



**North Western**  
**Water Supply & Sanitation Company Limited**



# STRATEGIC PLAN 2020-2023

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“Working Towards Commercially Viable and  
Sustainable Water and Sanitation Services”



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## FOREWORD



**Hon. Christabel Ngimbu**  
**Board Chairperson**

Despite over 21 years of existence, the North Western Water Supply and Sanitation Company Limited (NWWSSCL) believes that there is always room for improvement as we compete in service quality and delivery. This is necessary to ensure that coverage of the customers in the North-western province is increased for more people to enjoy safe adequate water and sanitation services on a commercially viable and sustainable basis. The NWWSSCL, building on the successes and challenges of the previous Strategic Plan 2014-2019, has developed this Strategic Plan to state affirmatively its desire to improve performance, expand the scope of its operations and become a commercially viable and self-sustaining public sector organization in a competitive business environment.

This Strategic Plan takes into consideration the realities of the prevailing resource limitations and has focused on a set of few but strategically important interventions. If well implemented, these will stimulate positive change in the operational efficiency and impact of NWWSSCL on both the local and national economies. NWWSSCL will stimulate capital mobilization

to meet the long-term investment desire of Zambian and international investors. NWWSSCL will contribute to the country's development vision as espoused in the Vision 2030; to become a middle-income country and as operationalized by the Seventh National Development Plan (2017-2021). The company through this strategic plan seeks to contribute to directly and tangentially addressing global goals on sustainable development (2015 to 2030) such as access to clean water and sanitation (goal 6), enhanced good health and well-being (goal 3), access to affordable clean energy (goal 7) as well as climate action (goal 13).

I wish to applaud management and staff for their commitment towards genuine change, creativity and innovation and I call upon all the stakeholders to embrace and support the implementation of the 2021-2024 Strategic Plan.

Many people have contributed to the development of this strategic plan representing perspectives from the Board members, senior management, academia, administration, finance, engineering, public health, procurement, commerce, traditional leaders, regulators, the community and customers as well as various other stakeholders of the company. In this process, past experiences were harvested and contemporary thinking in strategy making was employed as well as trends in water and sanitation sector including the wider environment were considered. This established a strong foundation for providing ways to improve water supply and sanitation services. Realistic goals and achievable objectives have been set, strategies have been identified, activities required to carry out the strategies have been specified as well as the output for monitoring and evaluation. We believe this document encapsulates the basis of NWWSSCL's new approach to providing safe water and sanitation services commercially and sustainably.

A handwritten signature in black ink, reading "C. Ngimbu".

**Hon. Christabel Ngimbu**  
**Board Chairperson**



## ACKNOWLEDGEMENTS



**Eng. John Chilufya**  
**Acting Managing Director**

Senior Management and Staff of NWWSSCL have worked hard to develop this strategic plan. I wish to acknowledge the contributions made by four key stakeholders to the development and documentation of the strategic plan. Their generosity in sharing their aspirations, knowledge and skills ensured the widest possible perspectives on every issue.

**NWWSSCL Board of Directors:** We are grateful for the unwavering support from the Board of Directors who are responsible for approving the overall long term direction and for allowing senior management and staff to participate in developing the strategic direction. This is as it should be especially that core staff involved in day to day implementation provide specific input on operational realities. We are particularly appreciative of the support from the entire Board, past and present, as we look forward to the continued support in the coming years.

**Former Managing Director Mr Arnott S. Chilwesa:** We are indebted to you for having steered the NWWSSCL team since the birth of the company in 2000 up to August 2020. We value the direction you gave towards coming up with past and this present strategic Plan. **NWWSSCL Staff:** Sincere gratitude also goes to the staff who worked diligently to ensure that the company continued

to discharge its mandate even in difficulty times. Particularly during the process of this Strategic Plan formulation, the staff were fully involved in the whole process and pledged ownership and were confident to ensuring the success of this strategic plan.

**Government and Cooperating Partners:** The Government of the Republic of Zambia through the Ministry of Water Development Sanitation and Environmental Protection, continues to guide the aspirations of the sector and therefore informed our strategic directions. It is our sincere wish that more support would be rendered as we endeavour to ensure access to potable water supply and safe sanitation services for all, in line with the aspirations of this Strategic Plan and the vision 2030. We are again grateful to government through the AfDB, and to our cooperating partners like the Dutch Government through RVO for funding the feasibility studies necessary for the direction we are taking in developing future water and sanitation facilities. We also express our gratitude to the Ministry of Local Government and Housing for the support rendered through the respective shareholders. We are equally thankful to the various stakeholders and cooperating partners who we have not mentioned; their direct and indirect support is so valuable.

**Directors and Staff Strategic Plan Workshop Participants:** We are also grateful to the Board of Directors and staff participants for the two workshops whose names have been reflected in the appendix.

**Consultants/Facilitators:** Additionally, we are filled with gratitude to Dothan Commercials Ltd through its Consultants, Dr Chanda Shikaputo, Mr Hillary Chanda, Mr Justice Bwalya and Dr Bruce Mwiya, who skilfully led the lengthy and arduous tasks of the brain-storming workshops and committing all the deliberations to paper.

Lastly, management pledges total commitment to all our stakeholders in the implementation of this strategic plan.

**Eng. John Chilufya**  
**Acting Managing Director**





Key stakeholders that took part in crafting the SBP drawn from Provincial Planning Unit (PPU), Local Authorities, Hostels & Lodges Association, North-western Chamber of Commerce Trade and Industry, Commercial and Domestic customer representatives and NWWSSC Board and staff.

## LIST OF ACRONYMS AND ABBREVIATIONS

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>AfDB</b>	African Development Bank
<b>AUSAID</b>	Australian Aid
<b>BOQs</b>	Bill of Quantities
<b>BoZ</b>	Bank of Zambia
<b>CEO</b>	Chief Executive Officer
<b>CHWSC</b>	Chambeshi Water and Sanitation Company
<b>CU</b>	Commercial Utilities
<b>DO</b>	Desk Officers
<b>DPGS</b>	Dynamic of Personal Goal Setting
<b>DTF</b>	Devolution Trust Fund
<b>ERP</b>	Enterprise Resource Planning
<b>EWSC</b>	Eastern Water and Sewerage Company
<b>GDP</b>	Gross Domestic Product
<b>GIS</b>	Geographical Information System (GIS)
<b>GRZ</b>	Government of the Republic of Zambia
<b>HIV</b>	Human Immuno Virus
<b>HR</b>	Human Resource
<b>ICT</b>	Information and Communication Technology
<b>IEC</b>	Information, Education and Communication
<b>KPI</b>	Key Performance Indicator
<b>KWSC</b>	Kafubu Water and Sanitation Company
<b>LA</b>	Local Authorities
<b>LDF</b>	Land Development Fund
<b>LFM</b>	Logical Framework Matrix
<b>LGWSC</b>	Lukanga Water and Sanitation Company
<b>LPWSC</b>	Luapula Water and Sanitation Company
<b>LWSC</b>	Lusaka Water and Sanitation Company
<b>MLGH</b>	Ministry of Local Government and Housing
<b>MoU</b>	Memorandum of Understanding
<b>MSL</b>	Minimum Service Levels
<b>MWSC</b>	Mulonga Water and Sanitation Company
<b>NUWSP</b>	National Urban Water Supply Programme
<b>NWASCO</b>	National Water Supply and Sanitation Council
<b>NWSC</b>	Nkana Water and Sanitation Company
<b>NWP</b>	North Western Province
<b>NWWSSCL</b>	North Western Water Supply and Sanitation Company Limited
<b>PESTEL</b>	Political, Economic, Social, Technological, Environmental, Legal
<b>PMRS</b>	Performance Monitoring and Rewarding System
<b>PPP</b>	Public Private Partnership

<b>ROI</b>	Return On Investment
<b>SME</b>	Small and Medium Enterprises
<b>SMMEs</b>	Small, Micro and Medium Enterprises
<b>SOE</b>	State Owned Enterprises
<b>SWOT</b>	Strengths, Weaknesses, Opportunities and Threats
<b>SWSC</b>	Southern Water and Sewerage Company
<b>NRW</b>	Non-Revenue Water
<b>WASHE</b>	Water and Sanitation Health Education
<b>WARMA</b>	Water Resources Management Authority
<b>WDM</b>	Water Demand Management
<b>WSS</b>	Water Supply and Sanitation
<b>WWSC</b>	Western Water and Sewerage Company
<b>ZCCM-IH</b>	Zambia Consolidated Copper Mines - Investment Holdings
<b>ZDA</b>	Zambia Development Agency
<b>ZEMA</b>	Zambia Environmental Management Agency





*Women and children drawing water from a shared stand tap. The water and sanitation sector has faced major obstacles in expanding access to adequate services by a majority mainly arising from the high cost of establishing piped systems and treatment Plants.*





*A team from NWWSSCL and Lumwana LPDC sharing some notes on Decentralised sewer system.*

## 1.0. INTRODUCTION

The North-western Water Supply and Sanitation Company Ltd (NWWSSCL) has been in existence since the year 2000. The Government of Zambia passed the Water Supply and Sanitation (WSS) Act, No. 28 of 1997 delegating and mandating the Local Authorities to provide water and sanitation services in their respective areas. This principle law governs water supply and sanitation service provision in Zambia and mainly deals with the regulation of the service provision and provides for powers of service providers. It also provides for the establishment of National Water and Sanitation Council (NWASCO) as an autonomous regulator in the provision of sanitation services by the Commercial Utilities (CUs) in Zambia. Local Authorities formed CUs as private companies to provide water supply and sanitation services on their behalf in urban and Peri-urban areas.

The Urban and Regional Planning Act 3 of 2015, Administrative Circular No. 1 of 1985 as well as Administrative Circular No. 1 of 2015 prohibit the allocation of new land unless services such as water supply, sewerage, drainages and roads are in place. Most planned and built up areas have basic services such as water supply, sewerage, roads, storm water drainages and solid waste disposal systems. Most unplanned areas in Peri-urban areas with high population densities suffer from lack of such basic services. Contamination of ground water is prevalent in these areas because of the poorly constructed latrines. The Devolution Trust Fund (DTF) was established by NWASCO under the WSS Act and through the Statutory Instrument No. 65 in 2001. It is a non-profit basket financing instrument aimed at assisting CUs to extend their services to the urban poor. It became operational in September 2003 with funding from GRZ and cooperating partners. DTF mobilises funds and promotes technology that is commercially viable in servicing large numbers of poor people. In addition, a sanitation surcharge is authorised by NWASCO in the range of 2.5% to 5% of water bills to allow CUs to accumulate funds for projects (which require NWASCO approval) to increase access to sanitation related services.

### 1.1 OBSTACLES IN THE SECTOR

Despite the legal and institutional reforms, the water and sanitation sector in Zambia has faced major obstacles in expanding access to adequate services by a majority of Zambians, mainly arising from the high cost of establishing piped sewerage systems and waste water treatment plants. Other challenges are that sanitation is widely regarded as an individual rather than a public problem, vandalism and theft of sanitation facilities, biased finance of water projects, inadequate coordination and consultation between CUs and planning authorities in new development areas and unclear policies in the provision of sanitation services in peri-urban areas.

As a way forward, government continues to implement accelerated extension of sanitation services to un-serviced areas through Commercial Utilities and Private Schemes. There are 11 Commercial Utilities and 7 Private Schemes that are currently licensed by NWASCO. They sought to secure private sector efficiencies with government oversight and with the main goal of improving service delivery through viable and professionally managed limited liability companies (CUs). As shareholders, the Local Authorities nominate members of the Board of Directors for approval by the Minister. The Board oversees the operations of the CUs. The day-to-day running of the utility is the responsibility of the appointed management.

On the other hand, there are seven private sector commercial entities that supply water and sanitation services to their employees as a fringe benefit. These are Zambia Sugar, Maamba Collieries, ZESCO, Lafarge Cement, Kaleya Small Holders, Konkola Copper Mines (Nampundwe) and Kafue Sugar.

## 1.2 RELATIVE PERFORMANCE OF CUS

In relation to performance of CUs, Table 1 summarises the performance of the CUs in 2018 in nine key performance indicators as prescribed by NWASCO. The Table shows that NWWSSCL leads in collection efficiency and Non-Revenue Water (NRW) albeit still short of the benchmark of 25%. Additionally, the firm is among the best in water quality compliance, metering ratio, staff efficiency and hours of supply. However, the firm performs relatively dismally in relation to water service coverage, operating and maintenance cost coverage by collection. Lastly, the firm is the lowest in sanitation coverage at 19.3% compared to the national average of 62.8%.

**Table 1 Relative Performance of CUs in Zambia<sup>1</sup>**

CU	NRW (%) Water	Quality Compliance	Metering Ratio (%)	Water Service Coverage (%)	Sanitation Coverage (%)	Hours of Supply	Staff Efficiency	Collection Efficiency (%)	O+M Cost coverage by collection (%)
Lusaka WSC	45	B	66	86.7	67.3	17	0.53	80.3	111
Nkana WSC	46	A	85	97	78.4	19	0.45	71.9	102
Kafubu WSC	72	A	70	82.7	74.5	20	0.35	72.2	100
Mulonga WSC	39	B	86	96.5	80.7	17	0.39	86.9	109
Lukanga WSC	51	A	80	83	51.8	19	0.57	93.9	99
Southern WSC	53	A	76	89.3	61.7	20	0.53	90	98
Chambeshi WSC	51	D	74	82.3	59.1	18	0.8	86.1	77
North Western WSC	28	A	100	88.9	19.3	20	0.73	107.4	101
Eastern WSC	62	D	80	53.5	33	15	0.58	81	104
Western WSC	42	A	100	86.5	32.4	20	0.75	98.8	95
Luapula WSC	78	A	100	45.1	31.4	20	1.14	85.1	67
<b>Average</b>	<b>50.6 (w)</b>	<b>N/A</b>	<b>78 (w)</b>	<b>85.7 (w)</b>	<b>62.8 (w)</b>	<b>18 (w)</b>	<b>0.60 (s)</b>	<b>87.2 (w)</b>	<b>104 (w)</b>
<b>Benchmark</b>	<b>25</b>	<b>95</b>	<b>100</b>	<b>80</b>	<b>80</b>	<b>18</b>	<b>0.4</b>	<b>85</b>	<b>100</b>
						<b>16</b>			

The Eastern and Southern Africa Water and Sanitation (ESAWAS) Regulators Association is a network of regional water supply and sanitation regulators that seeks to enhance the capacity of members to deliver quality and effective regulation through cooperation and mutual assistance. The nine members comprise regulators from Kenya, Mozambique, Rwanda, Tanzania, Zambia, Lesotho, Burundi, Zanzibar and Malawi. At regional level in East and Southern Africa, bench marking is based on three broad categories of dimensions<sup>2</sup> and the 2017 leading service providers are WASAC in Rwanda emerging as the best performer in all the three components aggregated, followed narrowly by NWSC, Uganda. These three dimensions include: Quality of Service- relating to the extent and assurance of the service; Economic Efficiency - relating to the viability of the service provider; and Operational Sustainability - relating to operational efficiencies. The 10 KPIs for regional benchmarking grouped into three are reflected in Table 1a.

<sup>1</sup> Based on NWASCO (2019) Urban and Peri-Urban Water Supply and Sanitation Sector Report 2018

<sup>2</sup> The summary of the Utilities performance in the 2016/17 period is shown in Table 47 of the NWASCO Sector report of 2018. The detail of regional performance is available on the ESAWAS website ([www.esawas.org](http://www.esawas.org)).



