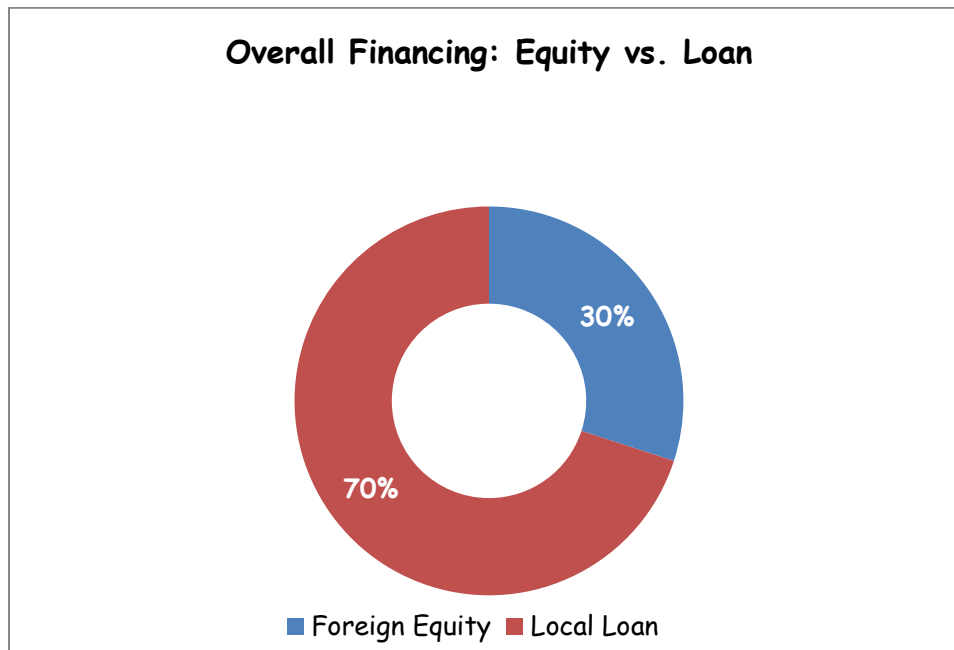
- a) LED Surgical Lights: These are the high-intensity, adjustable lighting used in surgical procedures to ensure precise visibility for surgeons.
- b) LED Therapy Lights: These are used for light therapy treatments for conditions like Seasonal Affective Disorder (SAD).

Light Emitting Diode (LED) products are diverse and can be found across various industries, significantly impacting energy savings, environmental sustainability, and technological advancement. As the market continues to grow and innovate, we can expect even more applications and enhancements in LED technology to emerge. Our project plans to start with LED TVs and LED Lights.

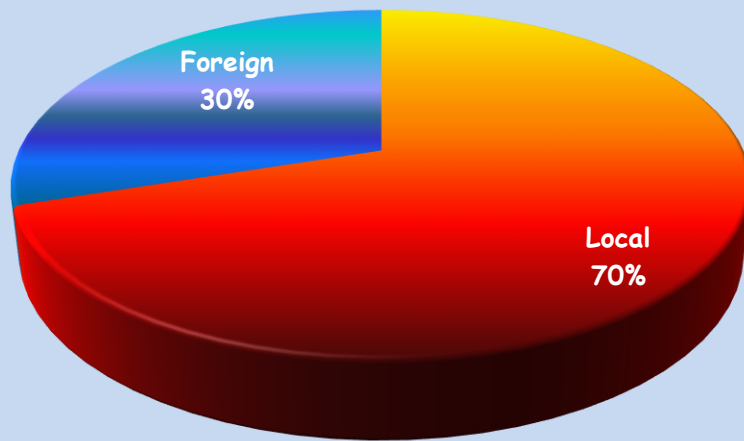
5.3 Project Financing

This is a USD 2,915,000 project owned 100% by foreign investors. It is planned to be financed by equity to the tune of 30% and a loan of 70% as shown below:-

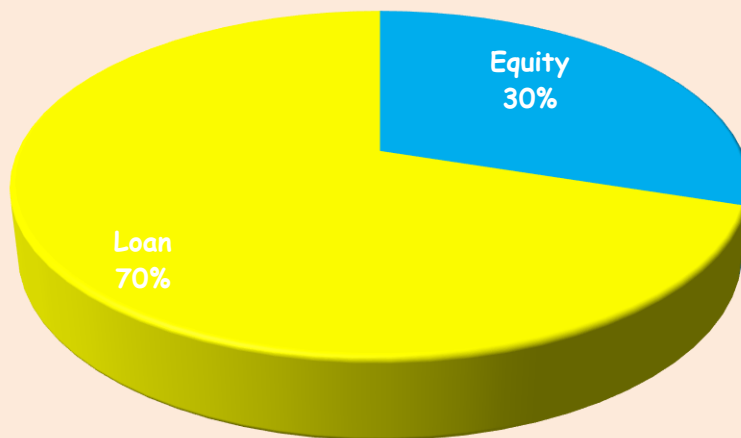
| CATEGORIES | AMOUNT (USD) | % SHARE |
|------------------------|------------------|------------|
| EQUITY | | |
| <i>Local Equity</i> | - | - |
| <i>Foreign Equity</i> | 874,500 | 30 |
| Total Equity | 874,500 | 30 |
| LOAN | | |
| <i>Local Loan</i> | 2,040,500 | 70 |
| <i>Foreign Loan</i> | - | - |
| Total Loan | 2,040,500 | 70 |
| TOTAL FINANCING | 2,915,000 | 100 |



