



LAKE PIPES LIMITED

BUSINESS PLAN

SEPTEMBER 2019

VISIGA, KIBAHA

PWANI, TANZANIA



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Background

1.1 INTRODUCTION

Lake Pipes Limited is a manufacturing and distribution Company dealing in quality PVC and HDPE pipes, water tanks and fitting for water management, irrigation, distribution and sewage disposal systems. The Company introduces high quality plastic pipes, UPVC fittings produced as per ISO 4422-2/2009 standards from sizes 20mm to 200mm diameter for UPVC. HDPE and fittings are produced as per ISO 4427 standards sizes of 16mm to 200mm diameter and in accordance with Tanzania Bureau of standards and International standards.

“Committed to Quality” Lake Plastics quality is tested at every stage for better quality product. In order to achieve good quality we import our raw material from the best HDPE & U-PVC raw material of manufactures around the world, we are also equipped with modern lab facilities for chemical and mechanical properties testing of this products to determine the physical properties of the manufacture pipes with various raw material like PE 80 and P 100, PVC raw material up to a maximum diameter of 200mm, currently. We also provide Field Services like Butt welding from 75mm to 315mm, Electro Fusion from 20mm to 315mm and socket Fusion from 16mm to 63mm.

1.2 OWNERSHIP

The ownership of Lake Pipes Limited is as shown below:

S.no	Name	Designation
1.	Ally Edha Awadh	Shareholder
2.	Kilimanjaro FZE	Shareholder

1.3 VISION

Lake Pipes Limited shares Lake Group's vision to become the leading regional convenience retailer and marketer of pipes and services while achieving continuous improvement ensuring excellence and customer satisfaction through shared values which are team work, reliability and integrity.”

1.4 MISSION STATEMENT

Lake Pipes Limited shares Lake Group's mission to provide its customers with top quality plastic products and high-standard services maintaining a safe, efficient and cost effective manner without damaging the environment.

1.5 STRATEGIC OBJECTIVES

The following are the strategic objective of the Company:

- i. To establish a UPVC, HDPE and LLDPE plant to cater for a positive economic growth
- ii. To utilize the opportunity of Government initiative in industrialization
- iii. To be the driver in creating local employment.

1.6 CORE VALUES

The Company provides services anchored in transparency, efficiency, commitment, integrity and accountability to the shareholders and general public. The core value of the company are:



- Transparency - to have a work culture where employees rigorously communicate with their peers and exchange ideas and thoughts, which progressively builds up and maintains trust and respect.
- Efficiency - to maintain the pioneering status in the specialized area of Manufacturing excellence so as to maintain exemplary leadership and remain the center of excellence.
- Commitment - to promote a culture of excellence throughout the Company through robust management system, consistent and effective training, vigilant maintenance of stakeholders relationships, and of course, the quality of our products expected for all customers.
- Integrity - Honesty and adherence to the codes of conduct that sustains high regard in the eyes of the public nationally and internationally.
- Professionalism - To act professional in all actions and dealings with our customers, Government and partners.

1.7 ACHIEVEMENTS

Since its inception, the Company has achieved to register and comply all necessary legal requirement for the establishment of the manufacturing plant.



2.0 OVERVIEW OF THE FACILITY AND PRODUCTS

2.1.1. The facility

The main activity done in this manufacturing factory is to provide high quality plastic products including plastic pipes, fittings and water tanks. In which consist of a state of the-art manufacturing plants has the full range of Roto moulding, blow moulding, compression moulding and PVC and HPDE extrusion machine to produce an entire range of tanks and pipes. With production capacity of up-to 5 tonnage per hour whereas the annual production of 10,000 metric tonnage. The company is equipped with high ultra-modern latest technology, experienced, dedication, technical knowledge and an extensive approach to plastic products making that emphasizes its priority of serving the nation.

Water storage solutions ensure highest standards of hygiene at a reasonable cost. The Lake Plastics Water Products, an innovation that offers top-hole feature for easy cleaning along with Lake Tanks SMC panel tanks cover the entire range of water storage solutions. Lake Tanks Plastics Division was started in the year 2020, and today we have the most diversified manufacturing capabilities in plastic processing in the world.