Table 1a: Key Performance Benchmarks for the African Region

COMPONENT	KPI	GOOD	ACCEPTABLE	POOR
Quality of Service	Water Coverage	<90	90-75	<75
	Sewerage Coverage	<70	70-40	<40
	Water Quality	<95	95-90	<90
	Hours of Supply	<20	20-16	<16
Economic Efficiency	Operations & Maintenance Costs Coverage (O&M)	<150	150-100	<100
	Collection Efficiency	<95	95-85	<85
	Staff Cost	<30	30-35	<35
Operational Sustainability	Staff/1000 Water and Sewerage Connections	<5.0	5.0-8.0	>8.0
	Non-Revenue Water (NRW)	<30	30-35	>35
	Metering Ratio	>95	95-85	<85



*Some of the accolade the company has received over the years*

### 1.3 OVERALL NWWSSCL PERFORMANCE BASED ON 2018 SECTOR REPORT

NWWSSCL has been recognised for exemplary performance in managing Non-Revenue Water (NRW), collection efficiency and metering ratio. Performances by indicator are summarised based on Table 1 and Table 2:

- i. Water Quality Compliance: NWWSSCL maintained and complied with requirements of bacteriological and Physiochemical quality. According to the Sector report, the rating was ranging from 98% - 100% during 2015 - 2019.
- ii. Collection Efficiency - NWWSSCL collection Efficiency increased from an average of 90% to 107% during 2009 - 2019.
- iii. Metering Ratio is a precondition for charging consumers according to their consumption and thereby ensures an equitable distribution of costs. Metering ratio is still low among most CUs. In this regard, however, NWWSSCL maintained a 100% metering ratio from 2009 to 2019.
- iv. Hours of Supply by the CUs per day showed no significant improvement across CUs overall. NWWSSCL was among the CUs that had acceptable performance of 20 hours of supply in 2019.
- v. Operations and maintenance (O&M) cost coverage by collection is the average Tariff per Unit Operation Cost. The policy of the Government is that the water tariffs should be cost reflective in producing the water. The average tariff has increased for most of the CUs including NWWSSCL at 101%.
- vi. Non-Revenue Water (NRW) is the difference between the quantity of water produced and the quantity of water billed. NRW remains a big challenge and quite high among most CUs. NWWSSCL reduced NRW from 34 to 28 percent principally because of a newly achieved 100% metering ratio leading to better management of water demand.
- vii. Staff Efficiency - the lower the number of staff per 1000 connections, the more efficient the company is. The lower the staff costs in relation to billing and collection the better but the sector average nationally is 0.57 while the national benchmark is 0.40 or lower. With NWWSSCL at 0.73 there is room for improvement. Only KWSC (0.35) and MWSC (0.39) met the benchmark for staff efficiency. LPWSC had the worst ratio of staff efficiency
- viii. Sanitation Coverage by sewer network among the CUs shows that there were practically no investments in the sewerage infrastructure and therefore no improvements including NWWSSCL at 19.3%.
- ix. Water Service coverage: In 2018, there was an overall increase in coverage of population although only four CUs met the benchmark of acceptable service coverage. NWWSSCL coverage was high at 88.9% though the best performing was Nkana WSC at 97%.
- x. Regulator's perception ranking: Because of the overall favourable performance across all indicators, NWWSSCL was perceived to be among the best. However, despite being ranked 1, 1, 3 and 2 in 2013, 2012, 2011 and 2010 respectively, the overall regulator ranking was at 3 in 2018, 2017, 2016 and 2014 while in 2015 it was at 2 (Table 2).



Table 2: Regulator's Perception Ranking<sup>3</sup>

Commercial Utility	Ranking 2018	Ranking 2017	Ranking 2016	Ranking 2015	Ranking 2014
MWSC	1	2	2	8	5
SWSC	2	1	1	1	2
NWWSC	3	3	3	2	3
EWSC	4	5	4	3	4
LWSC	5	4	5	4	1
KWSC	6	6	7	9	6
NWSC	7	7	6	6	7
LGWSC	8	8	8	5	10
CHWSC	9	9	11	11	11
WWSC	10	10	10	7	9
LPWSC	11	11	9	10	8

In response to the successes and challenges highlighted in the forgoing, the strategic plan presented herein covers the period 2020 to 2023. It was crafted over several months and culminated in the definitive workshops held in Solwezi hosted by Head Office in December 2019 and February 2020. The vision, mission and value statements retain the essence but they have been stated much more simply and sharply to reflect an emphasis on regional benchmarking (beyond Zambia) as well as commercial viability and sustainability. The strategic goals and objectives have also been set to reflect the streamlined emphasis on customer focus and revenue maximisation; production expansion; upgrade and maintenance of soft and hard infrastructure; as well as organisational efficiency and effectiveness underpinned by sustainable innovativeness.

The contents of the document provide details under the following headlines:

- ☞ The Purpose of NWWSSCL (Vision, Mission, Slogan, Values and Strategy Statement)
- ☞ Organisational and Environmental Analysis
- ☞ Stakeholder Mapping
- ☞ Strategic Priorities and Directions
- ☞ NWWSSCL Strategies, Activities and Outputs
- ☞ Action Plans and Budgets (2020 - 2023)

## MANAGEMENT AS PART OF THE VISION CARRIERS



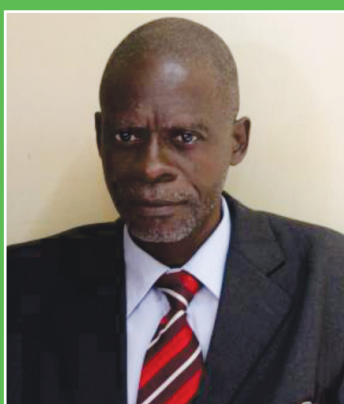
Eng. John Chilufya  
Acting Managing Director



Eng. Mufalo Nanyama  
Acting Director - Engineering



Mr. Austin Mungo  
Acting Director Finance



Mr. Mason Sichali  
Human Resources & Admin  
Manager



Mr. Pearson Phiri  
PR and Commercial Manager

## 2.0. THE PURPOSE OF NWWSSCL

The North Western Water Supply and Sanitation Company Limited (NWWSSCL) is the water utility company licensed by the National Water Supply and Sanitation Council (NWASCO) to transact in water and sanitation business in the North-Western Province of Zambia. The Company was incorporated on 12 November 1999 under the Companies Act of Zambia and is regulated under the Water and Sanitation Act of May 1997. The Company's principal activities are the supply of water, sewerage and related sanitation services as well as the maintenance, upgrade and expansion of the required infrastructure in eight districts, namely Solwezi, Mwinilunga, Kasempa, Mufumbwe, Manyinga, Kabompo, Zambezi and Chavuma. Like any other Commercial Utility entity in the Country, NWWSSCL is owned by the local authority under the Ministry of Local Government and Housing.

The firm's vision, mission, values and strategy statement are highlighted hereunder.

### 2.1 VISION

To be recognized as the African model of excellence in water and sanitation services

### 2.2 MISSION

We provide adequate safe water and sanitation services commercially and sustainably.

### 2.3 SLOGAN

Striving for excellence in water supply & sanitation

### 2.4 VALUES

As we make decisions, work and interact internally and with all stakeholders, our actions will reflect Customer-focus, Accountability, Team-Work, Innovativeness and Commitment ("CATI") as our guiding values:

Customer-focus: We relentlessly seek to meet and exceed internal and external customer expectations and needs;

Accountability: We are ethical, honest and transparent in interactions with internal and external stakeholders;

Team-work: We create and maintain team-oriented approaches, recognising that together we can achieve more;

Innovativeness: We encourage and recognize individual and team initiatives and innovations in finding solutions to our challenges; and,

Commitment: We are committed to commercial viability and sustainability as we meet the service level expectations of all our stakeholders.

### 2.5 STRATEGY STATEMENT

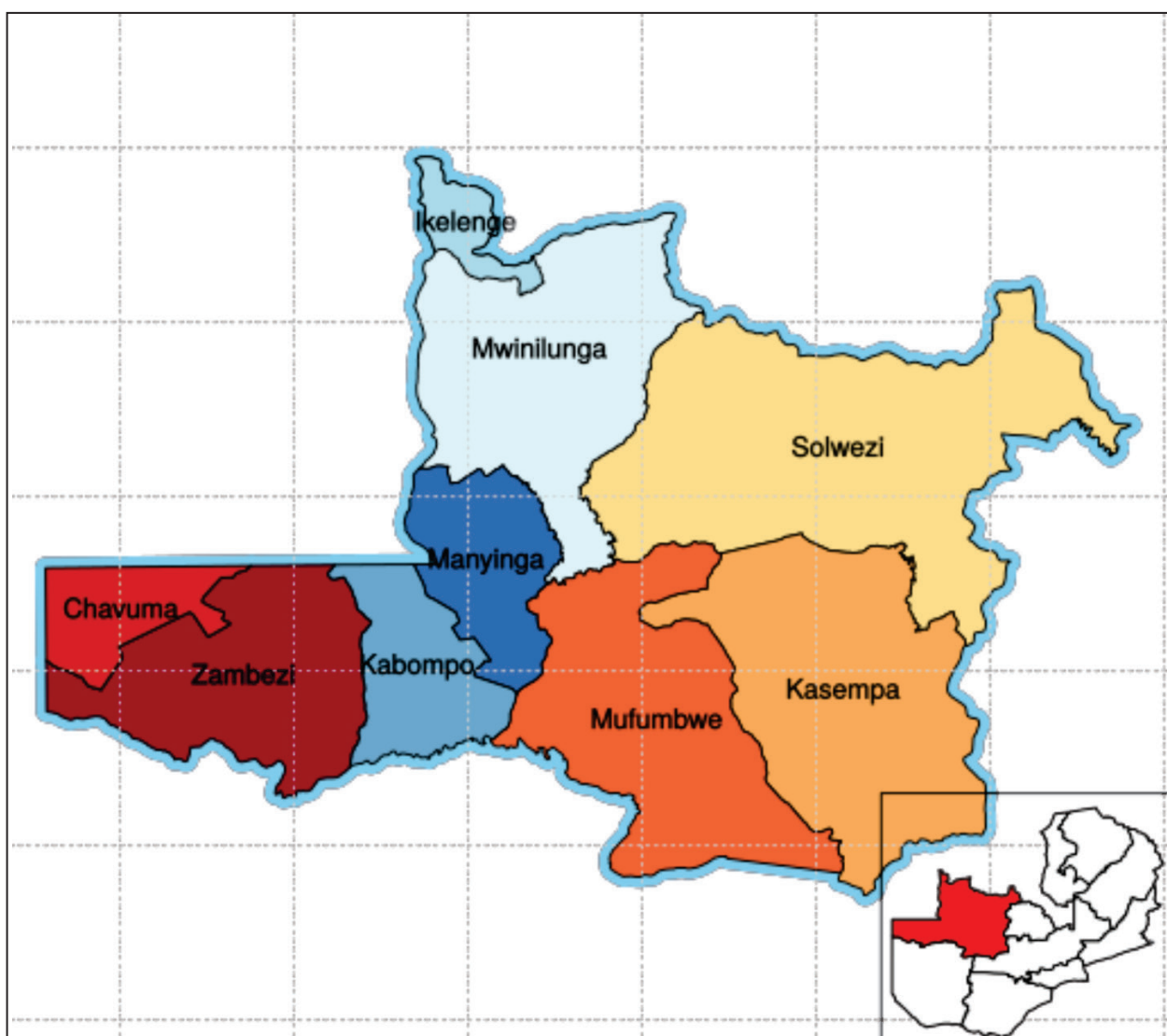
To be the African model of excellence in safe adequate water and sanitation services, achieving annual increases in customer-base (12%) and revenue (15%), through customer-focus, improved production capacity and infrastructure, organisational efficiency and effectiveness leveraging sustainable innovativeness.

### 3.0. ORGANISATIONAL AND ENVIRONMENTAL ANALYSIS

This section addresses organisational and environmental Analysis based on the NWWSSCL profile, comparative commercial utilities profile in the sector and firm specific financial trends. In addition, the section explores organisational strengths and weaknesses, organisational capabilities, stakeholders as well as environmental threats and opportunities. Lastly, the strategic issues and fit related to the foregoing are considered.

#### 3.1 PERFORMANCE OF OTHER CUs

Table 3 indicates the commercial utilities (CUs) profiles in the country. Particularly, NWWSSCL operates in eight towns in North-Western Province; namely Solwezi, Kasempa, Mwinilunga, Zambezi, Manyinga, Kabompo, Chavuma and Mufumbwe and in two mining areas of Kalumbila and Lumwana with the largest town, Solwezi, being a predominantly mining area. The Province includes three new districts of Ikelengi, Kalumbila and Mushindamo that were not yet serviced (apart from Kalumbila and Lumwana mining area).



Source: <https://www.pinterest.com/pin/45880428077812061>

The region in which the CU is licenced has medium to low economic activity with potential for growth. The firm has fairly good state of infrastructure, but needs expansion to meet the growing needs of the customers both on water and especially on the sanitation side. The firm maintained high hours of supply exceeding sector benchmarks. Though the firm has the best NRW ratings in the Sector, there is need to concert efforts to improve sanitation coverage.

**Table 3 Commercial Utility Profile<sup>4</sup>**

Commercial Utility	Abbreviation	start of Operations	"No. of Towns/ Centres Served"	Total Population in Service Area	No. of Connections	No. of Staff
Lusaka WSC	LWSC	1989	6	2,587,512	109,454	905
Nkana WSC	NWSC	2000	3	819,546	64,378	603
Kafubu WSC	KWSC	2000	3	722,553	64,104	654
Mulonga WSC	MWSC	2000	3	528,760	56,755	453
Lukanga WSC	LGWSC	2006	8	436,515	27,643	251
Southern WSC	SWSC	2000	21	489,130	56,536	433
Chambeshi WSC	CHWSC	2003	12	364,141	23,546	252
North Western WSC	NWWSC	2000	8	276,720	17,973	148
Eastern WSC	EWSC	2009	10	328,038	21,047	155
Western WSC	WWSC	2000	10	220,063	16,250	149
Luapula WSC	LPWSC	2009	7	220,715	7,951	77

**Table 4 Population Served with Water**

CU	Total Population 2017	Population Served 2017	Proportion of Population Served by Household Connection 2017	Proportion of Population Served by Public Standposts & Kiosks 2017	Total Population 2018	Population Served 2018	Proportion of Population Served by Household Connection 2018	Proportion of Population Served by Public Standposts & Kiosks 2018
LWSC	2,395,736	2,046,139	43.0%	57.0%	2,587,512	2,242,529	42.3%	57.7%
NWSC	794,906	764,998	70.0%	30.0%	819,546	794,979	70.0%	30.0%
KWSC	711,537	577,382	87.6%	12.4%	722,553	597,366	96.7%	3.3%
MWSC	519,796	505,597	78.9%	21.1%	528,760	510,304	78.7%	21.3%
LGWSC	432,478	339,087	41.3%	58.7%	436,515	362,135	42.2%	57.8%
SWSC	475,808	418,590	83.4%	16.6%	489,130	436,964	84.1%	15.9%
CHWSC	352,850	283,283	63.4%	36.6%	364,141	299,515	56.0%	44.0%
NWWSC	270,764	234,810	37.1%	62.9%	276,720	245,923	40.6%	59.4%
WWSC	216,385	136,125	72.7%	27.3%	220,063	117,681	95.9%	4.1%
EWSC	310,926	256,123	49.5%	50.5%	328,038	283,823	47.9%	52.1%
LPWSC	215,080	80,953	79.2%	20.8%	220,715	99,600	63.9%	36.1%
<b>Total</b>	<b>6,696,266</b>	<b>5,643,087</b>	<b>59.6%</b>	<b>40.4%</b>	<b>6,993,693</b>	<b>5,990,819</b>	<b>59.8%</b>	<b>40.2%</b>

Table 5 shows the population serviced with sanitation through sewer connection or septic tank desludging services by each CU based on NWASCO 2017 and 2018 comparative data. Clearly, NWWSSCL has the least household sewer connections at 10.7% in 2017 and 7.5% in 2018 compared to the best performer Mulonga WSC at 98.2% in 2017 and 97.1% in 2018. The limitation with this data is that it lacks a break down separating septic tank from pit latrine users. This entails that NWWSSCL needs to priorities increasing sewer connections to individual customers to increase its revenue base. This may require heavier investments in new sewer connections infrastructure and consumables. Additionally, assuming it is not a matter of managing perception to attract external financing, there is also need to learn from CUs that are utilising their capacities more and how they are achieving that.

