



REPUBLIC OF ZAMBIA

MINISTRY OF WATER DEVELOPMENT, SANITATION AND ENVIRONMENTAL PROTECTION



**2018
ANNUAL
REPORT**

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FOREWORD

On behalf of the Zambian Government, it is my honour and privilege to present the 2018 Annual Progress Report for the Ministry of Water Development, Sanitation and Environmental Protection. The report will give a highlight of programmes and projects implemented by the Ministry in the 2018 fiscal year. As required by the Government of Republic of Zambia, Ministries, Provinces and spending agencies must report annually on its progress in meeting the goals and objectives in line with the Seven National Development Plan (7NDP), Vision 2030 and institutional Strategic Plans.

The Ministry of Water Development Sanitation and Environmental Protection in this regard presents to the people of Zambia a detailed annual progress report in meeting the strategic goals and objectives of improving water supply and sanitation, management and development of water resources and the environment as espoused in the government documents already highlighted above.

The Ministry has jurisdiction over three statutory bodies namely; National Water Supply and Sanitation Council (NWASCO), and Water Resources Management Authority (WARMA) and Zambia Environmental Management Agency (ZEMA). In line with its mandate, the Ministry implemented programmes and projects focusing on ensuring water security and availability for various economic uses. Among the programmes implemented included infrastructure development for both surface and groundwater, rehabilitation of already existing surface and groundwater water infrastructure to increase water resources storage capacity and to make water resources available especially for our rural population for domestic, irrigation, animal watering and fishing.

Further, the ministry implemented water supply and sanitation programmes and projects aimed increasing access to clean and safe water for drinking and adequate sanitation for all. In realizing the objectives and goals, the Ministry mainstreamed environmental management programmes in water and sanitation activities. As you may be aware, environmental management plays a key role in the protection and recharging of water resources.

May I hasten to mention that though substantial progress was recorded in the 2018 fiscal year, the economic environment was very challenging, however with support from the cooperating partners and commitment from the members of staff we managed to record the successes. It is my sincere hope that my Ministry will continue striving to achieve the national objectives and targets as outlined in the 7NDP, Strategic Plan 2018-2021 and the Vision 2030.

Allow me to express my gratitude to the Permanent Secretary, Director of Water Resources Development, Director of Water Supply and Sanitation, Director of Planning and Information, Director of Human Resources and Administration, all members of staff in the Ministry and all stakeholders for working together to ensure that we all contribute to the work mandated to the Ministry.

Dr. Dennis. M. Wanchinga, MP

MINISTER OF WATER DEVELOPMENT, SANITATION AND ENVIRONMENTAL PROTECTION



ACKNOWLEDGEMENT

2018 was a year where the Ministry of Water Development, Sanitation and Environmental Protection made positive strides aimed at improving management and development of water resources, access to adequate water supply and sanitation as espoused in the vision 2030 goal of attaining 100% target. In addition, the Ministry endeavored to promote sustainable management of the environment for the benefit of the current and future generations.

On behalf of the Honourable Minister, I would like to thank the Management team and all our staff in the Ministry for the hard work in delivering the progress of implementation of programmes and projects set out in this annual report. As we look forward to 2019, we are assured of entering the New Year with a clear strategy and strong determination to do better than 2018 in order for us to serve the interest of our citizens and have their dreams realised.

I also wish to acknowledge our all-weather season cooperating partners as well as line Ministries and other stakeholders in the water and sanitation and environmental management sectors for their contributions and continued support to the Ministry of Water Development, Sanitation and Environmental Protection.