Financing by Nationality



Financing Modal

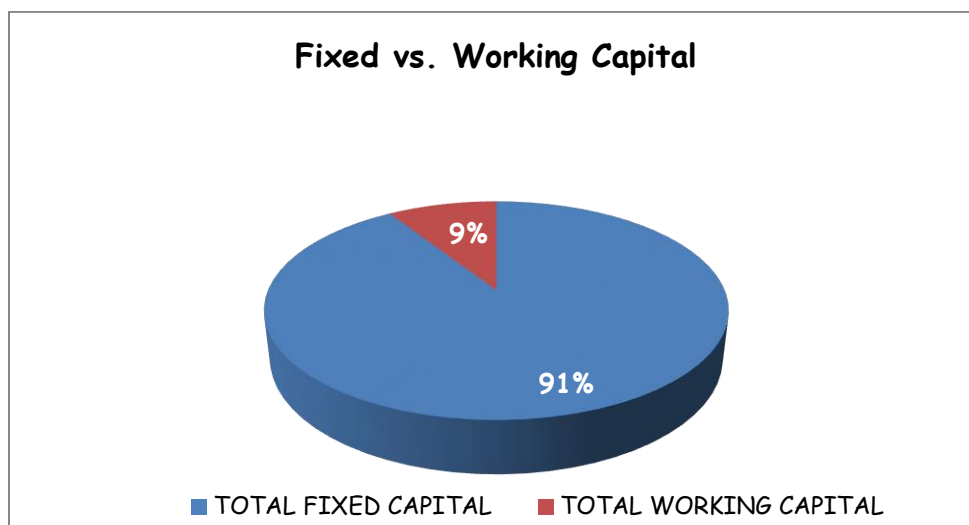


5.4 Items Financing

Below is the details on financing of items in the project and illustration on the fixed assets and working capital.

| ITEM | AMOUNT IN USD |
|------------------|---------------|
| Land & Buildings | 350,000 |
| Plant | 1,200,000 |
| Vehicles | 700,000 |

| | |
|----------------------|------------------|
| Furniture & Fittings | 120,000 |
| Pre Expenses | 80,000 |
| Others | 200,000 |
| Working Capital | 265,000 |
| TOTAL | 2,915,000 |



5.5 Investment Plans

This is a 5 years project. Over this half decade of project implementation the company expects to invest a total of USD 2,915,000. The annual projected injection of capital is detailed below:-

| ITEM | INVESTMENT PLAN | | | | | TOTAL INVESTMENT |
|----------------------|------------------|----------------|----------------|---------------|---------------|------------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 | |
| Land & Buildings | 250,000 | 100,000 | | | | 350,000 |
| Plant | 900,000 | 300,000 | | | | 1,200,000 |
| Vehicles | 500,000 | 150,000 | 50,000 | | | 700,000 |
| Furniture & Fittings | 25,000 | 75,000 | 20,000 | | | 120,000 |
| Pre Expenses | 80,000 | | | | | 80,000 |
| Others | 200,000 | | | | | 200,000 |
| Working Capital | 53,000 | 53,000 | 53,000 | 53,000 | 53,000 | 265,000 |
| TOTALS | 2,008,000 | 678,000 | 123,000 | 53,000 | 53,000 | 2,915,000 |

6.0 MARKET ANALYSIS

6.1 Market Overview

The demand for LED TVs and products continues to rise due to ongoing innovations in technology, affordability, and the shift toward smart home entertainment systems. With consumers increasingly seeking high-definition viewing experiences, the LED TV market presents lucrative opportunities for manufacturers who can provide quality products at competitive prices.

6.2 Target Market

Our target audience will encompass a wide range of consumers in Tanzania and I the neighboring countries including the following:-

- i) Residential Customers: Families and individuals looking for high-definition entertainment options.
- ii) Commercial Clients: Hotels, restaurants, and businesses seeking bulk purchases for advertising and customer engagement.
- iii) Online Retail Partners: E-commerce platforms that will distribute our products to a broader audience.

6.3 The Trade Perspective

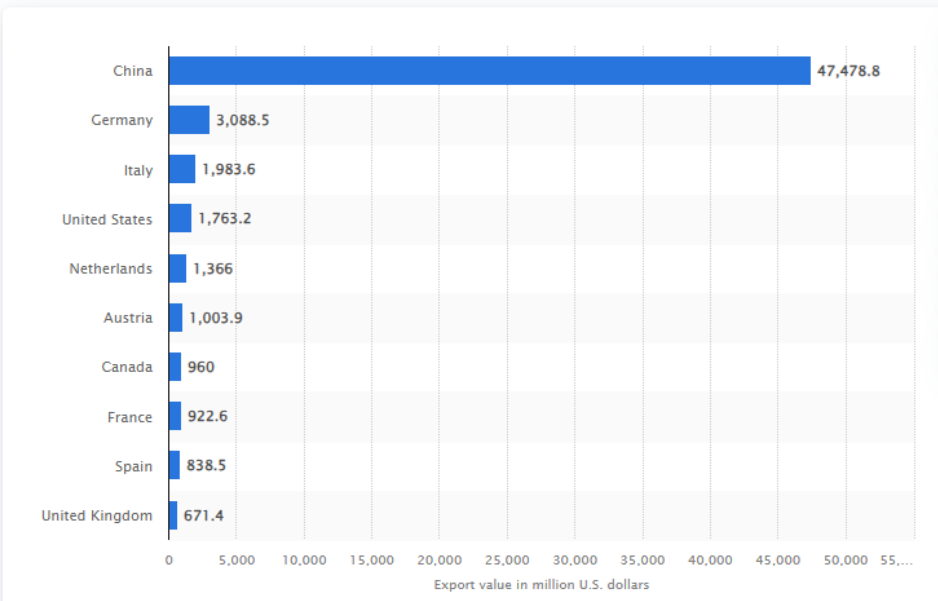
This sub-section focuses on the Light Emitting Diode (LED) Products trade at the global, regional and local perspectives. It elucidates on exports, imports and balances of trade for LED Products as well as geographies of the products (export destinations and import sources).