<sup>4</sup> NWASCO (2019) Urban and Peri-Urban Water Supply and Sanitation Sector Report 2018



Table 5 Comparative Population Served with Sanitation

CU	Total Population 2017	Population Served 2017	Proportion of Population Served on Sewer Network 2017	Proportion of Population Served by Septic Tanks 2017	Total Population 2018	Population Served 2018	Proportion of Population Served on Sewer Network 2018	Proportion of Population Served by Septic Tanks 2018
LWSC	2,395,736	1,765,843	17.3%	82.7%	2,587,512	1,741,948	23.9%	76.1%
NWSC	794,906	590,366	86.6%	13.4%	819,546	642,475	83.9%	16.1%
KWSC	711,537	505,599	74.5%	25.5%	722,553	538,645	78.5%	21.5%
MWSC	519,796	425,066	98.2%	1.8%	528,760	426,909	97.1%	2.9%
LGWSC	432,478	171,775	37.6%	62.4%	436,515	226,133	27.7%	72.3%
SWSC	475,808	282,562	31.0%	69.0%	489,130	301,990	28.4%	71.6%
CHWSC	352,850	147,605	21.3%	78.7%	364,141	215,033	47.5%	52.5%
NWWSC	270,764	58,530	10.7%	89.3%	276,720	53,436	7.5%	92.5%
WWSC	216,385	72,629	22.3%	77.7%	220,063	72,629	14.7%	85.3%
EWSC	310,926	97,460	14.0%	86.0%	328,038	106,378	12.9%	87.1%
LPWSC	215,080	68,504	6.8%	93.2%	220,715	69,235	12.6%	87.4%
<b>Total</b>	<b>6,696,266</b>	<b>4,185,939</b>	<b>43.8%</b>	<b>56.2%</b>	<b>6,993,693</b>	<b>4,394,811</b>	<b>47.3%</b>	<b>52.7%</b>

Table 6 shows the plant utilisation for water and sewer by each CU based on NWASCO 2017 and 2018 comparative data. Clearly, NWWSSCL was among the least in plant utilisation for sewer at 10% in 2017 and 8% in 2018 compared to the best performer Nkana WSC at 150% in 2017 and 90% in 2018. There is also need to ensure that the sewer blockages are attended to in the shortest time possible as this is an acute sanitation issue for customers and the community in line with SDG # 6. In terms of water plant utilisation NWWSSCL performed well at 66.2% in 2017 and 65.9% in 2018 but was still below the best performer Luapula WSC at 78.7% in 2017 and 77% 2018. This entails that even with the current production capacity in terms of the plant, NWWSSCL can still generate more revenue by connecting more households to its water and sewer lines. However, there will still be need to bring capacities to the design state through regular maintenance.

Table 6 Comparative Plant Utilisation- Water and Sewer

CU	Plant Utilisation Water 2017	Plant Utilisation Water 2018	Plant Utilisation Sewer 2017	Plant Utilisation Sewer 2018
LWSC	77.4%	71.2%	42.0%	43.0%
NWSC	71.4%	67.4%	150.0%	90.0%
KWSC	57.9%	68.5%	10.0%	60.0%
MWSC	57.7%	62.9%	82.0%	90.0%
LGWSC	28.9%	38.0%	5.0%	22.0%
SWSC	73.5%	80.7%	9.0%	91.0%
CHWSC	40.8%	31.4%	11.0%	39.0%
NWWSC	66.2%	65.9	10.0%	8.0%
WWSC	85.3%	51.1%	0.0%	0.0%
EWSC	58.2%	60.8%	26.0%	98.0%
LPWSC	78.7%	77.0%	34.0%	0.0%

Table 7 shows the Customer Complaints and their resolution by each CU based on NWASCO 2017 and 2018 comparative data. Complaints figures are important in gauging customer satisfaction regarding the service received from the provider. By regulation, CUs are required to keep a record of customer complaints and resolve them within a stipulated timeframe. Customer awareness plays a critical role in ensuring that complaints are reported and resolved. While NWWSSCL was among the good performers in complaints resolution at 91%, the best performers were Nkana WSC and Luapula WSC at 95% in 2018 while the sector average is at 88%. This entails that there is still more that NWWSSCL can do to attend to customer complaints expeditiously.

Table 7 Comparative Complaints and Resolution Figures

Provider	Total Customer Complaints 2017	Total Customer Complaints 2018	Total Complaints Resolved 2018	Total Complaints % Resolution 2018	Complaints per 100 Connections 2017	Complaints per 100 Connections 2018
LWSC	35,521	45,091	39,967	89%	35	41
NWSC	7,645	9,620	9,123	95%	12	15
KWSC	10,640	11,101	8,349	75%	17	17
MWSC	10,604	28,439	26,632	94%	19	50
LGWSC	9,236	2,132	1,981	93%	35	27
SWSC	6,190	5,829	5,164	89%	12	10
CHWSC	4,725	35,108	26,784	76%	22	141
NWWSC	594	12,544	11,418	91%	4	70
WWSC	8,273	6,027	5,738	95%	56	37
EWSC	4,441	9,257	8,284	89%	23	44
LPWSC	3,438	15,053	14,320	95%	46	54
<b>Total Complaints</b>	<b>101,307</b>	<b>180,201</b>	<b>157,760</b>	<b>88%</b>	<b>23</b>	<b>39</b>

### 3.2 PERFORMANCE TRENDS

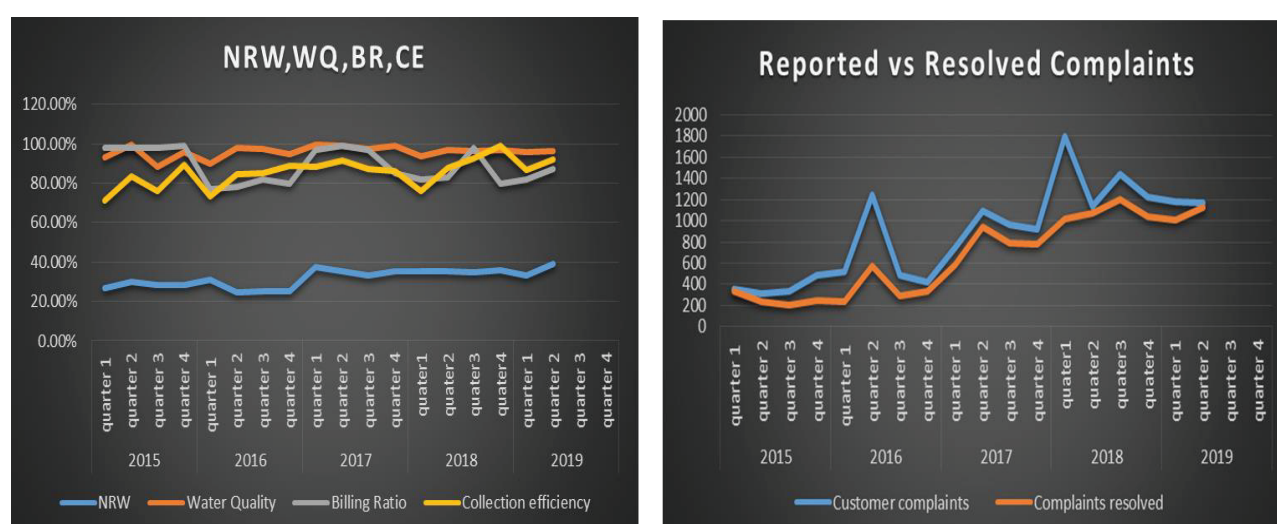
NWWSSCL has been recognised by the regulator for exemplary performance in containing Non-Revenue Water (NRW), collection efficiency and metering ratio. Performance by indicator is summarised based on Table 8 (in the Appendix) and Figures 1a and 1b for the five-year period 2015 to 2019. Firstly, water Quality Compliance reports show that the firm has consistently met requirements of bacteriological and Physiochemical quality with a rating ranging from 88.10% - 99.80% within and exceeding the industry benchmark of 95%. Secondly, collection efficiency indicates an increase from an average of 71.3% to 99.02% in the same period, exceeding the industry benchmark of 85% and the sector average of 87.2%. Thirdly, metering ratio is a precondition for charging consumers according to their consumption and thereby ensures an equitable distribution of costs. Metering ratio is still low among most CUs. In this regard, however, NWWSSCL maintained a 100% metering ratio in the period under review. Fourth, hours of supply by the CUs per day showed no significant improvement across CUs overall.

NWWSSCL had 22 to 23 hours of supply compared to the industry average of 18 and sector benchmark of 18.

Fifth, Non-Revenue Water (NRW) is the difference between the quantity of water produced and the quantity of water billed. NRW remains a big challenge and quite high among most CUs. NRW has ranged from 24.6% to 39.30% over the period under review. Though mostly short of the sector benchmark of 25%, the firm has been the best compared to the industry average of 50.6%. This was principally because of 100% metering ratio leading to better management of water demand and billing. Sixth, staff efficiency entails that the lower the number of staff per 1000 connections, the more efficient the company is. In 2018, the firm was the second best at 0.73 (second only to Eastern WSC with 0.75) exceeding the sector average of 0.60 and benchmark of 0.4. Seventh, Sanitation Coverage was the worst performance for NWWSSCL at 19.3% compared to the industry average of 62.8 % and sector benchmark of 80% in 2018.

Eighth, NWWSSCL water coverage was high at 88.9% though the best performing was Nkana WSC at 97% in 2018 compared to a benchmark and sector average of 80% and 85.7% respectively. Ninth, the billing ratio over the period under review has ranged from 80% to 99%, this entails the number of customers billed compared to the database of total customers. Lastly, as indicated earlier in the introduction, regulator's perception ranking indicates that because of the overall favourable performance across all indicators, NWWSSCL was perceived to be among the best performing CUs. However, despite being ranked 1, 1, 3 and 2 in 2013, 2012, 2011 and 2010 respectively, the overall regulator ranking was at 3 in 2018, 2017, 2016 and 2014 while in 2015 it was at 2 (see Table 2).

**Figures 1a and 1b<sup>5</sup> General Performance Indicators**



<sup>5</sup> Based on NWWSSCL (2019) Data

### 3.3 NWWSSCL BOARD

#### Non-Executive Directors



Hon. Christabel Ngimbu  
Board Chairperson



Hon. Danny Chingimbu  
Vice Board Chairperson



Sangazi Maliti  
Chairperson-Finance Staff & Admin



Emma Mankishi Mukokwe  
Chairperson Risk & Audit Committee



Victor Kashila Sondoyi  
Chairperson Technical Committee



Langton Sitima  
Member-Finance Staff & Admin.



Sylvia Kalamba  
Member- Technical Committee

### 3.3.1. CORPORATE GOVERNANCE AND MANAGEMENT

It is a primary role of the board of directors of NWWSSCL to ensure that the company is properly directed and controlled in the best interest of its shareholders and other stakeholders. Adherence to good corporate governance practices enhances performance of NWWSSCL. It is therefore the role and responsibility of the Board and management to drive NWWSSCL in the strategic direction of the company and thus achieve its objectives. In order to guide and direct NWWSSCL's affairs, whilst meeting the appropriate interests of its shareholders and other stakeholders, the company has in place a supervisory board structure composed of one executive and director and seven Non - executive directors (NEDs). The board also operates through board committees such as: a) Finance and Staff Establishment Committee; b) Audit and Risk Committee; and c) Technical Committee.

#### **Board Composition**

There is one (1) Executive Director and Seven (7) non-executive directors

In compliance with internationally recognised modern corporate governance frameworks, the roles of chairperson and chief executive officer are separated to clearly distinguish management authority from board authority and empower the chairperson and CEO to pursue their respective duties without concern that interests in one position might negatively influence the other. In terms of Management structure, broadly, the figure below indicates the current arrangement.