2.1.2 Products Introduction

- 1. Good chemical corrosion resistant performance** Polyethylene is an inert material and resistant to erosion of many chemical media. It doesn't have electrochemical corrosion and does not need anti-corrosion coating. Chemical substances present in the soil will not cause any degradation of the pipe. In addition, it will not promote growth of algae and bacteria.
- 2. Good anti-stress and cracking performance** Polyethylene has low notch sensitivity, high anti-shearing strength and excellent capabilities in its resistance to trace; moreover its performance in anti-environmental stress and cracking are also very prominent.
- 3. Good low-temperature impact brittleness** Polyethylene's low brittle temperature is very low and is can be used safely at the temperature range of -200Cto +400C. During winter construction, brittle rupture of the pipe will not occur due to its good anti impact performance.
- 4. Anti-aging and long service life**
PE pipe with 2%-2.5% uniformly distributed carbon black can effectively shield UV rays and will not suffer damage resulted by ultraviolet radiation. Service life of 50 years can be ensured.
- 5. Good wearing resistant performance**
The anti-wearing comparison test between polyethylene pipe shows that wearing resistant performance of polyethylene pipe is 4 times of steel pipe. In the fields of slurry transportation, polyethylene pipe has better wearing resistant performance compared to steel pipe which means polyethylene pipe possesses longer service life and better economy.
- 6. High toughness**
Polyethylene pipe is a kind of pipe with toughness; its broken elongation rate generally surpasses 500%; its ability to adapt to uneven subsidence of foundation is very strong. It is also an excellent pipeline with good anti seismic performance.
- 7. Water tanks are manufactured from LLDPE Resin** which has high level of ESCR (Environmental stress cracks resistance) 100% virgin FDA approved polyethylene. The triple layered "UV" Stablized Tank, having Insulated Middle layer, to keep the water Cool even in Summer

2.1.3 Product

2.1.3.1 UPVC Pressure pipes

Lake Pipes pressure pipes are manufactured to ISO 1452 Specification, incorporating the traditional design stressed of 10 and 12.5 MPA. The product is suited for use in both pumping and gravity designs

Product range	Dimensions
Pressure classes	PN6, PN8, PN10, PN12.5, PN16, PN20 Bar
Working pressure	600, 800, 1,000, 1,250, 1,600 and 2,000 KPA
Length	6 meter length and 5.8 meter for containers
Outside diameter	Constant for all classes of a given size
Pipe end/ Joint	Lock in rubber ring seal joint for pipes \geq 75mm diameter Solvent joints for pipes from 20mm to 75mm Diameter

2.1.3.2 Borehole casing as per DIN4925 and special casing

2.1.3.3 High density Polyethylene Pipes (HDPE)

These pipes are conformity with the International HOPE Standard ISO 4427-2-2007

2.1.3.4 Water tanks

Tanks are manufactured from LLDPE Resin which has high level of ESCR (Environmental Stress Crack Resistance), made from 100% virgin FDA approved polyethylene and comes in capacity of 200 to 10,000 litres.

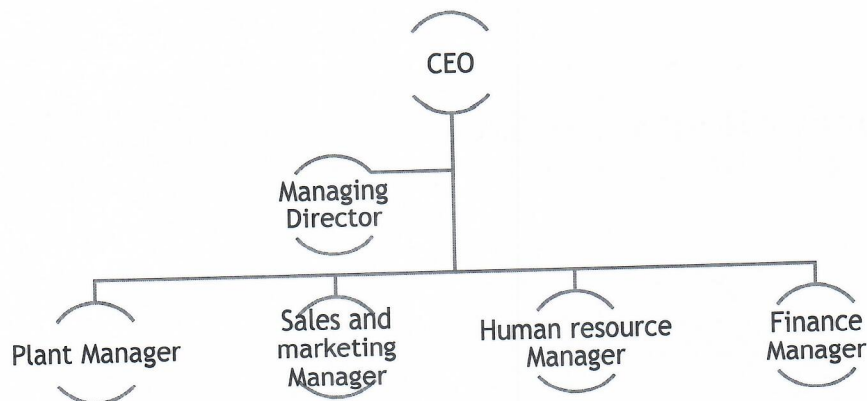
3.0 ORGANIZATIONAL STRUCTURE

The Board of Lake Pipes Limited is responsible for the management and operations of the Company. The Board members are of diverse discipline including body manufacturing, finance, law, business development, and management.