6.3.1 Global Trade of LED Products

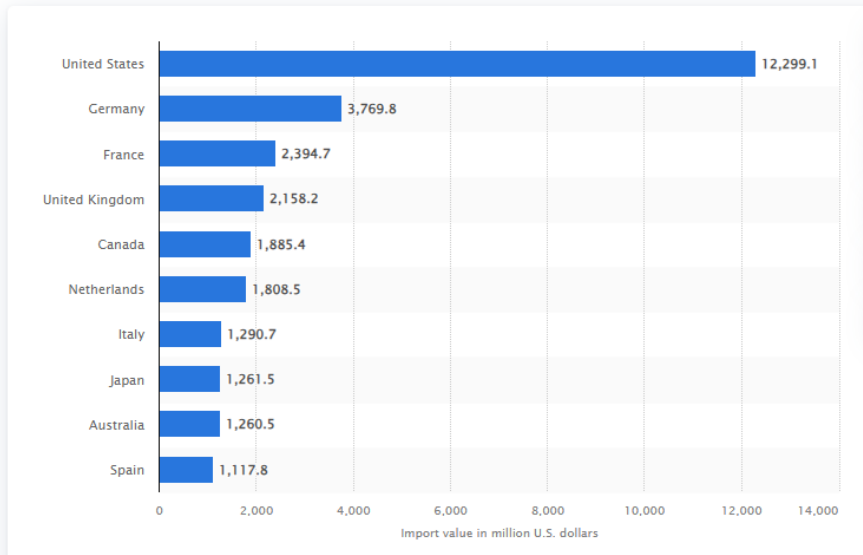
Globally, in 2022, Lamps - light-emitting diode (LED) lamps were the world's 551st most traded product, with a total trade of USD7.13 billion. Between 2021 and 2022 the exports of Lamps; light-emitting diode (LED) lamps decreased by -15.6%, from USD 8.45 billion to USD 7.13 billion. During the year 2022 the top exporters of Lamps; light-emitting diode (LED) lamps were

China (USD 5.95billion), France (USD 250 million), Germany (USD 131 million), Poland (USD 130 million), and the Netherlands (USD 99million).

Leading Exporting Countries - Lighting Fixtures and Fittings (2022)



Leading Importing Countries - Lighting Fixtures and Fittings (2022)



The global size of the LED Products is highly promising despite the existing competition in the market. China, for example, dominates much of the eastern

African market hence posing a challenge. Our company will leverage on technology, efficiency, quality and geographical proximity to win the market.

6.3.2 The Regional Market Trade in LED Products

This sub-item views the potentiality of the regional market for LED Products. Since Tanzania is the eastern gateway to the landlocked countries of Uganda, Burundi, Rwanda, DRC, Zambia, Malawi and Zimbabwe the company has chosen these countries as part of the analysis of the market. This is due to the fact that most of the imported products reach these countries from China and the Middle East via the Dar es Salaam port. As such, the said countries are targeted as a regional market for our products. Key focus is on general economic parameters of the countries.

Selected Economic Parameters for the Regional Market

| No. | COUNTRY | POPULATION (MILLIONS) | GDP (BILLION USD) | GDP PER CAPITA | GDP GROWTH RATE | TOTAL IMPORTS (BILLION USD) |
|-----|----------|-----------------------|-------------------|----------------|-----------------|-----------------------------|
| 1 | Burundi | 12.89 | 3.339 | 259.03 | 1.8 | 1.23 |
| 2 | DRC | 99.01 | 64.72 | 653.66 | 8.9 | 15.4 |
| 3 | Malawi | 20.41 | 13.16 | 645.16 | 0.9 | 2.15 |
| 4 | Rwanda | 13.78 | 13.31 | 966.23 | 8.2 | 4.32 |
| 5 | Uganda | 47.25 | 45.57 | 964.4 | 4.6 | 98.7 |
| 6 | Zambia | 20.02 | 29.16 | 1,456.90 | 5.2 | 10.2 |
| 7 | Zimbabwe | 16.32 | 27.37 | 1,676.82 | 6.5 | 8.56 |
| | TOTALS | 229.68 | 196.629 | | | 140.56 |
| | AVERAGES | | | 946.03 | 5.16 | |

With a combined population of 229.68 million people, USD 196.629 GDP and USD 140.56 billion in imports value as well as average GDP per capita of USD 946.03 that has an average growth rate of 5.16% the region is a promise land

to our project. Assuming that imports of LED products accounts for 0.002% of all imports the total imports of the products into the region will be a USD 0.03 billion. The company will strategize on securing a sizeable niche in the market within these countries.

6.3.4 The Tanzanian Market

This sub-item focuses on the Tanzanian market in view of the imports, and of the LED Products. Tanzania is a country of 65.5 million population, USD 75.73 billion GDP, 4.6% GDP growth rate, USD 1,192.77 GDP per capita, and 22.1 billion in total imports. The local market is promising both as a host market and as a metropolitan for the landlocked countries.

6.4 SWOCT Analysis

This sub-item focuses on the company's internal strengths and weaknesses, as well as its environmental opportunities, challenges and threats. This analysis gives the company a position on which to stand to thrive in the market

6.4.1 The Internal Environment

Strengths

The company has several strengths that provide a competitive edge in the LED products market. Here are key strengths of the company:-

1. Energy Efficiency and Cost Savings: -

a) Lower Operating Costs: the company uses significantly less power in producing the products that use lower energy consumption leading to lower energy bills for the company, the consumers and businesses.

b) Long Lifespan: the company is capable of producing LEDs of a longer lifespan (typically 25,000 to 50,000 hours), reducing replacement frequency and maintenance costs for users.

2. Technological Advancements:-

a) Innovation Opportunities: The LED market is ripe for innovation, from smart lighting solutions integrated with Internet of Things (IoT) technology to advanced assembling techniques, enabling the company to differentiate its products.

b) Customization: The Company is able to create customized and specialized LED products to meet specific consumer and industrial needs.

3. Sustainability and Environmental Impact:-

a) Eco-Friendly Products: LEDs are free of harmful chemicals (like mercury) present in traditional lighting systems. The company is aligned with global sustainability initiatives.

b) Regulatory Compliance: As governments worldwide implement stricter regulations on energy consumption and environmental impacts, investing in LEDs positions a company favorably to meet compliance standards.

4. Brand Reputation and Customer Loyalty:-

a) Positive Brand Image: The company focuses on energy-efficient and sustainable products, so it can enhance brand reputation, attracting environmentally conscious consumers.

b) Customer Loyalty: The company has the ability to provide high-quality, energy-efficient lighting solutions fosters customer loyalty and repeat business as users appreciate the long-term savings and reliability.

5. Adoption of Smart Technologies:-

a) Integration with Smart Home Technologies: The company is capable of swinging with the wave of the growing trend towards home automation and smart lighting systems so it can enhance product offerings and market appeal.

b) Use of IoT and AI: Leveraging new technologies (like IoT) can result in more advanced and user-friendly products, providing competitive advantages.