3.4 NEW STRUCTURE FOR BOARD OF DIRECTORS AND MANAGEMENT

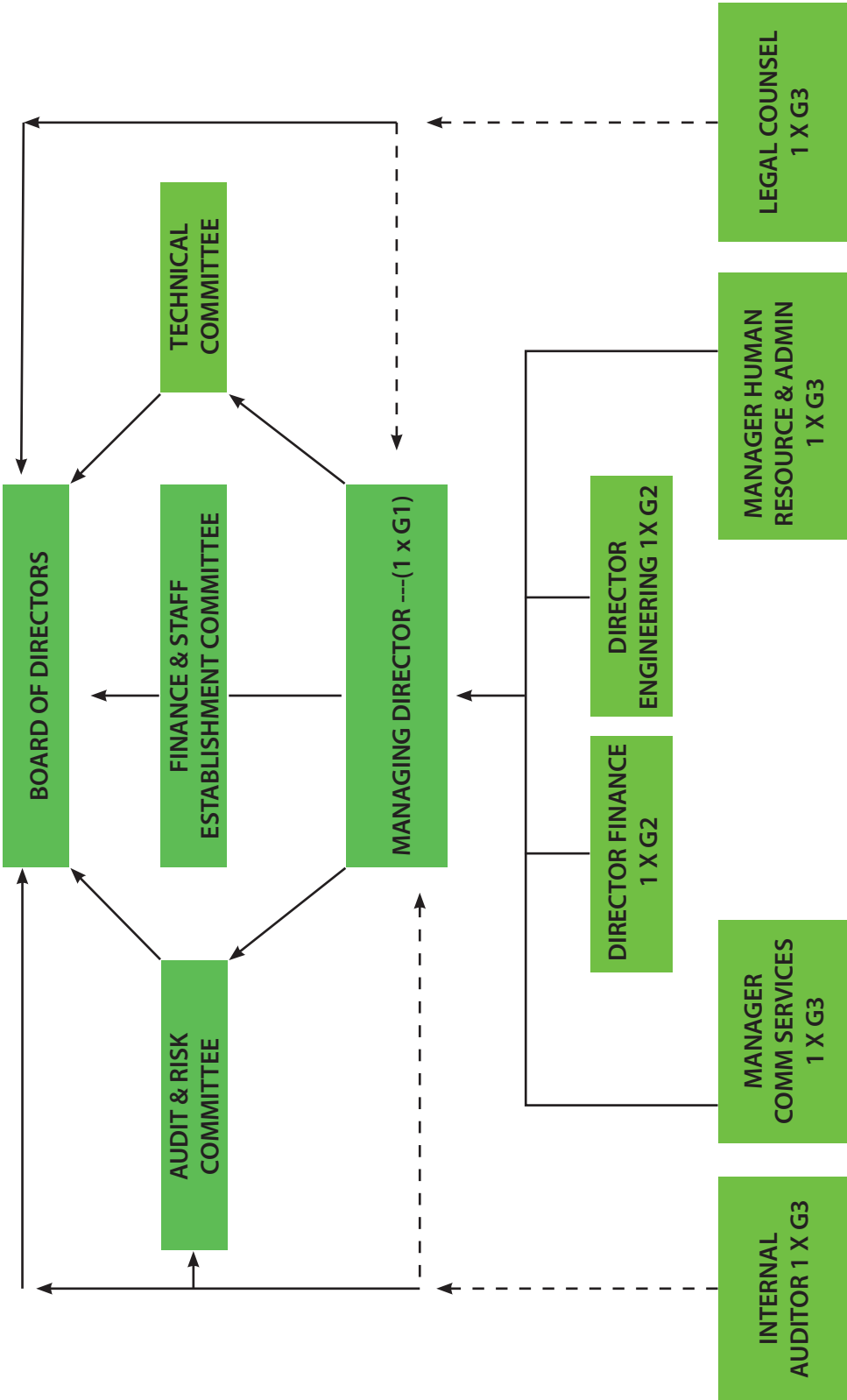


Figure 5: Operations and Maintenance Costs 2014 to 2018 Trends

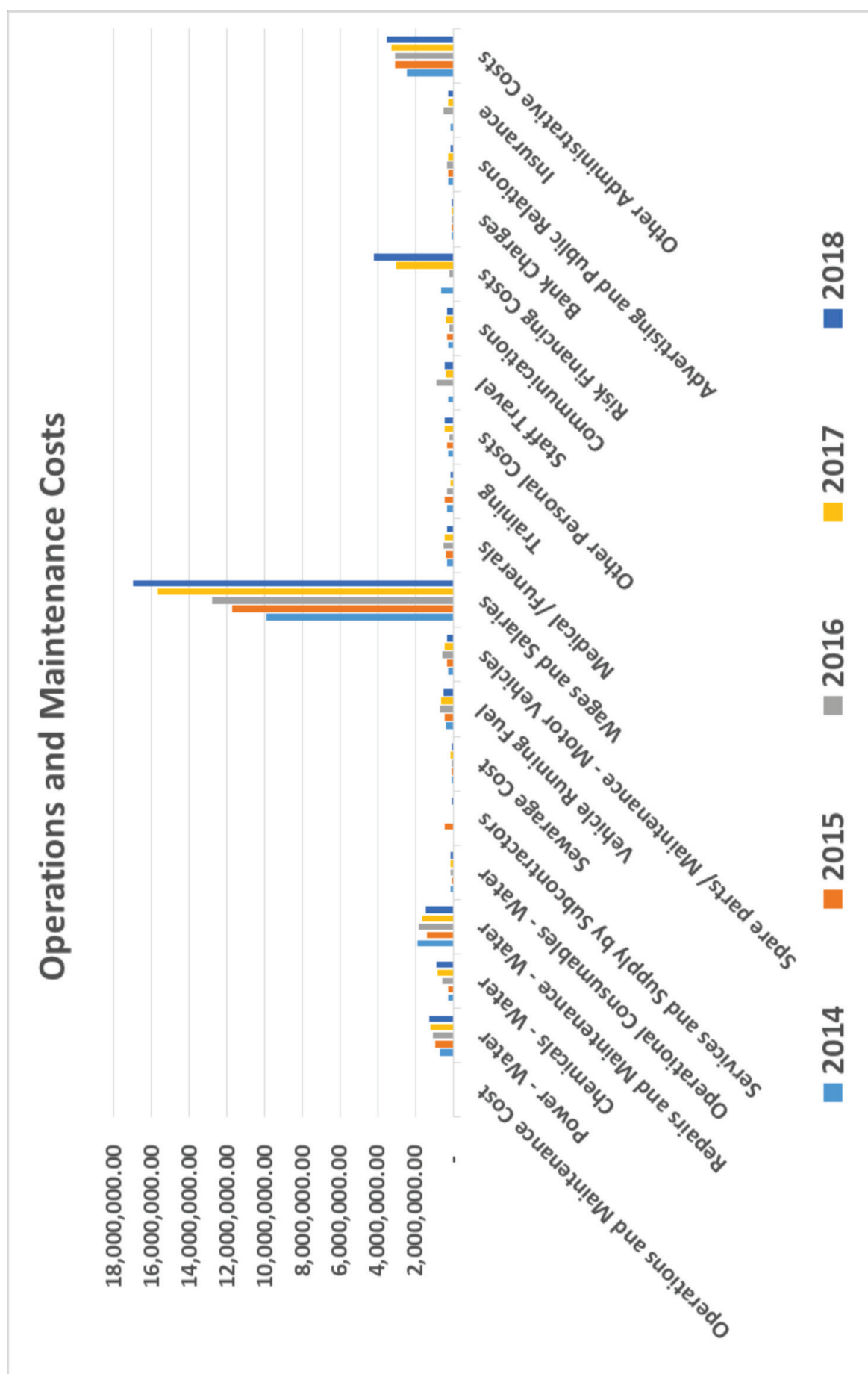


Table 10: Costs of Operation and Maintenance

CU	Personnel Cost (in '000 K)			Chemical Cost (in '000 K)			Energy Cost (in '000 K)			Maintenance Cost (in '000 K)			Other Cost (in '000 K)			Total O&M Cost (in '000 K)		
	2017	2018	% Change	2017	2018	% Change	2017	2018	% Change	2017	2018	% Change	2017	2018	% Change	2017	2018	% Change
LWSC	130,221	151,964	16.7%	6,824	9,274	36%	31,333	41,632	33%	4,799	6,071	26%	28,167	37,110	32%	201,344	246,053	22%
NWSC	55,396	60,961	10.0%	11,249	10,039	-11%	20,460	24,155	18%	6,278	3,887	-38%	18,722	18,775	0%	112,105	117,818	5%
KWSC	41,173	49,004	19.0%	5,442	5,730	5%	20,696	24,316	17%	2,810	3,086	10%	9,734	9,899	2%	79,855	92,034	15%
MWSC	53,614	60,027	12.0%	7,254	7,099	-2%	14,933	19,296	29%	9,308	12,819	38%	27,205	34,714	28%	112,314	133,955	19%
LGWSC	20,752	24,158	16.4%	1,905	1,378	-28%	5,268	7,246	38%	1,951	1,313	-33%	6,552	7,239	10%	36,427	41,334	13%
SWSC	36,112	39,921	10.5%	4,134	5,998	45%	9,976	14,085	41%	2,348	2,869	22%	9,639	12,841	33%	62,209	75,714	22%
CHWSC	13,806	15,516	12.4%	478	573	20%	4,743	6,210	31%	446	234	-48%	2,442	2,532	4%	21,915	25,064	14%
NWWSC	16,629	19,836	19.3%	846	854	1%	1,381	1,772	28%	3,085	2,263	-27%	5,533	5,468	-1%	27,473	30,193	10%
WWSC	10,415	11,644	11.8%	222	412	86%	1,540	2,515	63%	1,583	833	-47%	2,366	2,134	-10%	16,125	17,538	9%
EWSC	20,117	22,381	11.3%	1,633	905	-45%	1,785	3,018	69%	1,022	1,363	33%	4,244	5,103	20%	28,801	32,770	14%
LPWSC	8,685	8,912	2.6%	472	619	31%	1,038	1,335	29%	383	497	30%	784	423	-46%	11,362	11,786	4%
Totals	406,919	464,325	14.1%	40,458	42,882	6%	113,152	145,581	28.7%	34,013	35,233	4%	115,388	136,240	18%	709,931	824,259	16%

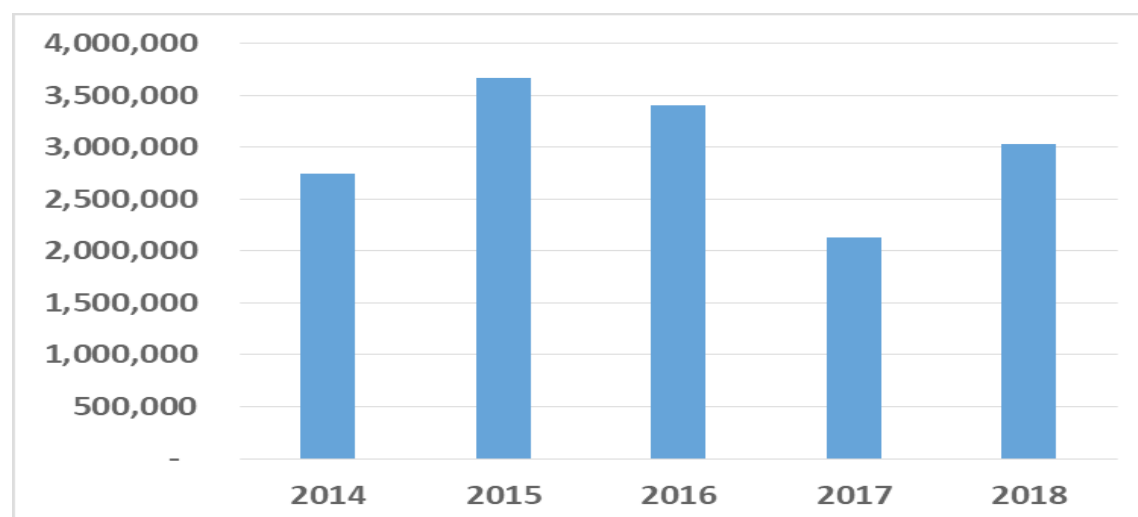
Source: NWASCO - Urban and Peri-Urban Water Supply and Sanitation Sector Report 2018

### 3.4.1. PROFITABILITY

Profitability graphs and charts visually track profitability and help to explain and communicate a specific data story comprehensively. In our data-driven digital age, business 'intelligent' organizations with the ability to collate, organize, and leverage the insights that are most valuable to their ongoing commercial goals are the ones that are destined to thrive in the long-term.

Figure 7 below indicates that despite a steady rise in revenues over the period 2014 to 2018, profits have fluctuated. NWWSSCL must prioritize cost control as a way of boosting profitability.

**Figure 7: Operating Profit and Loss**



### 3.4.2. FINANCIAL RATIOS

In the absence of statement of financial position figures for the NWWSSCL, the NWASCO sector figures (see Table 11) have been used for comparison with other companies in the sector. Clearly, LWSC has remained the most consistently profitable entity among the CUs.

**Table 11: Financial Ratios**

Utility Co.	Current Ratio		Net Profit Margin		Non-Current Asset Turnover	
	2017	2018	2017	2018	2017	2018
LWSC	2.56	2.00	26.75%	8.73%	0.61	0.71
NWSC	0.63	0.83	-16.15%	-0.07%	0.22	0.28
KWSC	0.55	1.17	-1.10%	0.21%	0.60	0.67
MWSC	2.08	1.96	5.13%	0.02%	0.80	0.89
LGWSC	0.66	0.79	-3.65%	-0.05%	0.10	0.13
SWSC	0.73	1.20	8.70%	0.05%	0.27	0.35
CHWSC	0.38	0.89	-8.00%	-0.29%	0.10	0.15
NWWSC	0.80	0.88	-3.03%	-0.05%	0.46	0.50
WWSC	0.77	0.85	23.03%	0.24%	0.38	0.48
EWSC	0.15	0.19	-20.62%	-0.23%	0.30	0.38
LPWSC	0.04	0.37	-8.51%	-0.32%	0.0	0.0

Source: NWASCO - Urban and Peri-Urban Water Supply and Sanitation Sector Report 2018

### 3.4.3. OPERATING COST COVERING (RATIO)

The operating cost covering ratio explains the extent to which operating costs are being covered. The operating cost covering ratio (OCCR) is a measurement of the cost to operate compared to the income brought in by the business. For the ratio to make business sense a comparison is made with other water utility companies operating within Zambia. Due to lack of detailed information for the year 2018, the strategic plan utilises data for the years 2013 to 2017. A lower operating cost covering ratio (OCCR) is desired as it means that expenses are minimized relative to revenue.

**Table 12: Operating cost covering (Ratio)**

Operating Cost Covering Ratio	2013	2014	2015	2016	2017
Chambeshi WSC	0.83	0.73	0.82	0.89	0.91
Eastern WSC	0.83	0.76	0.74	0.76	0.75
Kafubu WSC	1.45	1.25	1.22	1.41	1.47
Luapula WSC	0.46	0.46	0.35	0.50	0.64
Lukanga WSC	0.99	1.07	0.92	1.03	1.02
Lusaka WSC	1.26	0.98	0.91	1.15	1.34
Mulonga WSC	1.39	1.42	1.34	1.44	1.28
Nkana WSC	1.44	1.32	1.35	1.37	1.40
North Western WSC	1.39	0.93	0.96	1.01	0.84
Southern WSC	1.26	1.17	1.15	1.13	1.04
Western WSC	0.83	0.97	1.04	1.05	1.20

As can be seen from the Table 12 above, NWWSSCL's Operating cost covering Ratios for 2013 to 2017 are 1.39, 0.93, 0.96, 1.01, and 0.84 respectively. NWWSSCL's rankings are relatively decent: 8th in 2013, 4th in 2014, 6th in 2015, 3rd in 2016 and 2017.

**Figure 8 Operating Cost Covering (Ratio)**

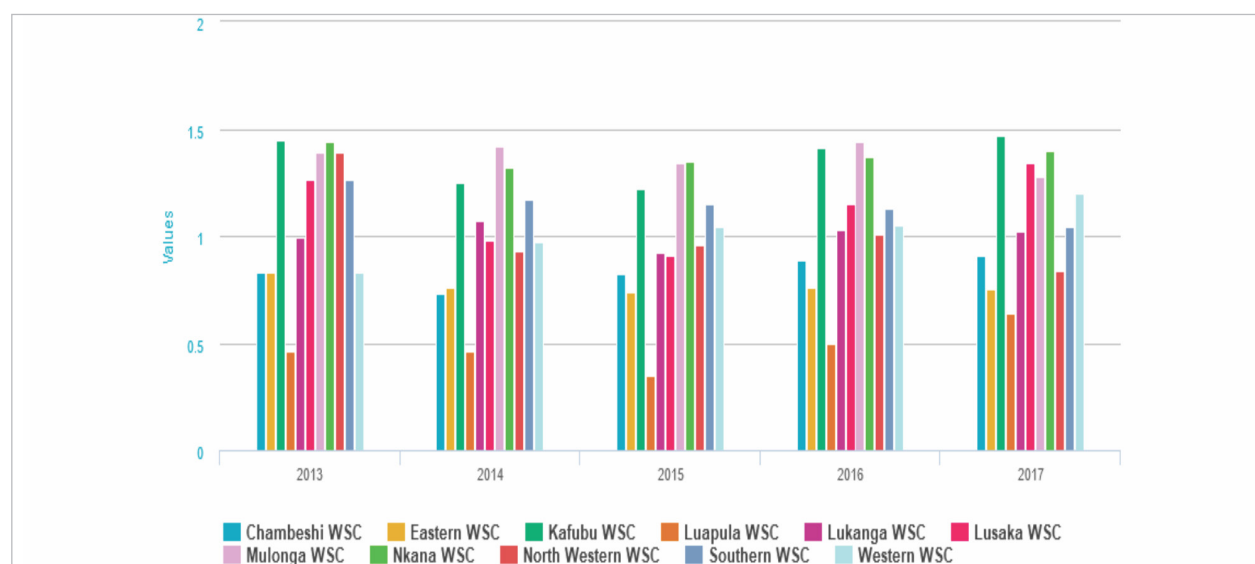


Figure 7 above shows NWWSSCL's graphical positioning compared to other water utility companies in Zambia

### 3.5 STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS

The NWWSSCL is not spared from the dynamism of the current business environment and therefore needs to adapt accordingly lest it drifts strategically. The adaptation requires an assessment of the strategic capabilities and assets of NWWSSCL and how they would help to cope with the opportunities and threats. To execute the Analysis, information was sought from the NWWSSCL annual reports (2015-2019) and stakeholder representatives through a series of workshops.

#### 3.5.1. INTERNAL CAPABILITIES AND ASSETS ASSESSMENT

The diagnosis highlights both the strengths and weaknesses of NWWSSCL capabilities and assets.

##### Strengths

To make the exercise and information more useful in strategy formulation, each identified factor was given a weight as reflected in Table 13 and Figure 8.

##### Weaknesses

Table 14 highlights a list of the weaknesses with their respective weights in terms of the extent of the weakness (high/low) and the importance of that factor to NWWSSCL operations.

The Weaknesses Matrix (Table 14) reveals that all the 18 of the identified weaknesses (with a ranking of mild 3 to major 5) remain very important to NWWSSCL's operations and sustainability. These require serious attention. For example, on weakness # 9, while potential exists, there has been low focus on sanitation services which could actually be one way of ameliorating the low customer base (weakness # 10) and as well as the financial base (weakness # 1). Additionally, the Weaknesses Matrix Map Figure 9 indicates the assessed level for each of the weaknesses and its importance to NWWSSCL operations. Weaknesses in the top right (green) quadrant are major weaknesses and represent areas that are important to NWWSSCL. These require immediate attention. Lastly, the weaknesses reflected in the bottom right (yellow) quadrant need to be maintained or minimised further as they are minor weaknesses but remain important to NWWSSCL.

An audit, assessment and evaluation of the NWWSSCL resources and competencies revealed further areas of strengths and weaknesses as reflected in Table 15.

The capabilities identified in Table 15 are also reflected in the NWWSSCL Resources/Competences Matrix Map (Figure 10) that shows the level of each of the capabilities (minor or major) and its importance to the success of NWWSSCL operations. Firstly, the top right quadrant shows capabilities in NWWSSCL which are not only strong but also important for sustainability. Secondly, the bottom right quadrant depicts capabilities in NWWSSCL which are weak and yet important for sustainability of its operations. The implication is that NWWSSCL needs to work on strengthening those resources/competencies. Thus, there is need for NWWSSCL to sustain areas of strength and work on improving the areas of weakness.

#### 3.5.2. ENVIRONMENTAL SCANNING AND ANALYSIS (OPPORTUNITIES AND THREATS)

A thorough scanning and interpretation of the external environment is cardinal in the strategy making process. The overall idea was to explore the strategic fit between the NWWSSCL internal factors and the external environment.



## Opportunities

Opportunities are favourable factors in the external environment that NWWSSCL can take advantage of to fulfil its mission and achieve its goals. Table 16 highlights some of the key opportunities in the environment.

Figure 11 indicates that NWWSSCL needs to strategize on how it will adapt to the opportunities reflected in the top right (green) quadrant because of the high likelihood of occurrence and the high importance on NWWSSCL operations. Conversely, the opportunity reflected in the bottom (red) quadrant can be ignored because not only is its importance on NWWSSCL operations minimal but also the likelihood of occurrence is low.

## Threats

A threat is a factor in the external environment that makes it difficult for NWWSSCL to achieve its goals and fulfil its mission. Table 17 highlights the threats from the environment based on the likelihood of occurrence and the impact/importance on the operations of NWWSSCL.

Figure 12 indicates that NWWSSCL needs to strategize on how it will minimise the negative effects of the threats reflected in the top right (green) quadrant because of the high likelihood of occurrence and the high importance on NWWSSCL operations. Conversely, the threats reflected in the bottom (red) quadrant can be ignored because not only are their impact on NWWSSCL operations minimal but also the likelihood of occurrence is low.