The day to day management of the Company is vested on the Managing Director (MD). The MD will be assisted by 3 Heads of the operational units namely: -

- Plant Manager
- Sales and Marketing Manager
- Finance Manager
- Head of Human Resources

For LPL achieve its strategic goals, below is the proposed organization structure as shown in Figure below: -



4.0 MARKETING ANALYSIS AND STRATEGY

4.1.1 General view of the country's economy

The Tanzania National Bureau of Statistics reports that real gross domestic product (GDP) growth was 7.0% in 2018, slightly higher than 6.8% in 2017. However, official demand-side data, including data related to consumption, investment and net trade, suggest that growth softened in 2018. The softening of consumption growth is supported by Tanzania Revenue Authority data showing lower consumption tax collection, as well as tight controls on public consumption expenditures. Investment growth remains positive but dampened as indicated by significant under-execution of public development plans, lower levels of FDI inflows and improved but relatively low private sector credit growth. The trade balance deteriorated in 2018, with exports contracting by 3.9% in gross value and imports increasing by 7.8%.

Real GDP growth is projected to remain in the range of 5-6% over the medium term, subject to favorable weather conditions, modest but steady implementation of reforms to improve the business environment, fiscal management, and address vulnerabilities in the financial sector. Inflation is expected to remain low, underpinned by favorable food supplies and stable global energy prices. The authorities target a modest overall fiscal deficit of 2.3% of GDP in 2019/20, which will expand to 3-4% of GDP over the medium term. The planned deficit will be financed largely by non-concessional loans. The current account deficit is expected to widen (6-7% of GDP) largely due increased imports of capital goods to support public infrastructure projects.

Despite efforts between 2007 and 2016 that have reduced the country's poverty rate from 34.4% to 26.8%, the absolute number of poor people has held at about 13 million due to high population growth. The most recent poverty measures based on the Household Budget Survey of 2017/18 are still being processed, but it seems likely that the downward trend in the poverty rate continues but has become more gradual. Government efforts to expand access to social services like education, health, and water have been undermined by their declining quality as the population rises faster than the supply of the services.

4.1.2 The marketing environment

4.1.2.1 The industry and opportunities ahead

Global PVC/PE Pipe Market size was valued at \$54,246 million in 2015, and is anticipated to grow at a CAGR of 6.7% to reach \$85,565 million by 2022. Polyvinyl chloride (PVC) is the third largest selling plastic commodity after polyethylene & polypropylene. It is beneficial over other materials owing to its chemical resistance, durability, low cost, recyclability, and others; thus, it can replace wood, metal, concrete, and clay in different applications. Piping and piping systems are a major application of PVC resin. PVC pipes are manufactured by extrusion method in a variety of dimensions such as solid wall or cellular core construction. These are corrosion resistant, cost-effective, flame resistant, easy to install & handle, and environmentally sound, with long service life.

Certain plastics can replace PVC in pipes such as high-density polyethylene (HDPE) and acrylonitrile-butadiene-styrene (ABS). These materials possess specific advantages over PVC such as they are less costly, more environment friendly, lighter in weight, and more flexible. In addition, ABS & HDPE pipes are well suited for oil & gas and chemical industries, ground & underground installations, and indoor piping applications, against PVC pipes. These pipes do not require plasticizers & stabilizers unlike PVC pipes and can be modified to have specific properties of PVC pipes.