6. Skilled Workforce and Expertise:

a) Talent Pool: The technological nature of LED production requires skilled labor, which can be acquired through collaboration with educational institutions or by attracting talent from existing markets. The company is positioned to develop an excellent talent pool.

b) Expertise Development: Over time, the company will develop in-house expertise in LED technology, product development, and assembling processes.

By focusing on innovation, sustainability, and market trends, the company is capable of effectively positioning itself as a leader in the rapidly evolving lighting industry.

Weaknesses

Investing in LED product production comes with its own set of weaknesses that the company to considers. Here are some of the potential weaknesses associated with our project:-

1. Limited Product Differentiation:

a) Homogenization: Many LED products have similar features, making it challenging for companies to differentiate their offerings in a crowded market.

b) Dependency on Design Innovations: Continuous need for innovative designs to capture consumer interest, which can require additional R&D expenditure.

While there are significant opportunities in the LED production market, the company is aware of and strategizes around these weaknesses. Proper risk management, market analysis, continuous innovation, and a focus on quality will be employed to help mitigate these potential challenges and allow a business to thrive in the LED products market.

6.4.2 The External Environment

This sub-item focuses on environmental opportunities and threats the company will face in the market.

Opportunities

1. Growing Market Demand:-

a) **Rising Awareness:** Increasing consumer awareness about energy efficiency and sustainability is driving demand for LED products, as they offer significant energy savings compared to traditional lighting solutions.

b) **Diverse Applications:** LEDs are versatile and can be used in various applications, including residential, commercial, automotive, and industrial sectors, allowing for diverse revenue streams.

2. Huge Potential for Export:-

a) **International Markets:** The expanding global market for LED products creates opportunities for exporting, especially in regions like Sub-Saharan Africa where energy-efficient solutions are in high demand.

b) **Collaborative Ventures:** Opportunities exist for partnerships or collaborations with businesses and governments focused on energy conservation initiatives.

3. Access to Incentives and Funding:

a) **Government Incentives:** the Government of Tanzania offers incentives for companies investing in energy-efficient technologies, which can help offset initial investment costs. This is why the company registers the project with TIC which offers the incentives

b) **Research Grants:** The availability of funding for research and development in green technologies supports innovation in LED products assembling.

4. Strong Supply Chain Opportunities:-

a) Local Sourcing: although the ability to source components locally is lower Tanzania's position as a gateway to other countries will lower production costs and reduce cost of transportation of imported components via international supply chains.

b) Efficient Assembling Processes: the company will embark on investing in automation and lean assembling practices to enhance production efficiency, reduced waste, and competitive products.

Threats and Challenges

This sub-item focuses on the threats and challenges the company will face in implementing the project. Here are some key issues:-

1. High Initial Investment: Capital expenditure for setting up of assembling facilities for LED products often requires substantial initial capital for equipment, technology, and facilities, which may pose a barrier for some companies. Also, continuous research and development investments are needed to keep up with technological advancements, leading to high ongoing costs.

2. Rapid Technological Changes: Obsolescence risk is very high in the fast-paced evolution of LED technology as products can quickly become outdated, resulting in potential financial losses if a company cannot adapt or innovate quickly enough. Also, investment in new technologies in the form of consistent investment in the latest technologies is inevitable in order to maintain competitiveness, which can strain financial resources.

3. Market Competition: The LED market is highly competitive, with numerous established players - mostly those exporting to the targeted markets - and new entrants, making it challenging to secure market share. Also, competitive

pricing can lead to reduced profit margins especially if companies engage in aggressive pricing strategies (price wars) to attract customers.

4. Supply Chain Challenges: Dependence on specific materials (like rare earth elements) can pose risks related to supply chain disruptions and fluctuating raw material costs. Also, geopolitical issues, trade tariffs, and global disruptions can heavily impact sourcing and production timelines.

5. Regulatory and Compliance Issues: Navigating various local, national, and international regulations regarding product safety, environmental impact, and energy efficiency can create challenges. Also, products often require certifications (e.g., Energy Star, RoHS) that involve time and costs to obtain.

6. Potential for Low-Quality Perception: The proliferation of low-quality LED products in the market can lead to skepticism among consumers, making it challenging for reputable brands to stand out. Assembling defects or subpar product performance can damage the company's reputation and customer trust.

8. Environmental and Safety Concerns: The assembling process can produce hazardous waste materials, requiring companies to invest in proper waste management systems. Issues related to recycling and disposal of LED products as well can lead to environmental scrutiny and affect public perception.

9. Economic Sensitivity: Demand for LED products can be sensitive to economic downturns, affecting the overall profitability of manufacturers. Also, in economically challenging times, consumers may prioritize essential spending over upgrading lighting solutions.

10. Talent Acquisition and Retention: The need for a skilled workforce with expertise in LED technologies can be a challenge, particularly in Tanzania and the Sub-Saharan Africa regions which have shortage of qualified personnel.

High competition for talent may lead to employee turnover, increasing recruitment and training costs.

Generally there are many challenges and threats in the field but the management is positioned to develop smart strategies in order to win the market.

6.5 PESTEL Analysis

This sub-section analyses the Political, Economic, Social, Technological, Environmental, and Legal factors that may affect our target market. It further examines the external factors that could influence the business environment of Tanzania. For LED products assembling in Tanzania, here is a breakdown of the PESTEL factors:-

1. Political Factors:-

a) *Government Policies:* The Tanzanian government's policies toward renewable energy and energy efficiency can significantly impact positively the LED assembling sector. Supporting policies include incentives for energy-efficient technologies.

b) *Political Stability:* Political stability in Tanzania is crucial for attracting foreign investment, including in the assembling sector. Political uncertainty, which is not characteristic of Tanzania, can deter investments and disrupt supply chains.

c) *Trade Agreements:* Tanzania is a member of bilateral, regional and multilateral trade agreements. Among the regional trade agreements are those giving the country access to markets under the AfCFTA, COMESA, EAC and SADC. These agreements do facilitate easier export and import of LED products and components.

d) *Regulations on Energy:* Tanzanian government is focused on increasing energy in rural areas. That is why it has created the Rural Energy Authority

(REA). This implies presence and implementation of policies encouraging the use of energy-efficient lighting solutions like LEDs.