### 3.5.3. FINDING A STRATEGIC FIT

To ensure sustained viability and to achieve its goals, an organisation has to use its strengths (S) and capabilities to respond to major opportunities (O) in the environment (SO strategies). Similarly, an organisation needs to seize opportunities (O) in the environment to work on its weaknesses (W) and their impact (WO strategies). Furthermore, to ensure sustainability, NWWSSCL has to employ its strengths (S) to minimise the impact of external threats (T) on its operations (ST strategies). Similarly, the organisation has to minimise its weaknesses (W) to reduce the impact of external threats (T) on its operations (WT strategies). Table 18 reflects the SO and WO strategies as well as possible ST and WT strategies.

Table 18 Strategic Fit Matrix- Possible Strategies, Tactics, Actions

External Opportunities		External Opportunities	NWWSSCL Internal Weaknesses
		(1) Well established Company policies, (2) 100% Metering Ratio, (3) Qualified Staff and Man power Support, (4) Well Established Water Quality Lab, (5) Size of potential Customer Base, (6) Access to funds, (7) Relationship with Key Stakeholders, (8) Performance Monitoring Systems (PMS)/ MIS, (9) Reputable Water Services e.g. water quality, and, (10) State of the Art Water Plant	(1) Weak financial base, (2) Inadequate ICT infrastructure and systems (3) High labour turnover, (4) Dilapidated WatSan infrastructure, (5) Inadequate implementation of internal controls and procedures, (6) High NRW, (7) Limited customer feedback, (8) Insufficient stakeholder engagement, (9) Low focus on sanitation, (10) Low customer base, (11) Skills gap for plumbers, (12) Failure to procure repair and connection materials, (13) Debt Management, (14) Inadequate sensitization on the usage of alternative payment methods, (15) Failure to satisfy demand for WatSan, (16) Inadequate capacity to satisfy potential demand, (17) Poor customer care management and, (18) Absence of Asset Register
External Opportunities		SO Strategies	WO Strategies
	(1) Except for private boreholes and septic tanks, the firm has monopoly in water supply and sanitation in the province, (2) MoU with the Mines in the supply of water and sanitation Services, (3) Vastness of the province still calling for Business Expansion, (4) Abundant Water Sources (Good Aquifers & surface water), (5) Economic Boom in the Province (new developments, malls and buildings etc., (6) Large potential customer base (presents an opportunity for expansion), (7) Large number of off grid sanitation facilities in new residential areas, (8) Availability and Access to Financial institutions (Banks), (9) Stable political environment/climate, (10) Harnessing solid waste management/energy opportunities, and, (11) Availability of Qualified Man-power in the market	Increase sewer connections to existing water customers by leveraging on access to funds Set up a project team to engage relevant stakeholders/explore each of the revenue streams in the non-traditional product/customer categories Expedite the efforts of launching the Ultra-modern water processing plant in order to expand production Set up a project team to explore expansion and increase capacity utilization of existing water and sanitation plants Mobilise resources to procure vacuum tankers for underserved/off grid sanitation services customers	Develop key project proposals to access funds generated internally as well as from cooperating partners (ODA) for production expansion and new projects Explore and implement more payment mechanisms for customers based on mobile and other e-banking avenues Leverage on existing cost-effective technologies to establish robust CRM systems to enhance customer feedback and interactions Increase capacity utilization in water and sanitation plants to reach additional customers
External Threats		ST Strategies	WT Strategies
	(1) Frequent changes in labour Laws (increase in minimum wage), (2) Increase in interest rate (cost of borrowing goes up), (3) Exchange rate (weaker currency), (4) Power Outages, (5) Encroachments to the water bodies, (6) Competitors (increase in Private boreholes, Private Vacuum tankers, Bottled Water), (7) Lobbying for licensing regulations, (8) Climate change, (9) Political Interference, (10) Change in technology, (11) illegal connections, and (12) vandalism	Update the HR policies in line with changes in labour laws Leverage on the existing sources of renewable energy for continuity of office operations e.g. install solar as a parallel source of energy for offices Expedite the completion of feasibility study and commission the biogas project to generate additional revenue Explore agency mechanisms with regulators for private borehole licensing, compliance and monitoring, and consider further price discrimination between household and commercial customers.	Leverage on cost-effective and free technologies to increase communications and feedback with customers Generate more funds internally by optimizing capacity utilization to serve additional customers for water and sanitation services Use technologies to enhance administrative efficiency to contain and reduce administrative costs

The situational Analysis and suggested strategies, tactics and actions presented in Table 18 form the foundation on which this strategic plan is built.



*Government as a key Stakeholder is an important factor in our engagement of various stakeholder*



*Stakeholder engagement at all levels is necessary for information sharing - update & feedback for support and effective service delivery.*



### 3.6 STAKEHOLDER MAPPING

Stakeholders are entities/individuals who depend on an organisation to achieve their goals and upon which the organisation depends to fulfil its mission and vision. A holistic understanding of an organisation's stakeholders is a precursor to crafting strategic direction that meets their expectations. Stakeholder mapping involves profiling the stakeholders in relation to their power and interest in the relevant organisation. The outcome of stakeholder analysis for NWWSSCL is reflected in Table 19 where power refers to the ability to block or facilitate strategic directions/implementation and interest connotes 'what is in it for them' on a scale of 1 (low) to 5 (high).

A summary of the stakeholder mapping is provided in a grid in Figure 15.

In the second quadrant, one (1) stakeholder with high power and low interest ought to be satisfied as they too can have an impact on the firm's strategy. Further, while the fourth quadrant does not contain any stakeholder, NWWSSCL should not ignore the two (2) stakeholders in the 3rd quadrant but instead should keep them informed or NWWSSCL should keep itself abreast of their activities as the case may be.

#### 3.6.1. STAKEHOLDER MANAGEMENT STRATEGIES

Table 19 highlights the strategies for dealing with specific stakeholders to meet their expectation.

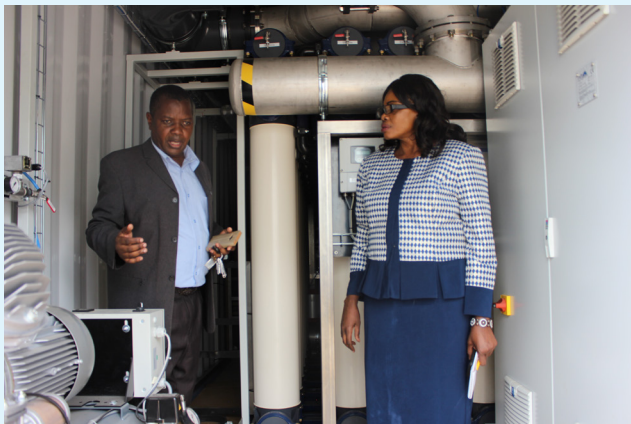
Table 19 Stakeholder Management Strategies

No.	Stakeholder	Interest	Power	Strategies
1.	Customers a) Domestic b) Commercial c) GRZ	High High High	Low Medium High	a) Continued improvement in quality of service b) Conduct regular customer satisfaction survey c) Keep them informed of NWWSSC activities regularly
2.	Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP)	High	High	1. Involvement in expansion and CAPEX projects 2. Keep them informed of progress and achievements
3.	National Water Supply and Sanitation Council (NWASCO)	High	High	1. Carry out expansion projects 2. Ensure compliance on SLA/SLG etc. 3. Be current on fees and payment plans
4.	Zambia Environmental Management Agency (ZEMA)	High	High	1. Ensure compliance to environmental standards 2. Payment of licence fees
5.	Water Resources Management Authority (WARMA)	High	High	1. Ensure compliance on water abstraction 2. Payment of water permits
6.	Zambia Bureau of Standards (ZABS) / Zambia Compulsory Standards Agency (ZCSA)	High	Medium	1. Ensure compliance to standards
7.	Local Authority/Shareholders	High	High	1. Ensure revenue maximization 2. Communicate annually at the AGMs
8.	Traditional Leaders	Medium	High	1. Provide regular updates on projects being undertaken 2. Engagement of traditional leaders with clear intentions explained 3. Extended service delivery
9.	Suppliers	High	High	1. Make payments according to agreed terms 2. Maintain good communication to sustain relationship
10.	Media	Low	High	1. Engage as needed and sponsor programs to provide frequent updates on developments in the organisation 2. Prompt response to their queries
11.	MPs and Councillors	Medium	Medium	1. Maintain good relationship through communication 2. Keep them updated on developments

No.	Stakeholder	Interest	Power	Strategies
12.	Mines	High	High	1. Keep them satisfied as stipulated in the MoU
13.	Local Authority (Regulator)	High	High	1. Keep them satisfied with the service level guarantees i.e. quality, water pressure, coverage
14.	Union	High	High	1. Keep involved and satisfied with conditions of service and new company developments and standards
15.	Consumer Watch group	Medium	Low	1. Keep informed with service level guarantees i.e. quality assurance
16.	Employees	High	High	1. Keep involved and satisfied with conditions of service and new company developments and standards 2. Maintain regular communication as internal customers
17.	Civil society	Medium	Medium	1. Keep informed about products / services and other the developments
18.	Host Community	High	High	1. Improve quality of service and satisfaction 2. Inform community on our services as well as CSR activities
19.	Cooperating Partners (ODA)	High	High	1. Engage regularly and demonstrate prudent utilisation of resources
20.	Ministry of Health (MOH)	Medium	High	1. Maintain a good quality of service delivery e.g. WQ 2. Engage / inform regularly for all company CSR activities involving prevention of diseases in areas of operation
21.	Relevant Training Institutions	Medium	Medium	1. Engage as needed to help in staff development / training in relevant areas
22.	Competitors	High	High	1. Monitor activities as well as prices regularly



STRATEGIC PRIORITIES AND DIRECTION



Investment in new technologies in pursuit of excellent service provision. The new ultrafiltration water treatment Plant



Regular maintenance of infrastructure is required for optimal water production.



Customer engagements will be key to enhancing customer and stakeholder care and satisfaction



## 4.0. STRATEGIC PRIORITIES AND DIRECTION

Based on the foregoing organisational and environment Analysis, the strategic direction chosen emphasises working toward commercially viable and sustainable supply of safe adequate water and sanitation services. This entails working within five priority areas: a) increasing revenue, b) increasing production capacity, c) maintaining and upgrading infrastructure, d) improving organisational effectiveness and efficiency, as well as e) enhancing customer and stakeholder care and satisfaction

### 4.1 STRATEGIC GOALS AND OBJECTIVES

The NWWSSCL vision and mission will be delivered through the following strategic goals and objectives:

#### 4.1.1. INCREASE REVENUE BY 15% ANNUALLY TO ASSURE COMMERCIAL AND FINANCIAL SUSTAINABILITY. THIS WILL BE ACHIEVED THROUGH THE FOLLOWING OBJECTIVES:

- a) Increase revenue collection in the traditional customer / product category from 92.15% to 99% of projected billing quarterly starting the 2nd Quarter of 2020;
- b) Increase customer base per quarter by 500 from 350 new water connections starting 2nd Quarter of 2020; there may be need to consider increasing connection fee to incorporate the direct materials required for each connection.
- c) Increase pay points and payment platforms and make monthly communications about the various payment platforms available to the customer starting 2nd Quarter of 2020;
- d) Increase profitability year on year by 5% starting 4th Quarter of 2020;
- e) Increase revenue contribution of the non-traditional products/customer categories (e.g. Mines, Biogas, more Sewer connections as well as other on-site and Off-site sanitation services) by 5% yearly starting 4th Quarter of 2020; and,
- f) Increase sanitation coverage by 30% by the end of 2023 starting 1<sup>st</sup> Quarter of 2021.

#### 4.1.2. INCREASE PRODUCTION CAPACITY TO FACILITATE ADDITIONAL CUSTOMER REACH / COVERAGE. THIS GOAL WILL BE REALIZED THROUGH THESE OBJECTIVES:

- a) Commission new ultra-modern processing plant by 3rd Quarter of 2020
- b) Increase existing plants and procure relevant additional new infrastructure for piped water commencing 4th Quarter of 2020;
- c) Increase sewerage infrastructure commencing 1st Quarter of 2021;
- d) Sustain consistent water supply to a minimum of 20hrs (NWASCO standard) per day in existing and new serviced areas starting 1st Quarter of 2020;
- e) Procure water Bowser and related equipment to increase operational capacity for bulk water supply services commencing 3rd Quarter of 2022;
- f) Procure vacuum tankers and related equipment to increase operational capacity for sanitation / sewerage services commencing 3rd Quarter of 2021.

#### **4.1.3. IMPROVE MAINTENANCE AND UPGRADE EXISTING SOFT AND HARD INFRASTRUCTURE FOR SUSTAINABLE AND CONSISTENT SERVICE DELIVERY. THIS WILL BE ACCOMPLISHED THROUGH THE FOLLOWING OBJECTIVES:**

- a) Perform regular maintenance and upgrade existing hard infrastructure for water supply, e.g. plant and machinery, water pipes etc., quarterly starting 2nd Quarter of 2020.
- b) Perform regular maintenance and upgrade existing hard infrastructure for sanitation / sewerage services, e.g. plant and machinery, sewer pipes, etc., quarterly starting 2nd Quarter of 2020;
- c) Reduce Non-revenue Water from 39.3% to 20% quarterly starting 1st Quarter 2020;
- d) Carry out regular maintenance and upgrade existing MyWATSAN infrastructure every quarter beginning 2nd Quarter of 2020;
- e) Carry out regular maintenance and upgrade other existing soft ICT infrastructure biannually beginning 2nd Quarter of 2020;
- f) Perform regular maintenance and upgrade existing hard infrastructure such as computer hardware, chairs, tables, etc. biannually starting 2nd Quarter of 2020;
- g) Perform regular maintenance and upgrade existing office infrastructure, at Head Office and remote areas, to enhance corporate image / impression of stakeholders starting 2nd Quarter of 2020, and h) Perform regular maintenance and updating fixed asset register

#### **4.1.4. ENHANCE CUSTOMER AND STAKEHOLDER CARE AND SATISFACTION:**

The following objectives will be used to attain this goal:

- a) Educate stakeholders on new initiatives such as new products, new payment channels monthly starting 3rd Quarter of 2020 by leveraging on social media and other ICT platforms;
- b) Monitor and resolve customer and stakeholder complaints, where possible within 72 hours, in relation to SLGs (i.e. reported versus resolved) on a quarterly basis starting 2nd Quarter of 2020; establish a customer complaints charter and mechanism for resolving complaints within a self-prescribed time limit;
- c) Carry out regular customer and stakeholder surveys to monitor satisfaction levels on a biannual basis starting 2nd Quarter of 2020; Carry out employee job satisfaction surveys yearly to enhance retention (by addressing intrinsic and extrinsic issues raised) commencing 4th Quarter of 2020; and,
- d) Manage relationships proactively with key stakeholders (such as regulatory agencies on compliance issues) on a quarterly basis starting 1st Quarter of 2020; e.g. Council, ZESCO, Provincial Planning Office, etc.

#### **4.1.5. ENHANCE ORGANISATIONAL EFFECTIVENESS AND EFFICIENCY THROUGH INNOVATION.**

This goal will be achieved through the following objectives:

- a) a) Benchmark performance against the best water and sanitation firms every two (2) years so as to be in the top 10% on the globe
- b) Contain and reduce total operating and maintenance cost from 91.2% to below 80% of revenue annually starting 4th Quarter of 2020;
- c) Monitor and enhance compliance to regulatory standards regularly to ensure high compliance



levels every quarter beginning 2nd Quarter of 2020;

- d) Harvest and research new knowledge from external and internal customer interactions in relation to service delivery quarterly beginning 1st Quarter of 2020;
- e) Enhance implementation of the Performance Management System to ensure a Results Only Work Environment (ROWE) based on the rhythm of accountability cascaded at every level/unit of the organisation starting 1st Quarter 2020;
- f) Encourage, monitor and reward innovative initiatives in relation to effectiveness and efficiency in service delivery quarterly starting 1st Quarter of 2020;
- g) Inculcate a customer centric culture by perennial training of all staff in relevant areas to improve external and internal customer care and service delivery biannually beginning 2nd Quarter of 2020;
- h) Explore expansion possibilities around solid waste management into biogas production for household customers' use commencing 3rd Quarter of 2021;
- i) Enhance corporate citizenship (image) by undertaking, reporting and informing stakeholders on CSR activities annually starting 4th Quarter of 2020;
- j) Monitor, evaluate and control performance as outlined in the annual plans and budgets on a quarterly basis starting 1st Quarter of 2020;
- k) Review the Strategic Business Plan (SBP) every two years; and
- l) Regularly undertake risk assessment on business continuity preparedness and sustainability quarterly starting 3rd Quarter of 2021 (e.g. continuity of operations and client interactions in the event of a pandemic through investment in ICT infrastructure and platforms).