WHO in 2006 estimated that only 16% of sub-Saharan Africa had access to clean drinking water through household connection. All these factors attracted major organizations such as World Bank to work closely with regional governments to expand access to clean & safe drinking water in rural areas. To fulfil this purpose, PVC pipes act as primary medium to provide clean & safe water in

rural areas. Further, maximum rural areas are still out of reach for clean water, and governments & organizations are working on these plans. Growth in the number of clean water supply projects is estimated to provide immense opportunity to the PVC pipe suppliers.

The commercial use of plastic materials by the piping industry constitutes for significant volume of polymers. In this section of the market, polyvinyl chloride (PVC) represents the largest worldwide market for plastics. PVC is applicable in plastic pressure pipe system for pipelines in water and sewer industries, owing to wide availability, inexpensive nature, and flexibility. Pipes & fittings constitute the largest application market for PVC resin, with more than 40% share in 2015.

4.1.3 The SWOT analysis

A review of the internal and external environment shows the following strength, weakness, opportunities and challenges.

4.1.3.1 Strengths

The following are LPL's strengths.

1. Financial Stability of the Directors and its close core business partner Lake Group
2. Qualified Staff and stable management;
3. Advantages of being Private Company with a high degree of flexibility in its operations;
4. Equity ownership in companies with good standing;
5. Ready available internal Market and the diversity of production and construction by its core business partner.
6. Experienced in building and construction industry inputs.
7. Good market network across the county, East Africa and SADC countries.

4.1.3.2 Weaknesses

The following are the Company's weaknesses

1. Existing economic environment obliges LPL to become more risk averse than in orderly situations;
2. New in PVC and HDPE market, understanding of business manufacturing environment and licensing requirement before launching production.

4.1.3.3 Opportunities

1. Steadily growing economy in the country, around East Africa and SADC countries;
2. The prevailing peace and tranquility, makes Tanzania an attractive Foreign Direct Investment (FDI) destination;
3. Government policy and legislation on Industrialization;
4. Lean and efficient organization and management system linked to Outsourcing of required services;
5. Policies and legislations promoting indigenization and requiring participation of local and foreign investors in specific investments

4.1.3.4 Challenges

1. A limited level of customer knowledge and sophistication in relation to long term investment.
2. Existence of other PVC manufactures in the market;

3. In availability of necessary statistical information to aid compile all critical business situation relating the manufacturing of plastic products and the business at large.

5.0 STRATEGIC PERSPECTIVES

5.1.1 Strategic goals

1. Growth in earning assets to enhance revenue sustainability;
2. To penetrate in the PVC/HDPE market gap in the country and east and central Africa.
3. To provide excellent high quality products to the increased demand to our business partners and other construction related customers.
4. Streamlining governance and management performance, business processes, ICT and other functional areas in order to enhance good image and visibility;
5. Devising integrated risk management, policy and strategies.
6. Improve the human resources capacity for effective and efficient performance of the core business;
7. To provide employment to the people of United Republic of Tanzania

5.1.2 Area of focus

1. To Improve PVC/HDPE production quality especially focusing on building and construction which determined to be of critical gap.
2. To improve financial management performance and growth in earning assets.
3. To provide high quality ideas in production to maximize shareholders value.
4. LPL intends to institutionalize good governance, integrated risk management processes, information and communication technology and other functional areas

5.1.3 Strategic perspective arrangement

Table 1

Strategic Areas of focus	Strategic goals
1. Financial Performance	1.1 Growth in earning assets to enhance revenue sustainability
2. Management Performance	2.1 Improve PVC/HDPE production so as to enhance shareholders value
3. Efficiency in business	3.1 Streamlining governance and management performance, business processes, ICT and other functional areas
	3.2 Devising integrated risk management, policy and strategies
4. Organizational Capacity	4.1 Improve human resources capacity for effective and efficient performance of the core business

5.1.4 Overarching themes

1. Customer focused, production, creativity based and result oriented mission delivery.
2. Strong leadership, teamwork and accountability at all levels.
3. Professional workforce of motivated staff who are empowered and equipped.
4. Strong partnerships that leverage capabilities and capitalize on public - private partnerships