2. Economic Factors:-

a) *Economic Growth*: Tanzania's growing economy influences consumer purchasing power. This leads to increased demand for quality lighting solutions, including LEDs.

b) *Energy Costs*: Fluctuating energy prices can influence the attractiveness of energy-efficient products. Higher energy costs may drive consumers toward adopting LED lighting solutions for cost savings.

c) *Accessibility of Financing*: Tanzania has a lot of financial institutions that support green technology investments and assembling expansion can facilitate growth in the LED sector.

d) *Employment Rates*: Employment levels in Tanzania affect consumer spending power. With good levels Tanzania is a promising market for LED products. So are the neighboring countries with relatively higher GDP per capita.

3. Social Factors:-

a) *Raising Awareness*: There's a growing awareness of the benefits of LEDs, including energy savings and sustainability in Tanzania. Consumer education campaigns will be employed to further drive the demand.

b) *Urbanization*: Increased urbanization in metropolitans like Dar es Salaam, Dodoma, Mbeya, Mwanza and Tanga can result in greater lighting demands, impacting the growth potential for LED products.

c) *Cultural Attitudes*: Preferences for traditional lighting products may still exist in some communities, affecting the adoption rate of LED technology. The

company will embark on intensive campaigns - social awareness teaser campaign to raise awareness of the product and foster effective demand.

d) *Population Growth*: Tanzania's population growth is promising and will surely lead to increased demand for infrastructure development, including residential and commercial buildings, which can boost the LED market.

4. Technological Factors:-

a) *Advancements in LED Technology*: Continuous advancements in LED technology enhance product efficiency, lifespan, and cost-effectiveness, impacting market competitiveness.

b) *Assembling Capabilities*: The availability of modern assembling technologies and expertise in Tanzania influences the efficiency and quality of LED production.

c) *Digital Infrastructure*: Improvements in digital infrastructure (e.g., internet access) facilitates e-commerce and marketing strategies for LED products. Tanzania has improved its internet access as it has the internet cable serving the country and the neighbors.

d) *Innovation in Lighting Solutions*: The development of smart lighting solutions integrated with Internet of Things (IoT) technology represents a significant opportunity for growth.

5. Environmental Factors:-

a) *Sustainability Initiatives*: An increasing global focus on sustainability and environmental responsibility can favor LED products, given their energy efficiency and lower environmental impact.

b) *Climate Change Impact*: Climate change and the need for adaptations may encourage investment in more sustainable lighting options like LEDs as part of climate mitigation strategies.

c) **Waste Management Regulations:** Regulations regarding electronic waste management can impact LED product lifecycle management, encouraging manufacturers to adopt more sustainable practices.

d) **Natural Resources:** The availability of raw materials needed for LED production can be influenced by environmental considerations and regulations.

6. Legal Factors:-

a) **Regulatory Framework:** Compliance with national and international standards for assembling LEDs will influence operations. Ensuring that products meet safety and performance standards is essential.

b) **Intellectual Property Rights:** Patent protections and intellectual property rights in the LED space can influence innovation and market entry strategies in Tanzania.

c) **Consumer Protection Laws:** Compliance with consumer protection laws, particularly concerning product quality and safety, is critical for building trust and reputation.

d) **Labor Regulations:** Adherence to labor laws and regulations affecting wages, working conditions, and employee rights will impact operational costs and company reputation.

The LED products assembling industry in Tanzania is influenced by a diverse range of factors outlined in this PESTEL analysis. We will consider these external factors carefully to develop strategies that align with the local political, economic, social, technological, environmental, and legal landscapes. This understanding can help to mitigate risks and capitalize on opportunities within the Tanzanian market, and the neighboring countries' markets.

6.6 The Markets

The company primarily targets the Tanzanian market. In addition it targets the markets of the neighboring countries namely Burundi, DRC, Malawi, Rwanda, Uganda, Zambia, and Zimbabwe.

6.7 The Marketing Strategies

Marketing LED products in Tanzania and her neighbors in the Sub-Saharan Africa requires a tailored approach due to the diverse economic, cultural, and infrastructural landscapes across the region. Here are several effective marketing strategies to consider:-

1. Education and Awareness Campaigns:-

a) Workshops and Seminars: Organizing workshops to educate consumers, businesses, and communities about the benefits of LED lighting, including energy savings, cost efficiency, and environmental benefits.

b) Comparison Campaigns: Creating marketing materials that compare traditional lighting options versus LED products, highlighting durability, efficiency, and long-term cost savings.

c) Promotional Events: Participating by exhibiting in events like Sabasaba and Nanenane

2. Leveraging on Local Distribution Networks:-

a) Partnerships with Local Retailers: Collaborating with local retailers, electrical supply stores, and hardware shops to facilitate the availability of LED products and gain access to established customer bases.

b) E-commerce Platforms: Utilize regional online marketplaces and e-commerce platforms to reach urban consumers while ensuring product availability in remote areas.

3. Targeted Promotions:-

a) *Discounts and Bundling Offers*: Introducing introductory pricing or bundling packages for households and businesses to encourage trial purchases.

b) *Incentive Programs*: Working with government MDAs, NGOs and private sector umbrella organizations to create incentive programs for using energy-efficient products, potentially reducing the costs for end-users.

4. Focus on Sustainability and Community Impact:-

a) *Sustainability Messaging*: Highlighting the environmental benefits of LEDs, such as reduced energy consumption and lower carbon footprints, to align with global sustainability trends.

b) *Community Engagement*: Investing in community projects, such as solar-powered community lighting initiatives, to showcase the effectiveness of LED technology and build brand trust.

5. Customizing Marketing Messages:-

a) *Cultural Relevance*: Tailor messaging to align with local languages, cultures, and traditions to resonate better with various target demographics.

b) *Addressing Local Issues*: Framing marketing messages around local issues such as inadequate lighting in rural areas or unreliable electricity supply, positioning LEDs as a practical solution.

6. Leveraging Technology and Digital Marketing:-

a) *Social Media Campaigns*: Using popular regional social media platforms to run targeted ad campaigns and engaging with potential customers, especially the youth demographic.

b) *Influencer Marketing*: Partnering with local influencers or community leaders who are trusted voices in their communities to spread awareness and promote the benefits of LED products.