## 4.2 STRATEGIC RESPONSES

Based on the foregoing strategic direction and goals, Table 20 highlights the strategies, activities as well as the expected outputs.

Table 20: Strategic Responses, Strategies and Activities

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
4.1.1 Increase revenue by 15% annually to assure commercial and financial sustainability	a) Increase revenue collection in the traditional customer / product category from 92.15% to 99% of billing quarterly starting the 2nd Quarter of 2020;	Improve collection efficiency by effective bill distribution, use of e-withdraw notices, effective use of alternative payment platforms Generate and expedite new customer connection processes and procedures	<ul style="list-style-type: none"> <li>➤ Regularly work on the system to be effective in e-bill distribution</li> <li>➤ Increase sensitisation about payment methods and other notices</li> <li>➤ Address the existing hitches in new customer connections processes</li> </ul>	Increased total revenue; Increased revenue collection efficiency; increased billing efficiency based on targets.
	b) Increase the customer base per quarter by 500 from 350 new water connections starting 2nd Quarter of 2020;	Form a committee to explore effective communications platform as well as costs and implement	<ul style="list-style-type: none"> <li>➤ Use GIS for new customer location</li> <li>➤ Create database for customer relationship management</li> </ul>	Increased number of customers per quarter Database created and being utilised
	c) Increase pay points and payment platforms and make monthly communications about the various payment platforms available to the customer starting 2nd Quarter of 2020;		<ul style="list-style-type: none"> <li>➤ Explore use of contact management module to track and process new connections</li> <li>➤ Mobilise resources</li> <li>➤ Work out a plan to operationalise these communications regularly</li> </ul>	Communications made regularly; Increased revenue collections per payment mode

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	<p>d) Increase profitability year on year by 5% starting 4th Quarter of 2020;</p> <p>e) Increase revenue contribution of the non-traditional/products/customer category (e.g. Mines, Biogas, Sewer connections, Off-site sanitation services, Vacuum tanker-desludge septic tank and Solid waste management) by 5% yearly starting 4th Quarter of 2020;</p> <p>f) Increase sanitation coverage by 30% based on the current customer base for sanitation services starting by 1<sup>st</sup> Quarter 2021.</p>	<p>Introduce a system to check profitability levels regularly</p> <p>Set up a project team to engage relevant stakeholders / explore each of the revenue streams</p> <p>Constitute a committee to explore this expansion and expedite process of connections</p>	<p>➤ Observe costs and revenue trends on a monthly basis</p> <p>➤ Mobilise resources required</p> <p>➤ Regularly engage the Mines for new/improved business</p> <p>➤ Explore possibilities of commercialising biogas</p> <p>➤ Engage stakeholder for developmental plans for sewer connections</p> <p>➤ Increase customer awareness about offsite sanitation services</p> <p>➤ Create a schedule for maintenance of equipment for these services</p> <p>➤ Get quotations for material required and Mobilise resources to procure materials for new installations</p> <p>➤ Shorten the process of new sewer connections</p> <p>➤ Increase demand by use of regular marketing communications</p>	<p>Increase in profitability</p> <p>Increased revenue per non-traditional category / increased total revenue contribution of non-traditional business</p> <p>Materials for sewerage connections procured;</p> <p>Increased customer base for sanitation services</p> <p>Increased revenue from sewerage / sanitation services</p>

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
4.1.2 Increase production capacity to facilitate additional customer reach / coverage.	<p>a) Commission new ultra-modern processing plant by 3<sup>rd</sup> Quarter of 2020;</p> <p>b) Increase existing plant capacity and procure relevant additional new infrastructure for piped water commencing 4th Quarter of 2021;</p> <p>c) Increase sewerage infrastructure commencing 1st Quarter of 2021</p> <p>d) Sustain consistent water supply to a minimum of 20hrs (NWASCO standard) per day in existing and new serviced areas starting 1st Quarter of 2020;</p>	<p>Expedite the process of launch by engaging relevant stakeholders</p> <p>Set a project team to explore expansion of existing water plants</p> <p>Set a project team to explore expansion of existing sewer plants</p> <p>Develop a system to monitor and control water supplied daily</p>	<p>➤ Resource mobilisation for the activities involved</p> <p>➤ Inspect the plant to ensure everything is intact</p> <p>➤ Carry out inspection of existing plant and identify ways to expand existing plants</p> <p>➤ Mobilise resources for new and additional equipment for piped water</p> <p>➤ Replace old pipes with new ones</p> <p>➤ Carry out inspection of existing plant and identify ways to expand existing plants</p> <p>➤ Mobilise resources for new and additional equipment for piped sewer</p> <p>➤ Replace old pipes with new ones</p> <p>➤ Gather information on water supply and establish /set minimum</p>	<p>New Ultra-Modern processing plant commissioned</p> <p>Increased efficiency in volume of water produced</p> <p>Report on inspections</p> <p>Existing water plants increased</p> <p>Old pipes replaced</p> <p>Report on inspections</p> <p>Existing sewer plants increased</p> <p>Old pipes replaced</p> <p>Water supplied to a minimum of 20hrs per day</p>
	<p>e) Procure Water Bowser and related equipment to increase operational capacity for bulk water supply services commencing 3rd Quarter of 2022;</p> <p>f) Procure vacuum tankers and related equipment to increase operational capacity for sanitation / sewerage services commencing 3rd Quarter of 2021.</p>	<p>Mobilise resources and schedule procurement</p> <p>Mobilise resources and schedule procurement</p>	<p>➤ Get quotations, board approval and procure</p> <p>➤ Get quotations, board approval and procure</p>	<p>Water Bowser and related equipment procured/enhanced for bulk water supply</p> <p>Vacuum Tankers and related equipment procured for sanitation / sewerage services</p>

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
4.1.3 Improve maintenance and upgrade existing soft and hard infrastructure for sustainable and consistent service delivery	<p>a) Perform regular maintenance and upgrade existing hard infrastructure for water supply, e.g. plant and machinery, water pipes etc., quarterly starting 2nd Quarter of 2020;</p> <p>b) Perform regular maintenance and upgrade existing hard infrastructure for sanitation e.g. plant and machinery, sewer pipes, etc., quarterly starting 2nd Quarter of 2020;</p>	<p>Initiate and establish mechanisms for regular maintenance and upgrade of hard infrastructure</p> <p>Initiate and establish mechanisms for regular maintenance and upgrade of infrastructure for sanitation</p>	<p>➤ Get quotations and Board approval to procure required materials</p> <p>➤ Mobilise resources to perform these regular maintenance works</p> <p>➤ Record all hard infrastructure and develop a regular maintenance schedule for each type of hard infrastructure</p> <p>➤ Get quotations and Board approval to procure required materials</p> <p>➤ Mobilise resources to perform these regular maintenance works</p> <p>➤ Record all hard infrastructure for sanitation services and develop a regular maintenance schedule for each type of infrastructure</p>	<p>Regular maintenance performed for existing hard infrastructure for water</p> <p>Regular maintenance performed for existing hard infrastructure for sanitation services</p>



GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	<p>c) Reduce Non-revenue Water from 39.3% to 20% (NWASCO standard) quarterly starting 1st Quarter 2020;</p> <p>d) Carry out regular maintenance and upgrade existing MyWATSAN infrastructure every quarter beginning 2nd Quarter of 2020;</p> <p>e) Carry out regular maintenance and upgrade other existing soft ICT infrastructure biannually beginning 2nd Quarter of 2020;</p> <p>f) Perform regular maintenance and upgrade existing hard infrastructure such as computer hardware, chairs, tables, offices, etc. biannually starting 2nd Quarter of 2020;</p>	<p>Establish mechanisms to monitor and control non-revenue water</p> <p>Initiate and establish mechanisms for regular maintenance and upgrade existing MyWATSAN infrastructure</p> <p>Initiate and establish mechanisms for regular maintenance and upgrade of soft infrastructure</p> <p>Initiate and establish mechanisms for regular maintenance and upgrade of hard infrastructure</p>	<p>➤ Schedule and carry out regular maintenance of water supply infrastructure</p> <p>➤ Reduce on breakdowns and replace aged pipes with new ones</p> <p>➤ Identify areas of maintenance for MyWATSAN</p> <p>➤ Schedule regular maintenance of MyWATSAN infrastructure</p> <p>➤ Mobilise resources as needed to carry out maintenance of soft infrastructure</p> <p>➤ Identify areas of maintenance for soft infrastructure</p> <p>➤ Schedule regular maintenance of soft infrastructure</p> <p>➤ Get quotations and Board approval to procure required materials</p> <p>➤ Mobilise resources to perform these regular maintenance works</p> <p>➤ Record all office equipment and develop a regular maintenance schedule for each type of equipment e.g. offices, chairs, tables, etc.</p>	<p>Non-Revenue Water reduced to less than 20%</p> <p>Regular maintenance of MyWATSAN infrastructure performed</p> <p>Regular maintenance of soft infrastructure performed</p> <p>Regular maintenance of existing office hard infrastructure performed</p>

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	g) Perform regular maintenance and upgrade existing office infrastructure, at Head Office and district offices, to enhance corporate image / impression of stakeholders starting 2nd Quarter of 2020	Initiate and establish mechanisms for regular maintenance and upgrade of existing office hard infrastructure	<ul style="list-style-type: none"> <li>➤ Get quotations, Board approval and procure required materials Mobilise resources to carry out upgrade and maintenance</li> <li>➤ Design a programme to carryout upgrades and maintenance of office infrastructure company-wide</li> </ul>	Upgraded Office Infrastructure
	h) Perform regular maintenance and update fixed asset register semi-annually starting 3 <sup>rd</sup> Quarter 2020	Initiate and establish mechanisms for regular maintenance and update fixed asset register	<ul style="list-style-type: none"> <li>➤ Schedule regular maintenance and fixed asset updates</li> </ul>	Report on regular maintenance and asset register
4.1.4 Enhance customer and stakeholder care and satisfaction.	<p>a) Educate stakeholders on new initiatives such as new products, new payment channels monthly starting 3rd Quarter of 2020 by leveraging on social media and other ICT platforms;</p> <p>b) Monitor and resolve customer and stakeholder complaints, where possible within 72 hrs, in relation to SLGs (i.e. reported versus resolved) on a quarterly basis starting 2nd Quarter of 2020;</p>	<p>Establish a system to educate stakeholders on new initiatives</p> <p>Establish mechanisms to monitor customer and stakeholder complaints</p>	<ul style="list-style-type: none"> <li>➤ Identify stakeholders and appropriate channels to educate for each new initiative</li> <li>➤ Mobilise resources as needed</li> <li>➤ Schedule each education activity for each stakeholder identified</li> <li>➤ Employ electronic mailing box / toll free /WhatsApp line to encourage complaint behaviour</li> <li>Record all complaints received</li> <li>➤ Establish customer complaints charter with self-prescribed time limits</li> </ul>	<p>Stakeholders educated / informed about new initiatives</p> <p>Report on complaints completed</p>

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	<p>c) Carry out regular customer and stakeholder surveys to monitor satisfaction levels on a biannual basis starting 2nd Quarter of 2020;</p> <p>d) Carry out employee job satisfaction surveys yearly to enhance retention (by addressing intrinsic and extrinsic issues raised) commencing 4th Quarter of 2020; and,</p> <p>e) Manage relationships proactively with key stakeholders (such as regulatory agencies on compliance issues) on a quarterly basis starting 1st Quarter of 2020; e.g. Council, ZESCO, Provincial Planning Office, etc.</p>	<p>Conduct Surveys/Engage Researchers</p> <p>Conduct employee job satisfaction surveys</p> <p>Establish a mechanism to engage and manage key stakeholders proactively</p>	<ul style="list-style-type: none"> <li>➤ Evaluate complaints received vs. resolved</li> <li>➤ Design questionnaire and administer to members / engage researchers</li> <li>➤ Develop a schedule for conducting such surveys</li> <li>➤ Mobilise resources as need may arise</li> <li>➤ Design questionnaire for employee job satisfaction surveys</li> <li>➤ Develop a schedule for this survey/Identify key stakeholders and understand their expectations</li> <li>➤ Design a schedule to regularly engage key stakeholders</li> </ul>	<p>Customer Service Charter</p> <p>Research Report completed</p> <p>Research Report completed</p> <p>All stakeholders engaged each year and cordial relationships</p>
4.1.5 Enhance organisational effectiveness and efficiency through innovation.	a) Benchmark performance against the best water and sanitation firms every two (2) years so as to be in the top 10% on the globe	Carry out research start 1 <sup>st</sup> Quarter of 2021	<ul style="list-style-type: none"> <li>➤ Mobilise resources needed for research</li> <li>➤ Design and conduct research to identify top 10% Water and Sanitation Services firms in the region</li> <li>➤ Profile the best Water and Sanitation Services firms and identify KPIs</li> </ul>	Report on the best Water and Sanitation Services firms completed

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	<p>b) Contain and reduce total operating and maintenance cost from 91.2% to below 80% of revenue annually starting 4th Quarter of 2020;</p> <p>c) Monitor and enhance compliance to regulatory standards regularly to ensure high compliance levels every quarter beginning 2nd Quarter of 2020;</p> <p>d) Harvest new knowledge from external and internal customer interactions in relation to service delivery quarterly beginning 1st Quarter of 2020;</p> <p>e) Enhance implementation of a Performance Management System to ensure a Results Only Work Environment (ROWE) based on the rhythm of accountability cascaded at every level/unit of the organisation starting 1st Quarter 2020;</p>	<p>Establish a mechanism to monitor operating and maintenance costs</p> <p>Establish a system to identify key regulatory standards and monitor compliance</p> <p>Establish a mechanism to facilitate interactions with both external and internal customers</p> <p>Expedite implementation of Performance Management System</p>	<p>➤ Embarking on cost effective processes, such as use of electronic methods for communications and other activities</p> <p>➤ Train manpower to reduce on repeat jobs</p> <p>➤ Introduce MMS under asset management</p> <p>➤ Design and implement a programme to monitor compliance levels and report results regularly</p> <p>➤ Identify learning and harvest that for sharing purposes</p> <p>➤ Maintain a daily/weekly/twice a month rhythm of reporting/accountability cascaded at every level/unit of the organisation</p> <p>➤ Design a programme to implement the PMS</p> <p>➤ Gather information on challenges for implementation and address the situation</p>	<p>Operating and maintenance costs reduced and contained</p> <p>Compliance to regulatory standards attained</p> <p>Knowledge from external and internal customers harvested</p> <p>Performance Management System implemented</p>



GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	<p>f) Encourage, monitor and reward innovative initiatives in relation to effectiveness and efficiency in service delivery quarterly starting 1st Quarter of 2020;</p> <p>g) Inculcate a customer centric culture by perennial training of all staff in relevant areas to improve external and internal customer care and service delivery biannually beginning 2nd Quarter of 2020;</p> <p>h) Explore expansion possibilities around solid waste management into biogas production for household customers' use commencing 3rd Quarter of 2020;</p> <p>i) Enhance corporate citizenship (image) by undertaking, reporting and informing stakeholders on CSR activities annually starting 4th Quarter of 2020;</p> <p>j) Monitor, evaluate and control performance in relation to strategic plan and budget on a quarterly basis starting 1st Quarter of 2020;</p>	<p>Establish a mechanism to encourage and capture innovative initiatives</p> <p>Initiate a programme to encourage customer centricism</p> <p>Complete feasibility study around solid waste management and biogas production</p> <p>Establish a CSR programme in the areas of operation</p> <p>Establish a mechanism to monitor and control performance in relevant areas</p>	<p>➤ Quarterly reward, encourage staff to submit initiatives</p> <p>➤ Mobilise resources to carry out staff training</p> <p>➤ Identify relevant areas for training</p> <p>➤ Design and conduct training programmes and perform an evaluation</p> <p>➤ Design and conduct feasibility study</p> <p>➤ Report findings and explore implementation</p> <p>➤ Mobilise resources to perform CSR activities</p> <p>➤ Identify CSR activities and design a programme to operationalise this</p> <p>➤ Engage concerned stakeholders about the CSR activities</p> <p>➤ Publicise CSR initiatives by engaging relevant stakeholders such as the media</p> <p>➤ Perform regular monitoring of performance in key areas</p>	<p>Number of innovative initiatives received</p> <p>Training programme conducted</p> <p>Feasibility study completed</p> <p>Enhanced Corporate Image;</p> <p>Number of CSR activities performed</p> <p>Report on performance</p> <p>Deviations and corrective actions taken/ to be taken</p>

GOAL	OBJECTIVE	STRATEGIES	ACTIVITIES	OUTPUT
	<p>k) Review the Strategic Business Plan every two (2) years</p> <p>l) Regularly undertake risk assessment on business continuity preparedness and sustainability quarterly starting 3rd Quarter of 2020 (e.g. continuity of operations and client interactions in the event of a pandemic through investment in ICT infrastructure and platforms).</p>	<p>Establish systems of monitoring and evaluation of strategic plan</p> <p>Establish/strengthen mechanisms for risk assessment on business continuity and sustainability</p>	<p>➤ Report on performance and especially early signals of MIS-performance</p> <p>➤ Control areas needing correction based on the gap observed</p> <p>➤ Engage relevant units/departments / stakeholders based on performance</p> <p>➤ Continually gather information on the key performance indicators and provide feedback</p> <p>➤ Develop a risk register at appropriate departmental levels and assess their likelihood of occurrence, impact and develop mitigation mechanisms</p> <p>➤ Monitor efficacy of mitigation mechanisms</p>	<p>Report on review carried out</p> <p>Risk register developed</p> <p>Risk assessment carried out and feedback provided</p> <p>Report on efficacy of mitigation mechanisms</p>

## 5.0. ACTION PLANS (2020 -2023)

Based on the foregoing strategies and objectives, Table 21 presents the work plans for the strategic activities.