6.0 STRATEGIC PRIORITIES 2020 - 2022

LPL priorities for the years 2020 to 2022 will be

1. **Leadership** - Tailoring Company's efforts to high growth and SMART (Specific, Measurable, Assignable, Realistic and Time-related).
2. **Market-led innovation** - Where there are clearer routes to the markets and in response to sector opportunities.
3. **Improved access to finance** - Promote joint venture relationship to have access to global resources.
4. **Capacity building** - Enhancing capacity and capability of managing the factory.
5. **Business Development** - Improving services to our customers, production creativity and adopting advanced PVC/HDPE production technologies.
6. **Management Information System (MIS)** - Strengthening MIS in order to achieve accuracy, reliability and timely results during all the time to achieve high level of transparency, accuracy and accountability.

7.0 PERFORMANCE MILESTONES AND MEASURES

7.1.1 Strategic goal 1: Production Growth

LPL strives to achieve a consistent and growing PVC/HDPE production by ensuring products produced of whatever types meet high international and local standards, the company expects to deploy high level of professional experts to achieve this primary objective.

This objective is the key and heart of the future success of our business, our belief to beat the competition lies on excellent product quality and good customer service.

Growth in earning assets to enhance revenue and sustainability

LPL will endeavor to grow its earning assets, revenue and increase self-sustainability. Attaining self-sustainability is a prerequisite for the sustainability of the Company and the business, but also is the answer to attainment of Company vision, mission and objectives. In this aspect, Revenue growth and Return on Capital invested will be the key measures of sustainable growth in the business. To achieve sustainable levels of self-sustainability LPL plans to invest on production machinery sum of TZS 2.3 billion by year 2020, the amount will be increased to TZS 5.52 Billion in year 2022.

To achieve the set growth targets, TML will implement various strategic activities as outlined in table 2 below:

Strategic Goal	Strategic Objectives	Major Activities	Outcomes	Time Frame Yearly		
				2020	2021	2022
Growth in earning assets to enhance sustainability	Sustain the Business i.e. income generated covers production costs and operating costs	Increase Revenue - Increase investment portfolio in a wide range of economic activities	Revenues increased by between 12% to 18% year-on-year		✓	✓

Strategic goal	Strategic objectives	Major activities	Outcomes	Time frames			
				2020	2021	2022	2023
Streamlining governance and management performance, business processes, ICT and other functions	Improve governance in the Company	- Select Board of directors from different sectors of economy	Appoint the entire Board in place	✓			
		- Revise and update governance documents for Board approval	Revise and generate governance documentation	✓			
		- Develop Board and committees charter	Approve Board and committees charters	✓			
		- Develop production programs	Production manuals in place	✓			
		- Develop procedure manuals to the developed policies	Develop procedure manuals	✓			
		- Make MIS robust	Automate timely reports by automation	✓			

7.1.4 Strategic goal 4: Devising integrated risk management policy and strategies

Based on developments of the industry, risk management is becoming a necessary process. The previous performance showed serious shortcomings in choice and management of investments. Board Strategic activities for these actions are presented in Table 5 below

Table 5

Strategic goal	Strategic objectives	Major activities	Outcomes	Time frames			
				2020	2021	2022	2023
Developing integrated risk management policies and strategies	Managing business risk	- Develop risk management framework	Approved risk management framework in place	✓			
		- Develop risk management policy	Approved risk management policy in place	✓			
		- Conduct risk management strategy and program	Awareness on risk management done	✓			
		- Introduce risk management unit	Risk and health management unit in place	✓			
		- Introduce integrated risk management reporting	Risk management reporting implemented	✓			

7.2 Measuring manufacturing performance relative to the business plan

Performance management will form a key element of the approach to help ensure that the Business Plan achieves its intended results. Performance management is conducted under the direction of the LPL's Board

7.2.1 Investment management effectiveness

LPL will put in place a rigorous monthly Projects progress reporting system. On a monthly basis, the Management will review the budget, scope, timeline and risks associated with every planned activities. Projects showing issues on any of these dimensions will be reported to the Management regarding the causes, mitigations and proposed solutions on a project-by-project or production-by-production basis. In this way project issues will be identified as early as possible and highlighted to the Board for attention, decision and remedial action

7.2.2 Production planning process result

On an annual basis, the Management will conduct debriefing sessions with the production Team, and revise the process as necessary to ensure that it is meeting the planning needs of the Company.