7. Demonstration Projects:-

a) *Pilot Programs*: Conducting pilot lighting projects in selected communities or businesses where the benefits of LED lighting can be demonstrated in real-life settings to showcase efficacy.

b) *Interactive Exhibitions*: Setting up exhibitions or pop-up shops that allow potential customers to see and test the products firsthand, offering real-time demonstrations of quality and usage.

8. Emphasizing Affordability and Financing Options:-

a) *Flexible Payment Plans*: Offering financing options or installment payment plans to make it easier for consumers and businesses to invest in LED lighting systems.

b) *Micro-Financing Partnerships*: Partnering with micro-financing institutions to provide low-interest loans specifically for purchasing energy-efficient lighting solutions.

9. Utilizing CSR Initiatives:-

a) *Corporate Social Responsibility (CSR)*: Establishing CSR initiatives that focus on energy accessibility. Supporting efforts that improve energy infrastructure can enhance brand reputation and customer loyalty.

10. *Adapt to Regulatory Changes: Staying Informed on Policies*: Keeping up with government policies promoting energy-efficient products, and adapt marketing strategies to leverage any incentives or subsidies available.

11. After-Sales Support:-

a) *Customer Care Channels*: Establishing robust customer service support to address inquiries, installation, and after-sales issues, ensuring customer satisfaction and fostering loyalty.

b) **Feedback Mechanisms:** Implementing feedback channels to understand consumer needs better and improve products and services and tailor future marketing efforts.

Marketing LED products in Tanzania and the Sub-Saharan Africa region requires an understanding of the local context, educational initiatives, and strategic partnerships. By leveraging these marketing strategies, our company will effectively reach the target audience and promote the adoption of energy-efficient lighting solutions.

7.0 FINANCIAL PROJECTIONS

This section covers the various aspects of financial projections for the project. These include production plans, sales plans, income statement and cash flow statement as well as selected ratios.

7.1 Production Projections

The project expects to be producing various types of LED products including TVs, Lightings, Displays, Signs and Medical Products. The production set is not limited to the mentioned product as the projections are for select few products. The project will produce a wider range of products. The project capacity at Year 5 is expected to be 90,774 units per annum. Production is expected to be growing at 10% per annum.

Production Projections

| DETAILS | YEARS | | | | |
|--|---------------|---------------|---------------|---------------|---------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| Annual production of LED TVs (PCS) | 20,000 | 22,000 | 24,200 | 26,620 | 29,282 |
| Annual production of LED Lightings (PCS) | 10,000 | 11,000 | 12,100 | 13,310 | 14,641 |
| Annual production of LED Displays (PCS) | 20,000 | 22,000 | 24,200 | 26,620 | 29,282 |
| Annual production of LED Signs (Sets) | 10,000 | 11,000 | 12,100 | 13,310 | 14,641 |
| Annual production of LED Medical Products (Sets) | 2,000 | 2,200 | 2,420 | 2,662 | 2,928 |
| TOTAL PRODUCTION P. A. | 62,000 | 68,200 | 75,020 | 82,522 | 90,774 |

7.2 Sales Projections

This sub-section covers sales projections. Estimates show steadily growing trends from the first year to year 5.

| DETAILS | YEARS | | | | |
|---|-------------------|-------------------|-------------------|-------------------|--------------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| Sales Projections - LED TVs (85% of the stock) | 17,000 | 21,250 | 21,208 | 25,171 | 26,122 |
| Sales Projections - LED Lightings (85%) of Stock | 8,500 | 10,625 | 10,604 | 12,585 | 13,061 |
| Sales Projections - LED Displays (85%) of Stock | 17,000 | 21,250 | 21,208 | 25,171 | 26,122 |
| Sales Projections - LED Signs (85%) of Stock | 8,500 | 10,625 | 10,604 | 12,585 | 13,061 |
| Sales Projections - LED Medical Products (85%) of Stock | 1,700 | 2,125 | 2,121 | 2,517 | 2,612 |
| Price per Unit - LED TVs (6% Inflation) | 1,000 | 1,060 | 1,124 | 1,191 | 1,262 |
| Price per Unit - LED Lightings (6% Inflation) | 1 | 1 | 1 | 1 | 1 |
| Price per Unit - LED Displays (6% Inflation) | 1,000 | 1,060 | 1,124 | 1,191 | 1,262 |
| Price per Unit - LED Signs (6% Inflation) | 100 | 106 | 112 | 119 | 126 |
| Price per Unit - LED Medical Products (6% Inflation) | 1,000 | 1,060 | 1,124 | 1,191 | 1,262 |
| Sales in USD - LED TVs | 17,000,000 | 22,525,000 | 23,828,747 | 29,978,617 | 32,978,005 |
| Sales in USD - LED Lightings | 8,500 | 11,263 | 11,914 | 14,989 | 16,489 |
| Sales in USD - LED Displays | 17,000,000 | 22,525,000 | 23,828,747 | 29,978,617 | 32,978,005 |
| Sales in USD - LED Signs | 850,000 | 1,126,250 | 1,191,437 | 1,498,931 | 1,648,900 |
| Sales in USD - LED Medical Products | 1,700,000 | 22,525,000 | 23,828,747 | 29,978,617 | 32,978,005 |
| TOTAL SALES | 36,558,500 | 68,712,513 | 72,689,593 | 91,449,771 | 100,599,404 |

7.3 Gross Profit Projections

Projections show positive and growing gross profit for the first five years of operationalization of the project as shown below

| ITEM | YEARS | | | | |
|----------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| <i>Projected Sales</i> | 36,558,500 | 68,712,513 | 72,689,593 | 91,449,771 | 100,599,404 |
| <i>Cost of Sales</i> | | | | | |
| Power Utilities | 24,000 | 24,960 | 25,958 | 26,997 | 28,077 |
| Water Utilities | 32,000 | 33,280 | 34,611 | 35,996 | 37,435 |
| Wages | 160,000 | 166,400 | 173,056 | 179,978 | 187,177 |
| Supplies | 24,000 | 24,960 | 25,958 | 26,997 | 28,077 |
| TOTAL COST OF SALES | 240,000 | 249,600 | 259,584 | 269,967 | 280,766 |
| GROSS PROFIT | 36,318,500 | 68,462,913 | 72,430,009 | 91,179,804 | 100,318,638 |