**Table 21: Work Plans**

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
4.1.1 (a) Increase revenue collection in the traditional customer / product category from 92.15% to 99% of projected billing quarterly starting the 2nd Quarter of 2020	<ul style="list-style-type: none"> <li>➤ Regularly work on the system to be effective in e-bill distribution</li> <li>➤ Increase sensitisation about payment methods and other notices</li> </ul>		X	X	X		X	X	X		X	X	X		X	X	X
(b) Increase the customer base per quarter by 500 from 350 new water connections starting 2nd Quarter of 2020	<ul style="list-style-type: none"> <li>➤ Address the existing hitches in new customer connections processes</li> <li>➤ Use GIS for new customer location</li> <li>➤ Create database for customer relationship management</li> <li>➤ Explore use of contact management module to track and process new connections</li> </ul>		X														X
(c) Increase pay points and payment platforms and make monthly communications about the various payment platforms available to the customer starting 2nd Quarter of 2020	<ul style="list-style-type: none"> <li>➤ Mobilise resources</li> <li>➤ Work out a plan to operationalise these communications regularly</li> </ul>		X	X						X							

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(d) Increase profitability year on year by 5% starting 4th Quarter of 2021	<ul style="list-style-type: none"> <li>➤ Observe costs and revenue trends on a monthly basis</li> </ul>				X				X				X				X
(e) Increase revenue contribution of the non-traditional/products/customer category (e.g. Mines, Biogas, Sewer connections, Off-site sanitation services, Vacuum tanker-desludge septic tank and Solid waste management) by 5% yearly starting 4th Quarter of 2020	<ul style="list-style-type: none"> <li>➤ Mobilise resources required</li> </ul>				X				X				X				X
	<ul style="list-style-type: none"> <li>➤ Regularly engage the Mines for new/improved business</li> </ul>				X				X				X				X
	<ul style="list-style-type: none"> <li>➤ Explore possibilities of commercialising biogas</li> </ul>				X				X				X				X
	<ul style="list-style-type: none"> <li>➤ Engage stakeholder for developmental plans for sewer connections</li> </ul>				X												
	<ul style="list-style-type: none"> <li>➤ Increase customer awareness about offsite sanitation services</li> </ul>				X												
	<ul style="list-style-type: none"> <li>➤ Create a schedule for maintenance of equipment for these services</li> </ul>				X												



Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(f) Increase sanitation coverage by 30% by the end of 2023 starting 1st Quarter of 2021.	➤ Get quotations for material required and mobilise resources to procure materials for new installations				X				X				X				X
	➤ Shorten the process of new sewer connections				X				X				X				X
	➤ Increase demand by use of regular marketing communications				X				X				X				X
4.1.2 (a) Commission new ultra-modern processing plant by 3rd Quarter of 2020	➤ Resource mobilisation for the activities involved			X													
	➤ Inspect the plant to ensure everything is intact			X													
	➤ Carry out inspection of existing plant and identify ways to expand existing plants				X												
(b) Increase existing plants and procure relevant additional new infrastructure for piped water commencing 4th Quarter of 2020	➤ Mobilise resources for new and additional equipment for piped water				X				X								
	➤ Replace old pipes with new ones				X				X								
	➤ Carry out inspection of existing plant and identify ways to expand existing plants																
(c) Increase sewerage processing plants and procure relevant additional new infrastructure for piped sewer commencing 1 <sup>st</sup> Quarter of 2021	➤ Mobilise resources for new and additional equipment for piped sewer									X							
	➤ Replace old pipes with new ones									X							
	➤ Carry out inspection of existing plant and identify ways to expand existing plants																

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(d) Sustain consistent water supply to a minimum of 20hrs (NWASCO standard) per day in existing and new serviced areas starting 1st Quarter of 2020	➤ Gather information on water supply and establish /set minimum	X															
(e) Procure water Bowser and related equipment to increase operational capacity for bulk water supply services commencing 3rd Quarter of 2022	➤ Get quotations, board approval and procure											X					
(f) Procure vacuum tankers and related equipment to increase operational capacity for sanitation / sewerage services commencing 3rd Quarter of 2021	➤ Get quotations, board approval and procure							X									
4.1.3 (a) Perform regular maintenance and upgrade existing hard infrastructure for water supply, e.g. plant and machinery, water pipes etc., quarterly starting 2nd Quarter of 2020	➤ Get quotations and Board approval to procure required materials	X															
	➤ Mobilise resources to perform these regular maintenance works	X															
	➤ Record all hard infrastructure and develop a regular maintenance schedule for each type of hard infrastructure	X		X	X	X	X		X	X	X	X	X	X	X	X	X

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(b) Perform regular maintenance and upgrade existing hard infrastructure for sanitation / sewerage services, e.g. plant machinery, sewer pipes, etc., quarterly starting 2nd Quarter of 2020;	➤ Get quotations and Board approval to procure required materials		X														
	➤ Mobilise resources to perform these regular maintenance works		X														
	➤ Record all hard infrastructure for sanitation / sewerage services and develop a regular maintenance schedule for each type of infrastructure		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(c) Reduce Non-revenue Water from 39.3% to 20% (NWASCO standard) quarterly starting 1st Quarter 2020	➤ Schedule and carry out regular maintenance of water supply infrastructure	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	➤ Reduce on breakdowns and replace aged pipes with new ones	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(d) Carry out regular maintenance and upgrade existing MyWATSAN infrastructure every quarter beginning 2nd Quarter of 2020	➤ Identify areas of maintenance for MyWATSAN		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	➤ Schedule regular maintenance of MyWATSAN infrastructure		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(e) Carry out regular maintenance and upgrade other existing soft ICT infrastructure biannually beginning 2nd Quarter of 2020	➤ Mobilise resources as needed to carry out maintenance of soft infrastructure		X														
	➤ Identify areas of maintenance for soft infrastructure		X														
	➤ Schedule regular maintenance of soft infrastructure		X														
(f) Perform regular maintenance and upgrade existing hard infrastructure such as computer hardware, chairs, tables, offices, etc. biannually starting 2nd Quarter of 2020	➤ Get quotations and Board approval to procure required materials		X														
	➤ Mobilise resources to perform these regular maintenance works		X														
	➤ Record all office equipment and develop a regular maintenance schedule for each type of equipment e.g. offices, chairs, tables, etc.		X		X	X	X		X	X	X		X	X	X		X



Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(g) Perform regular maintenance and upgrade existing office infrastructure, at Head Office and remote areas, to enhance corporate image / impression of stakeholders starting 2nd Quarter of 2020	<ul style="list-style-type: none"> <li>➤ Get quotations, Board approval and procure required materials Mobilise resources to carry out upgrade and maintenance</li> <li>➤ Design a programme to carryout upgrades and maintenance of office infrastructure company-wide</li> </ul>		X														
(h) Perform regular maintenance and updating fixed asset register biannually starting 3 <sup>rd</sup> Quarter 2020	<ul style="list-style-type: none"> <li>➤ Schedule regular maintenance and fixed asset updates</li> </ul>			X													
4.1.4 (a) Educate stakeholders on new initiatives such as new products, new payment channels monthly starting 3rd Quarter of 2020 by leveraging on social media and other ICT platforms	<ul style="list-style-type: none"> <li>➤ Identify stakeholders and appropriate channels to educate for each new initiative</li> <li>➤ Mobilise resources as needed</li> <li>➤ Schedule each education activity for each stakeholder identified</li> </ul>			X													

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(b) Monitor and resolve customer and stakeholder complaints, where possible within 72hrs, in relation to SLGs (i.e. reported versus resolved) on a quarterly basis starting 2nd Quarter of 2020	➤ Employ suggestion boxes / toll free /WhatsApp line to encourage complaint behaviour		X														
	➤ Record all complaints received		X	X	X		X	X	X		X	X	X		X	X	X
	➤ Evaluate complaints received vs resolved		X														X
(c) Carry out regular customer and stakeholder surveys to monitor satisfaction levels on a biannual basis starting 2nd Quarter of 2020	➤ Design questionnaire and administer to members / engage researchers		X														X
	➤ Develop a schedule for conducting such surveys		X				X		X				X		X		
	➤ Mobilise resources as need may arise		X														
(d) Carry out employee job satisfaction surveys yearly to enhance retention (by addressing intrinsic and extrinsic issues raised) commencing 4th Quarter of 2020	➤ Design questionnaire for employee job satisfaction surveys and administer		X														
(e) Manage relationships proactively with key stakeholders (such as regulatory agencies on compliance issues) on a quarterly basis starting 1st Quarter of 2020; e.g. Council, Zesco, Provincial Planning Office, etc.	➤ Develop a schedule for this survey identify key stakeholders and understand their expectations	X															
	➤ Design a schedule to regularly engage key stakeholders	X															

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
4.1.5 Benchmark performance against the best water and sanitation firms every two (2) years so as to be in the top 10% on the globe	➤ Mobilise resources needed for research				X								X				
	➤ Design and conduct research to identify top 10% Water and Sanitation Services firms in the region				X								X				
	➤ Profile the best Water and Sanitation Services firms and identify KPIs				X								X				
(b) Contain and reduce total operating and maintenance cost from 91.2% to below 80% of revenue annually starting 4th Quarter of 2020	➤ Embarking on cost effective processes, such as use of electronic methods for communications and other activities				X				X				X				X
	➤ Train manpower to reduce on repeat jobs				X				X				X				X
(c) Monitor and enhance compliance to regulatory standards regularly to ensure high compliance levels every quarter beginning 2nd Quarter of 2020	➤ Introduce MMS under asset management		X														
	➤ Design and implement a programme to monitor compliance levels and report results regularly		X	X	X		X	X	X		X	X	X	X	X	X	X
(d) Harvest new knowledge from external and internal customer interactions in relation to service delivery quarterly beginning 1st Quarter of 2020	➤ Identify learning and harvest that for sharing purposes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(e) Enhance implementation of a Performance Management System to ensure a Results Only Work Environment (ROWE) based on the rhythm of accountability cascaded at every level/unit of the organisation starting 1 <sup>st</sup> Quarter 2020	➤ Design a programme to implement the PMS																
	➤ Maintain a daily/weekly/twice a month rhythm of reporting/accountability cascaded at every level/unit of the organisation	X															
	➤ Gather information on challenges for implementation and address the situation	X															
	➤ Quarterly reward, encourage staff to submit initiatives	X															
(f) Encourage, monitor and reward innovative initiatives in relation to effectiveness and efficiency in service delivery quarterly starting 1 <sup>st</sup> Quarter of 2020	➤ Gather information on challenges for implementation and address the situation	X															
	➤ Quarterly reward, encourage staff to submit initiatives	X															
	➤ Quarterly reward, encourage staff to submit initiatives	X															
	➤ Mobilise resources to carry out staff training	X															
(g) Inculcate a customer centric culture by perennial training of all staff in relevant areas to improve external and internal customer care and service delivery biannually beginning 2 <sup>nd</sup> Quarter of 2020	➤ Identify relevant areas for training	X															
	➤ Design and conduct training programmes and perform an evaluation	X															
	➤ Quarterly reward, encourage staff to submit initiatives	X															
	➤ Mobilise resources to carry out staff training	X															



Objective (Numbers section 4 aligned)	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(h) Explore expansion possibilities around solid waste management into biogas production for household customers' use commencing 3rd Quarter of 2021	➤ Mobilise resources to carry out feasibility study			X													
	➤ Design and conduct feasibility study			X													
	➤ Report findings and explore implementation			X													
(i) Enhance corporate citizenship (image) by undertaking, reporting and informing stakeholders on CSR activities annually starting 4th Quarter of 2020	➤ Mobilise resources to perform CSR activities				X				X				X				X
	➤ Identify CSR activities and design a programme to operationalise this				X				X				X				X
	➤ Engage concerned stakeholders about the CSR activities				X				X				X				X
	➤ Publicise CSR initiatives by engaging relevant stakeholders such as the media				X				X				X				X

Objective	Activities	Year 1 2020				Year 2 2021				Year 3 2022				Year 4 2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
(j) Monitor, evaluate and control performance in relation to strategic plan and budget on a quarterly basis starting 1st Quarter of 2020	➤ Perform regular monitoring of performance in key areas	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	➤ Report on performance and especially early signals of MIS-performance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	➤ Control areas needing correction based on the gap observed	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	➤ Engage relevant units/ departments / stakeholders based on performance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(k) Review the SBP every two years	➤ Continually gather information on the key performance indicators and provide feedback								X							X	
(l) Regularly undertake risk assessment on business continuity preparedness and sustainability quarterly starting 3rd Quarter of 2020 (e.g. continuity of operations and client interactions in the event of a pandemic through investment in ICT infrastructure and platforms).	➤ Develop a risk register at appropriate departmental levels and assess their likelihood of occurrence, impact and develop mitigation mechanisms		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	➤ Monitor efficacy of mitigation mechanisms			X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 22: Budget for Strategic Activities (2020 - 2023)

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
1.	<b>Increase revenue collection in the traditional customer / product category from 92.15% to 99% of billing quarterly starting the 2nd Quarter of 2020</b>									
a)	➤ Regularly work on the system to be effective in e-bill distribution				K	K308	K2,358	K2,594	K2,854	8,114
	➤ Increase sensitisation about payment methods and other notices				K	K232	K255	K280	K308	1075
b)	<b>Increase the customer base per quarter by 500 from 350 new water connections starting 2nd Quarter of 2020</b>									
	➤ Create database for customer relationship management				K	15	17	18	20	70
	➤ Explore use of contact management module to track and process new connections				K	15	17	18	20	70
c)	<b>Increase pay points and payment platforms and make monthly communications about the various payment platforms available to the customer starting 2nd Quarter of 2020</b>									
	➤ Mobilise resources				K					

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
d)	<p><b>Increase revenue contribution of the non-traditional/products/customer category (e.g. Mines, Biogas, Sewer connections, Off-site sanitation services, Vacuum tanker-desludge septic tank and Solid waste management) by 5% yearly starting 4th Quarter of 2020</b></p> <ul style="list-style-type: none"> <li>➤ Mobilise resources required</li> <li>➤ Regularly engage the Mines for new/improved business</li> <li>➤ Explore possibilities of commercialising biogas</li> <li>➤ Engage stakeholder for developmental plans for sewer connections</li> <li>➤ Increase customer awareness about offsite sanitation services</li> </ul>									
					K					162
					K		5	76	7	50
					K	74	50	50		50
					K		8	88	97	193
e)	<p><b>Increase sanitation coverage by 30% by 2023 based on the current customer base for sanitation services</b></p> <ul style="list-style-type: none"> <li>➤ Get quotations for material required and mobilise resources to procure materials for new installations</li> <li>➤ Increase demand by use of regular marketing communications</li> </ul>									
					K	500	1500	500	200	2,700
2. a)	<p><b>Commission new ultra-modern processing plant by 2nd Quarter of 2020</b></p> <ul style="list-style-type: none"> <li>➤ Resource mobilisation for the activities involved</li> </ul>				K					
						120		88	97	193
					K	120				120



NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
b)	<p><b>Increase existing plants and procure relevant additional new infrastructure for piped water commencing 4th Quarter of 2020</b></p> <ul style="list-style-type: none"> <li>➤ Mobilize resources for new and additional equipment for piped water</li> <li>➤ Replace old pipes with new ones</li> </ul>					50	55	60.5	66.5	232
					K	1,575	1,575	1,575	1,575	6,300
c)	<p><b>Increase sewerage processing plants and procure relevant additional new infrastructure for piped sewer commencing 4th Quarter of 2020</b></p> <ul style="list-style-type: none"> <li>➤ Mobilise resources for new and additional equipment for piped sewer</li> <li>➤ Replace old pipes with new ones</li> </ul>					50	55	61	67	233
					K	500	550	605	665	2,320
d)	<p><b>Procure water bowser and related equipment to increase operational capacity for bulk water supply services commencing 3rd Quarter of 2020</b></p> <ul style="list-style-type: none"> <li>➤ Get quotations, board approval and procure</li> </ul>	1	1		K			1,000		1,000
e)	<p><b>Procure vacuum tankers and related equipment to increase operational capacity for sanitation / sewerage services commencing 3rd Quarter of 2020</b></p> <ul style="list-style-type: none"> <li>➤ Get quotations, board approval and procure</li> </ul>	1	1		K		1,000			1,000

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
3. a)	Perform regular maintenance and upgrade existing hard infrastructure for water supply, e.g. plant and machinery, water pipes etc., quarterly starting 2nd Quarter of 2020	1	1	1	K					
		1	1	1	K	1,350	1,350	1,350	1,350	5,400
b)	Perform regular maintenance and upgrade existing hard infrastructure for sanitation / sewerage services, e.g. plant and machinery, sewer pipes, etc., quarterly starting 2nd Quarter of 2020	1	1	1	K					
		1	1	1	K		150	150	150	450
c)	Reduce Non-revenue Water from 39.30% to within 25% (NWASCO standard) quarterly starting 1st Quarter 2020									
		1	1		K	562	562	563	563	2,250
d)	Carry out regular maintenance and upgrade existing MyWATSAN infrastructure every quarter beginning 2nd Quarter of 2020					70				70
		1	1	1	K	20	20	20	20	80

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
e)	<b>Carry out regular maintenance and upgrade other existing soft ICT infrastructure biannually beginning 2nd Quarter of 2020</b> <ul style="list-style-type: none"> <li>➤ Mobilise resources as needed to carry out maintenance of soft infrastructure</li> <li>➤ Schedule regular maintenance of soft infrastructure</li> </ul>	 1  1	 1  1		 K  K	 727  799		 879  967	 967  967	 3,372  3,372
f)	<b>Perform regular maintenance and upgrade existing hard infrastructure such as computer hardware, chairs, tables, offices, etc. biannually starting 2nd Quarter of 2020</b> <ul style="list-style-type: none"> <li>➤ Maintenance work on furniture and Buildings</li> <li>➤ Acquire new Computer hardware</li> </ul>	 1  1	 1  1		 K  K	 100  392	 110  110	 121  121	 133  521	 464  913
g)	<b>Perform regular maintenance and upgrade existing office infrastructure, at Head Office and remote areas, to enhance corporate image / impression of stakeholders starting 2nd Quarter of 2020</b> <ul style="list-style-type: none"> <li>➤ Get quotations, and procure required materials</li> <li>➤ Mobilise resources to carry out upgrade and maintenance</li> <li>➤ Design a programme to carryout upgrades and maintenance of office infrastructure company-wide</li> </ul>	 1  1	 1  1		 K  K	 As in (f)  				

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
4. a)	Educate stakeholders on new initiatives such as new products, new payment channels monthly starting 3rd Quarter of 2020 by leveraging on social media and other ICT platforms									
	➤ Identify stakeholders and appropriate channels to educate for each new initiative	1	1	1	K					
	➤ Mobilize resources as needed									
	➤ Schedule each education activity for each stakeholder identified	1	1	1	K		88	88	97	273
b)	Monitor and resolve customer and stakeholder complaints, where possible within 72 hrs., in relation to SLGs (i.e. reported versus resolved) on a quarterly basis starting 2nd Quarter of 2020									
	➤ Employ mailing box / toll free /WhatsApp line to encourage complaint behaviour									
	➤ Record all complaints received	1	1		K	105	116	127	140	488
	➤ Evaluate complaints received vs resolved									
c)	Carry out regular customer and stakeholder surveys to monitor satisfaction levels on a biannual basis starting 2nd Quarter of 2020									
	➤ Design questionnaire and administer to members / engage researchers	1	1	1	K					63
	➤ Develop a schedule for conducting such surveys									
	➤ Mobilise resources as need may arise	1	1	1	K		15	16	18	



NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
d)	<p>Carry out employee job satisfaction surveys yearly to enhance retention (by addressing intrinsic and extrinsic issues raised) commencing 4th Quarter of 2020</p> <ul style="list-style-type: none"> <li>➤ Design questionnaire for employee job satisfaction surveys and administer</li> </ul>	1	1	1	K	10		15		25
e)	<p>Manage relationships proactively with key stakeholders (such as regulatory agencies on compliance issues) on a quarterly basis starting 1st Quarter of 2020</p> <ul style="list-style-type: none"> <li>➤ Develop a schedule for this survey identify key stakeholders and understand their expectations</li> <li>➤ Design a schedule to regularly engage key stakeholders</li> </ul>	1	1		K		160	176	194	530
5. a)	<p>Benchmark performance against the best water and sanitation firms every two (2) years so as to be in the top 10% on the globe</p> <ul style="list-style-type: none"> <li>➤ Mobilise resources needed for research</li> <li>➤ Design and conduct research to identify top 10% Water and Sanitation Services firms in the region</li> </ul>	1	1		K		200		250	450
b)	<p>Contain and reduce total operating and maintenance cost from 91.2% to below 80% of revenue annually starting 4th Quarter of 2020</p> <ul style="list-style-type: none"> <li>➤ Embarking on cost effective processes, such as use of electronic methods for communications and other activities</li> <li>➤ Train manpower to reduce on repeat jobs</li> </ul>	1	1		K	50	70	70	70	260

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
c)	<b>Monitor and enhance compliance to regulatory standards regularly to ensure high compliance levels every quarter beginning 2nd Quarter of 2020</b> ➤ Water Quality monitoring and Licencing ➤ Introduce MMS under asset management ➤ Design and implement a programme to monitor compliance levels and report results regularly									
		1	1		K	1,000	1,000	1,000	1,000	4,000
		1	1		K	21	21	21	21	84
d)	<b>Enhance implementation of a Performance Management System to ensure a Results Only Work Environment (ROWE) based on the rhythm of accountability cascaded at every level/unit of the organisation starting 2nd Quarter 2020</b> ➤ Enhance PMS implementation program									
		1	1		K	20	25	30	35	110
e)	<b>Inculcate a customer centric culture by perennial training of all staff in relevant areas to improve external and internal customer care and service delivery biannually beginning 2nd Quarter of 2020</b> ➤ Quarterly reward, encourage staff to submit initiatives ➤ Mobilise resources to carry out staff training ➤ Design and conduct training programmes and perform an evaluation									
		1	1		K	50	50	50	50	200
		1	1		K					
		1	1		K	55	61	67	74	257

NO.	ACTIVITY	ITEM	QTY	FREQ	UNIT COST	2020 K'000	2021 K'000	2022 K'000	2023 K'000	TOTAL K'000
f)	Explore expansion possibilities around solid waste management into biogas production for household customers' use commencing 3rd Quarter of 2021									
		1	1		K					
		1	1		K			120	132	252
g)	Enhance corporate citizenship (image) by undertaking, reporting and informing stakeholders on CSR activities annually starting 4th Quarter of 2020									
		1	1		K					
		1	1		K	25	28	30	35	118
		1	1		K		120	132	145	397
h)	Monitor, evaluate and control performance in the annual plans and budgets on a quarterly basis starting 1st Quarter of 2020					75	84	91	100	350
	GRAND TOTAL									44,793

## 6.0. APPENDICES

### 6.1 GENERAL PERFORMANCE INDICATORS

*Table 8 General Performance Indicators (Related to Figures 1a and 1b)*

Performance Indicator	2015				2016				2017				2018				2019	
	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2	q 3	q 4	q 1	q 2
Water Quality	93.00%	99.80%	88.10%	95.90%	90%	98.15%	97.30%	94.80%	99.80%	98.90%	97.30%	98.90%	93.90%	96.90%	96.35%	96.60%	95.60%	96.50%
New water connections	356	347	427	168	350	201	50	135	317	293	483	254	182	579	343	1161	651	227
Billing	4,689,209	4,598,719	4,689,209	4,489,481	5,337,830	5,439,921	6,510,796	6,698,505	4,731,979	5,532,657	6,539,458	6,198,250	5,775,771	6,624,825	7,043,078	7,214,058	6,819,371	6,976,156
Billing ratio	98%	98%	98%	99%	77%	78%	82%	80%	97%	99%	97%	85%	82%	83%	98%	80%	82%	87%
Collection efficiency	71.30%	83.60%	76.10%	89.20%	73.50%	84.40%	85.10%	88.90%	88.41%	91.59%	87.27%	86.10%	75.85%	87.81%	92.35%	99.02%	86.55%	92.15%
NRW	26.95%	29.73%	28.31%	28.22%	30.89%	24.56%	25.23%	25.35%	37.50%	35.20%	33.03%	35.30%	35.32%	35.10%	34.80%	35.65%	33.35%	39.30%
Customer complaints	357	310	338	482	521	1247	482	425	743	1091	968	915	1793	1138	1444	1221	1175	1166
Complaints resolved	333	241	199	249	241	568	288	329	588	936	789	778	1014	1072	1205	1041	1006	1123
Hours of supply									22	22	22	23	22	22	22	22	23	23

## 6.2 SWOT ANALYSIS

Table 13 NWWSSCL Strengths Matrix

No.	Strength Description	Level of Strength (5 – Major Strength 1 – Minor Strength)	Importance (5 – Very Important 1- Least Important)
1	Well established Company policies	5	5
2	100% Metering Ratio	5	5
3	Qualified Staff and Man power Support	4	5
4	Well Established Water Quality Lab	4	5
5	Size of potential Customer Base	2	5
6	Access to funds	2	5
7	Relationship with Key Stakeholders	4	5
8	Performance Monitoring Systems (PMS)/ MIS	4	5
9	Reputable Water Services e.g. water quality	5	5
10.	State of the Art Water Plant	4	5

Table 14 NWWSSCL Weaknesses Matrix

No.	Weakness Description	Level of Weakness (5 – Major Weakness 1 – Minor Weakness)	Importance (5 – Very Important 1 – Least Important)
1	Weak financial base	5	5
2	Inadequate ICT infrastructure and systems	5	5
3	High labour turnover	2	5
4	Dilapidated WatSan infrastructure	3	5
5	Inadequate implementation of internal controls and procedures	3	5
6	High NRW	3	5
7	Limited customer feedback	4	5
8	Insufficient stakeholder engagement	3	5
9	Low focus on sanitation	5	5
10	Low customer base	4	5
11	Skill gap for plumbers	3	5
12	Failure to procure repair and connection materials	5	5
13	Debt Management	5	5
14	Inadequate sensitization on the usage of alternative payment methods	3	5
15	Failure to satisfy demand for WatSan	4	5
16	Inadequate capacity to satisfy potential demand	4	5
17	Poor customer care management	3	5
18	Absence of Asset Register	5	5



Table 15 Capabilities Evaluation Matrix

Internal Area	Resource /Competence	Evaluation (Level) (5 – Major Capability 1 – Minor Capability)	Importance (5 – Very Important 1 – Least Important)
Physical Resources	i. Assets (vehicles) ii. Buildings (offices) iii. Staff houses iv. WATSAN Infrastructure v. Technology Support System	2 4 3 4 2	5 5 2 5 5
Financial Resources	i. Funds Availability/ Cash Flow ii. Continuing Surplus iii. Good Relationship with banks iv. Strategic Partners e.g. the mines v. Overseas Development Agencies (ODA) vi. GRZ Grants/ Support vii. Support from Shareholders viii. Other Revenue Streams	2 1 4 2 3 2 3 2	5 5 5 4 5 5 5 5
Human Resources	i. Trained staff ii. A robust multi-skilled staff that form strong competency iii. Experienced Staff and Man-Power iv. Adherence to Performance Management System (PMS) v. In- House human capital development (e.g. trainee development Program) vi. Highly dedicated/Committed staff (despite being salary arrears) vii. Good industrial relations climate (no strikes since inception because the relations are cordial at both branch and national levels)	5 5 5 5 5 3 5 5	5 5 5 5 5 5 5
Intangible Resource/ Competence	i. Performance monitoring systems ii. Consistent reputable water services iii. Relationship with key stakeholders iv. Highly qualified management and staff v. Strong innovation and creativity practices vi. Good reputation in industrial relation vii. High negotiation skills(loans)	5 4 3 4 4 4 4	5 5 5 5 5 5 5

Table 16 Opportunities Matrix

No	Description of Opportunity	Likelihood (5 – High) (1 – Low)	Importance (5 – High) (1 – Low)
1	Except for private boreholes and septic tanks, the company has monopoly in water supply and sanitation in the province	5	5
2	MoU with the Mines in the supply of water and sanitation Services	5	3
3	Vastness of the province still calling for Business Expansion	5	5
4	Abundant Water Sources (Good Aquifers & surface water)	5	5
5	Economic Boom in the Province (new developments, malls and buildings etc.	5	5
6	Large potential customer base (presents an opportunity of expansion)	5	5
7	Large number of off grid sanitation facilities in new residential areas	4	5
8	Availability and Access to Financial Institutions (Banks)	5	3
9	Stable political environment/climate	4	4
10	Harnessing solid waste management/energy opportunities	5	5
11	Availability of Qualified Man-power in the market	5	5

Table 17 Threats Matrix

No	Description of Threats	Likelihood (5 – High) (1 – Low)	Importance (5 – High) (1 – Low)
1	Frequent change in labour Laws (increase in minimum wage)	2	3
2	Increase in interest rate (cost of borrowing goes up)	5	5
3	Exchange rate (weaker currency)	5	5
4	Power Outages	5	5
5	Encroachments to the water bodies	5	5
6	Competitors (increase in Private boreholes, Private Vacuum tankers, Bottled Water)	2	2
7	Lobbying for licensing regulations	2	4
8	Climate change	5	5
9	Political Interference	2	2
10	Change in technology	2	2
11	Illegal connections	5	5
12	Vandalism	5	5

Table 19 Stakeholder Interest and Power Matrix

No.	Stakeholder	Interest (1-5)	Interest Description	Power (1-5)
1.	Customers <ul style="list-style-type: none"> <li>Domestic</li> <li>Commercial</li> <li>GRZ</li> </ul>	5	Desire quality of water, satisfaction in meeting SLG/SLA and value for money	2
		5		3
		5		4
2.	Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP)	5	Desire increased service coverage for water and sanitation	5
3.	National Water Supply and Sanitation Council (NWASCO)	5	Compliance to regulations and increase in service coverage for water and sanitation	5
4.	Zambia Environmental Management Agency (ZEMA)	5	Desire compliance to regulations regarding environmental protection	4
5.	Water Resources Management Authority (WARMA)	5	Desire compliance regarding protection of water sources	5
6.	Zambia Bureau of Standards (ZABS) / Zambia Compulsory Standards Agency (ZCSA)	5	Compliance to standards	3
7.	Local Authority/Shareholders	5	Share Dividends /ROI	5
8.	Traditional Leaders	3	Land preservations, provision of Water to their people Employment for the locals	4
9.	Suppliers	5	Financial gain through repeat business	5
10.	Media	2	Desire business and positive response to community engagement	4
11.	MPs and Councillors	3	Desire good service provision and well-being of community	3
12.	Mines	5	Ensure good service delivery	5
13.	Local Authority (Regulator)	5	Good service delivery to the community	5
14.	Union	5	Good condition of services and members' welfare	5
15.	Consumer Watch group(s)	3	Customer satisfaction with the quality of service provision. Customer (public) sensitization	2
16.	Employees	5	Good conditions of service as well as good working environment	5
17.	Civil society	3	Customer satisfaction with quality of service	3
18.	Host Community	5	Good corporate citizenship and good quality of service	5
19.	Cooperating Partners (ODA)	5	Quality of service delivered to the community	4
20.	Ministry of Health (MOH)	3	Provision of adequate and safe drinking water	5
21.	Relevant Training Institutions	3	Training current and potential staff for the organisation	3
22.	Competitors	5	Financial gain by providing substitutes for the organisation's water and sanitation services	5





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