Process effectiveness will also be assessed through targeted performance indicators that will be reported to the Management and thereafter to the Board. The measures will be designed to inform the Board as to whether the Business Plan is achieving intended effects towards Production targets, Marketing, Sales, good governance, stewardship, accountability, sound decision-making, and effectiveness of planning activities.

The following table contains the performance measures for assessing the production and marketing plan's effectiveness and efficiency:

Table 7: production and marketing result performance measure

Dimensions	Measures	Responsible
People/Staff	<ul style="list-style-type: none"> • Are all production staff involved • Is the target and production plan clear • Is there a clear Governance structure • Is the structure transparent and accountable • Are necessary resources in place to achieve set plan 	Management
Process	<ul style="list-style-type: none"> • Is manufacturing process well understood • Is there mechanism to identify inefficiencies and promote lessons learnt 	Production

9.0 FINANCIAL PROJECTIONS AND ANALYSIS

STARTING CAPITAL FOR LAKE PIPES LIMITED

EQUIPMENT	Amount(USD)	
Land/Building	2,000,000	
Plant	2,000,000	
Vehicles	400,000	
Furniture & Fittings	350,000	
Pre - Expenses	100,000	
Others	1,150	
Working Capital	4,000,000	
Total		10,000,000

Tb.8SOURCE OF CAPITAL

SOURCE OF CAPITAL	AMOUNT
FOREIGN EQUITY	5,000,000/= US DOLLARS
LOCAL EQUITY	2,000,000/= US DOLLARS
LOCAL LOAN	3,000,000/= US DOLLARS
Total Amount	10,000,000/= US DOLLARS

Assumptions

1. By the end of financial year 2021, the Company is projected to produce 4836 MT (Metric tonnage) to be sold locally, being 65% of the Plant capacity and increase production by 5% annually to 85% in 2025.
2. Capital funds to be financed by the shareholders, Local Loans and other partners in Lake Group as unconditional loan repayable at undefined period until the Company starts making profits
3. During the financial year 2020 -2021 the Company will employ 75 employees in three level of staff, i.e. management, Mechanical and Industrial Engineer, Plant manager, Supervisors, Machine operators and other 25 support staff. Salaries and wages will be paid in accordance with employment laws in consultation with private sector salary schemes.
4. To ensure continuous flow of working capital, the Company will seek short term funding from financial institution to a tune of TZS 6.9Billion to boost raw material requirement and operational costs. The loan will be interest at the prevailing market rates now at 17%.

Investment	-	-	1,150	1,150	1,150
	6,187	8,372	8,602	7,797	7,061
Current assets					
Inventories	1,349	1,524	1,714	1,920	2,141
Trade Receivables	1,521	1,720	1,935	2,167	2,418
Cash and Bank Balances	8,537	6,513	6,974	8,942	11,306
	11,407	9,758	10,624	13,029	15,864
Current Liabilities					
Trade Creditors	3,529	3,987	4,482	5,017	5,593
Working Capital Loans	5,750	5,750	5,750	5,750	5,750
Other Current Liability	424	496	674	867	1,062
	9,703	10,233	10,906	11,634	12,405
	7,890	7,897	8,319	9,193	10,521

9.1.3 Five years Projected Statement of cash flow

	2021 TZS (000,000)	2022 TZS (000,000)	2023 TZS (000,000)	2024 TZS (000,000)	2025 TZS (000,000)
Cash flow from operating activities	8,537	2,346	1,611	3,118	3,513
Tax paid	424	496	674	867	1,062
	8,962	2,842	2,285	3,985	4,575
Cash flow from Investment activities	-	(3,220)	0	(0)	-
Cash flow from financing activities	(424)	(1,646)	(1,824)	(2,017)	(2,212)
Increase in net cash flow	8,537	6,513	6,974	8,942	11,306