Projected Operating Expenses

| ITEMS | YEARS | | | | |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| Marketing Expenses | 36,000.00 | 32,160.00 | 35,376.00 | 38,913.60 | 42,804.96 |
| Bank Charges | 2,400.00 | 2,496.00 | 2,745.60 | 3,020.16 | 3,322.18 |
| Insurance | 21,400.00 | 22,256.00 | 24,481.60 | 26,929.76 | 29,622.74 |
| Office Expenses | 7,400.00 | 7,400.00 | 7,400.00 | 7,400.00 | 7,400.00 |
| Permits and Licenses | 63,700.00 | 1,000.00 | 1,000.00 | 2,000.00 | 62,600.00 |
| Vehicle Expenses | 203,000.00 | 211,120.00 | 219,564.80 | 228,347.39 | 237,481.29 |
| Professionals Fees | 30,000.00 | 12,000.00 | 30,000.00 | 12,000.00 | 30,000.00 |
| Provision for Bad Debts | 182,792.50 | 343,562.56 | 363,447.96 | 457,248.86 | 502,997.02 |
| Miscellaneous Expenses | 60,000,000.00 | 66,000,000.00 | 72,600,000.00 | 79,860,000.00 | 87,846,000.00 |
| TOTAL OPERATING EXPENSES | 60,546,692.50 | 66,631,994.56 | 73,284,015.96 | 80,635,859.77 | 88,762,228.18 |

7.4 Projected Income Statement

Projections on income show that the project will be making profits by years 4 and 5. This implies viability of the investment as shown below. Ratios are also included in the analysis.

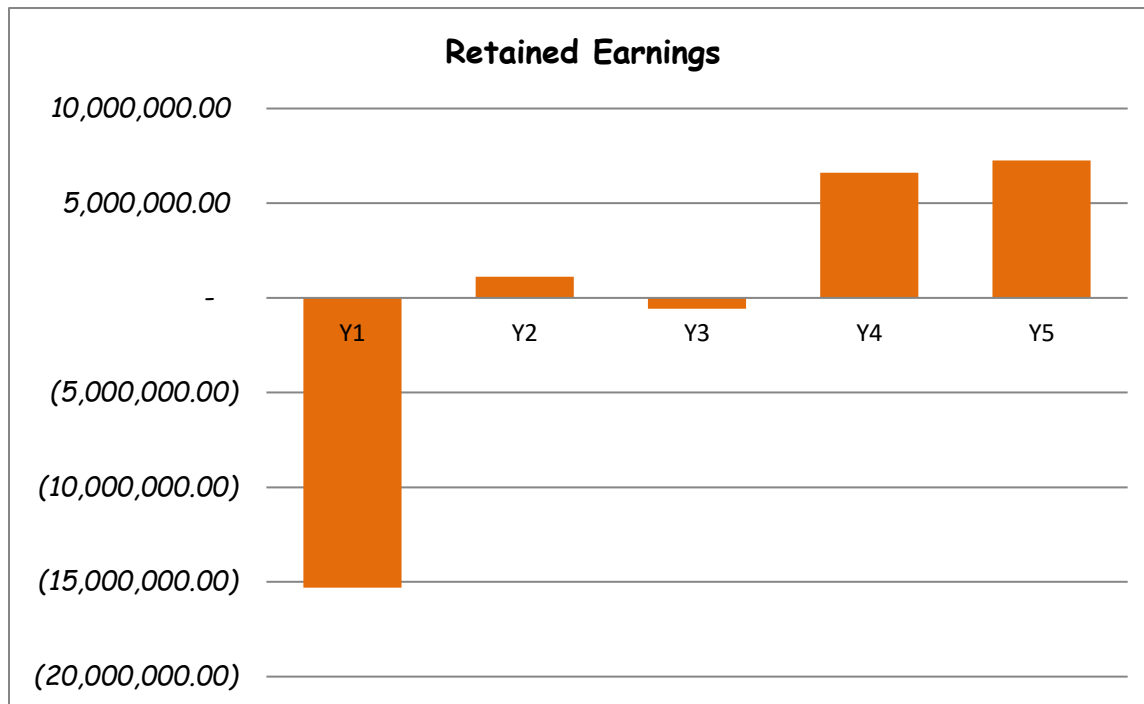
| DETAILS | YEARS | | | | |
|--------------------------|---------------------|-------------------|-------------------|-------------------|--------------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| Total Sales Revenue | 36,558,500 | 68,712,513 | 72,689,593 | 91,449,771 | 100,599,404 |
| Less: Cost of Sales | 240,000 | 249,600 | 259,584 | 269,967 | 280,766 |
| <i>Gross Profit</i> | <i>36,318,500</i> | <i>68,462,913</i> | <i>72,430,009</i> | <i>91,179,804</i> | <i>100,318,638</i> |
| Less: Operating Expenses | 60,546,693 | 66,631,995 | 73,284,016 | 80,635,860 | 88,762,228 |
| <i>EBIT</i> | <i>- 24,228,193</i> | <i>1,830,918</i> | <i>- 854,007</i> | <i>10,543,944</i> | <i>11,556,410</i> |
| Less: Loan Interest | 53,053 | 53,053 | 53,053 | 53,053 | 53,053 |
| <i>EBT</i> | <i>- 24,281,246</i> | <i>1,777,865</i> | <i>- 907,060</i> | <i>10,490,891</i> | <i>11,503,357</i> |
| Less: Taxes (30%) | - 7,284,374 | 533,359 | - 272,118 | 3,147,267 | 3,451,007 |
| Net Profit/(Loss) | -16,996,872 | 1,244,505 | - 634,942 | 7,343,624 | 8,052,350 |
| Dividend (10%) | - 1,699,687 | 124,451 | - 63,494 | 734,362 | 805,235 |
| Retained Earnings | - 15,297,185 | 1,120,055 | - 571,448 | 6,609,262 | 7,247,115 |

Projected Ratios

| Margin Ratios | Y1 | Y2 | Y3 | Y4 | Y5 |
|---------------|----|----|----|----|----|
|---------------|----|----|----|----|----|

| | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|
| Gross Profit Margin | 99.34% | 99.64% | 99.64% | 99.70% | 99.72% |
| Operating Profit Margin | -66.71% | 2.67% | -1.18% | 11.56% | 11.52% |
| Net Profit Margin | -66.27% | 2.66% | -1.17% | 11.53% | 11.49% |
| | | | | | |
| Profitability Ratios | Y1 | Y2 | Y3 | Y4 | Y5 |
| Gross Profit Margin: (Gross Profit/Total Revenue) | 99.34% | 99.64% | 99.64% | 99.70% | 99.72% |
| Net Profit Margin: (Net Income/Total Revenue) | -46.49% | 1.81% | -0.87% | 8.03% | 8.00% |
| Return on Assets (ROA): (Net Income/Total Assets) | -846.46% | 46.33% | -22.60% | 256.59% | 276.24% |
| Return on Equity (ROE): (Net Income/Shareholders' Equity) | -1943.61% | 142.31% | -72.61% | 839.75% | 920.79% |

| | | | | | |
|---|------------|-----------|-----------|-----------|-----------|
| Solvency Ratios | Y1 | Y2 | Y3 | Y4 | Y5 |
| Debt-to-Equity Ratio: Total Debt/Shareholders' Equity | 52.73% | 52.73% | 52.73% | 52.73% | 52.73% |
| Interest Coverage Ratio: Earnings Before Interest and Taxes (EBIT)/Interest Expense | -45767.90% | 3351.11% | -1709.72% | 19774.36% | 21682.76% |



7.5 Projected Cash Flow Statement

| DETAILS | YEARS | | | | |
|---|-------|--------------|------------|--------------|--------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| Net Income | - | 1,244,505.46 | 634,942.17 | 7,343,623.94 | 8,052,349.81 |
| Add: Depreciation and Amortization | | | | | |
| (Increase)/ Decrease in Operating Working Capital | | | | | |

| | | | | | |
|--|----------------------|---------------------|-------------------|---------------------|---------------------|
| <i>Cash Flow from Operating Activities</i> | - | - | - | - | - |
| | 16,996,871.85 | 1,244,505.46 | 634,942.17 | 7,343,623.94 | 8,052,349.81 |
| (Capital Expenditure) | - | - | - | - | - |
| | 2,008,000.00 | 678,000.00 | 123,000.00 | 53,000.00 | 53,000.00 |
| <i>Cash Flow from Investing Activities</i> | - | - | - | - | - |
| | 2,008,000.00 | 678,000.00 | 123,000.00 | 53,000.00 | 53,000.00 |
| Increase (decrease) in long-term debt | | | | | |
| (Dividend) | - | - | - | - | - |
| | 1,699,687.19 | 124,450.55 | 63,494.22 | 734,362.39 | 805,234.98 |
| Issuance of Equity | | | | | |
| <i>Cash Flow from Financing Activities</i> | - | - | - | - | - |
| | 1,699,687.19 | 124,450.55 | 63,494.22 | 734,362.39 | 805,234.98 |
| Beginning Cash | 265,000.00 | 17,570,184.67 | 17,128,129.75 | 17,822,577.71 | 11,266,316.16 |
| Net Cash Flow | - | - | - | - | - |
| | 17,305,184.67 | 442,054.91 | 694,447.95 | 6,556,261.55 | 7,194,114.83 |
| Ending Cash | 17,570,184.67 | 17,128,129.75 | 17,822,577.71 | 11,266,316.16 | 4,072,201.32 |

8.0 BENEFITS OF THE PROJECT

This is a project that is very promising to the shareholders, and to the economy of Tanzania. To the shareholders it promises good returns on their investment. To the economy of Tanzania it will create 200 direct jobs within the country and about 6,000 jobs within Tanzania and the neighboring countries. Of the direct jobs 180 will be locals and 20 will be foreign expatriates.

The project will create business for local banks, tax to the government, cash flows to other businesses, cash flows to firms, and so on as shown below. The cash flows have multiplier effect down the value chains, not only in Tanzania but also in her neighbors.

| DETAILS | YEARS | | | | | TOTAL |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
| | Y1 | Y2 | Y3 | Y4 | Y5 | |
| Interest to the local banking sector | 53,053.00 | 53,053.00 | 53,053.00 | 53,053.00 | 53,053.00 | 265,265.00 |
| Wages to Households | 160,000.00 | 166,400.00 | 173,056.00 | 179,978.24 | 187,177.37 | 866,611.61 |
| Payment to supplier SMEs | 60,603,900.00 | 66,538,032.00 | 73,180,152.00 | 80,448,578.27 | 88,539,997.21 | 369,310,659.49 |
| Income Tax | - | - | - | - | - | - |
| | 7,284,373.65 | 533,359.48 | 272,118.07 | 3,147,267.40 | 3,451,007.06 | 424,857.77 |
| VAT | 7,311,700.00 | 13,742,502.50 | 14,537,918.54 | 18,289,954.30 | 20,119,880.82 | 74,001,956.16 |

| | | | | | | |
|--------------------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
| CSR | - | | | | | |
| | 485,624.91 | 35,557.30 | 18,141.20 | 209,817.83 | 230,067.14 | - |
| SUMMARIES | Y1 | Y2 | Y3 | Y4 | Y5 | TOTAL |
| To the Private Sector | 60,656,953.00 | 66,591,085.00 | 73,233,205.00 | 80,501,631.27 | 88,593,050.21 | 369,575,924.49 |
| To the Government | 27,326.35 | 14,275,861.98 | 14,265,800.47 | 21,437,221.70 | 23,570,887.89 | 73,577,098.39 |
| To the Hosting Community | - | | | | | |
| | 325,624.91 | 201,957.30 | 154,914.80 | 389,796.07 | 417,244.51 | 838,287.76 |

9.0 CONCLUSION

This is a LED products assembling project. The business plan details projections for the implementation of promoters' business idea. It is a viable idea and it is promising to both investors and the Tanzanian economy and the economies of neighboring countries. Promoters have developed this plan in order for the project to be registered by TIC and enjoy incentives. Upon receiving the incentives the project will be able to take-off smoothly.

10.0 RECOMMENDATIONS

Shareholders and management of the company recommends that TIC improves the incentives packages in the most dynamic sectors like LED products. This will make Tanzania's economy more competitive in the regional market.