Dr. Bishop Ed. Chomba
Permanent Secretary

MINISTRY OF WATER DEVELOPMENT, SANITATION AND ENVIRONMENTAL PROTECTION

TOP MANAGEMENT LEVEL STRUCTURE OF THE MINISTRY IN 2018



Hon. Dennis M. Wanchinga, MP
Minister



Dr. Bishop Ed. Chomba, Permanent
Secretary



Mr. Oswell Katooka,
Director Water Supply
and Sanitation



Mr. Godwin F. Gondwe,
Director
Environmental
Management



Mr. Alfonso Banda,
Director Human
Resources and
Administration



Mr. Tobias Musonda,
Director Planning and
Information

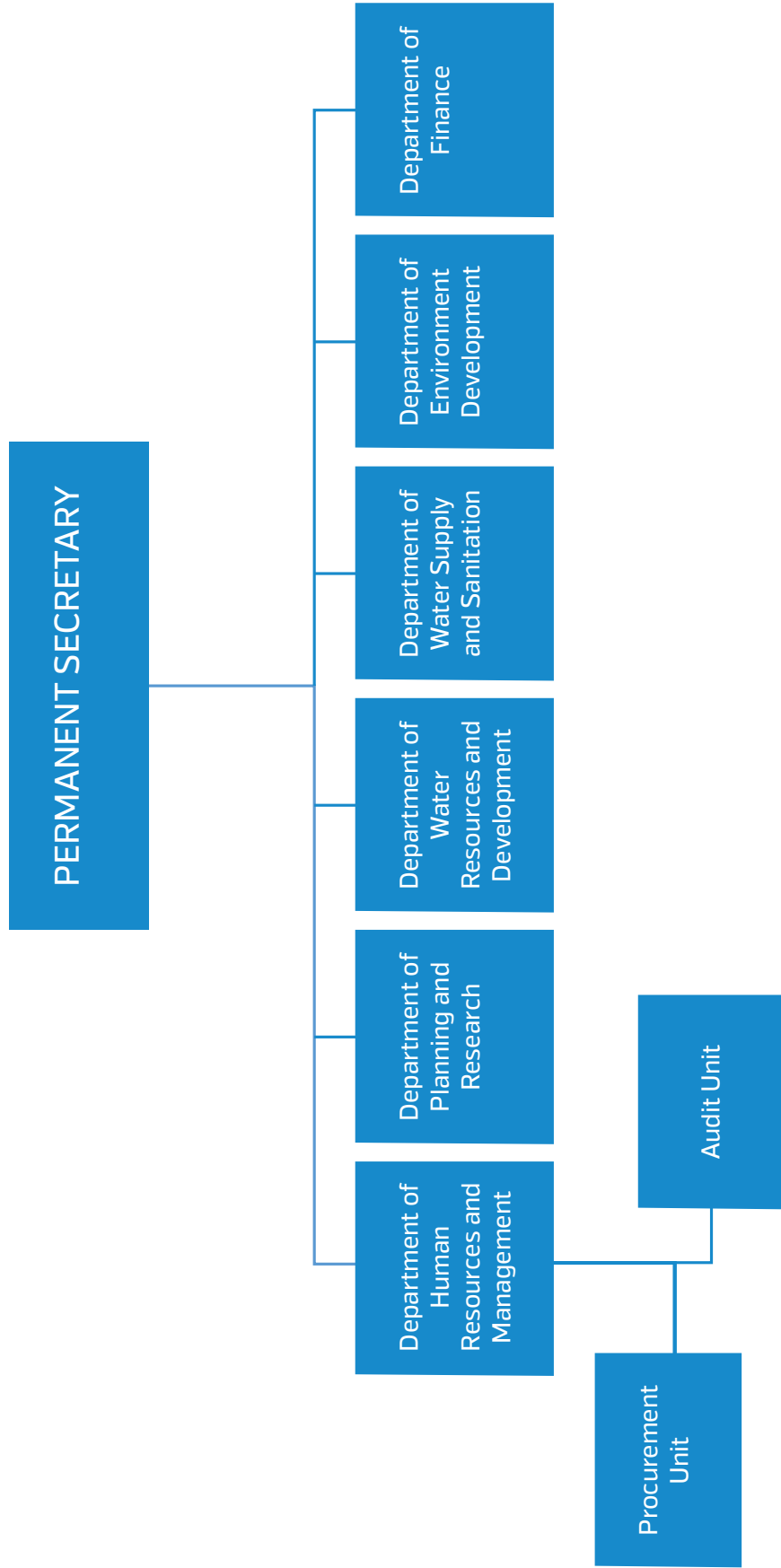


Mr. Kenneth Nyundu
Water Resources
Development



Ms. Namataa Kalaluka
Department of
Finance

MWDSEP ORGANIZATIONAL STRUCTURE



1.0 INTRODUCTION

This Annual Report presents highlights of programmes and projects implemented in 2018 by the Ministry of Water Development, Sanitation and Environmental Protection. The Report will also give a synopsis of achievements, challenges and make recommendations as well as the outlook for the year 2019.

1.1 Mandate and Functions

The Ministry of Water Development, Sanitation and Environmental Protection is mandated with the responsibility of managing and developing the Water Sector for socio-economic growth as well as ensuring that water is available for various uses in an environmentally sustainable manner for the benefit of the people of Zambia.

The Mandate and functions of the Ministry as contained in the Gazette Notice Number 836 of 2016 are as follows:

- Environmental Policy
- Environmental Protection and pollution control
- Environmental research and training
- Water Policy
- Water supply and sanitation; and
- Water resources management and development

The Ministry is responsible for the three Statutory Bodies namely; National Water Supply and Sanitation Council (NWASCO); Water Resources Management Authority (WARMA); Zambia Environmental Management Agency (ZEMA) and Water Utility Companies (CUs).

1.2 Vision

Vision: *“A Smart and Value Centered Ministry of Water Development, Sanitation and Environmental Protection”*

1.3 Vision

Mission Statement: *“To promote a clean and safe environment and water for all”*

1.4 Structure of the Ministry

The Ministry comprises of Six (06) Departments, namely:

- Department of Human Resources and Administration,
- Department of Water Resources Development,
- Department of Water Supply and Sanitation,
- Department of Planning and Information, and
- Department of Environmental Management
- Department of Finance

The Ministry also has structures at Provincial and District levels under the Department of Water Resources Development and Water Supply and Sanitation

1.5 FUNCTIONS FOR THE MINISTRY OF WATER DEVELOPMENT, SANITATION AND ENVIRONMENTAL PROTECTION

1. Formulate and review policies on Water Supply and Sanitation, Environment, Water Development and Management in order to guide implementation of sector programmes
2. Review and develop legislation on Water Supply and Sanitation, Environment, Water Development and Management in order to provide a framework for implementing policies and programmes
3. Conduct research on Water Supply and Sanitation, Environment, Water Development and Management as well as other related matters in order to generate information for decision making
4. Formulate and review National Programmes and Action Plans on Water Supply and Sanitation, Environment, Water Development and Management in order to ensure effective and sustainable utilization
5. Facilitate the development and rehabilitation of water resources, water supply and sanitation and Environmental Protection infrastructure in order to enhance service delivery
6. Monitor and Evaluate the implementation of Water Supply and Sanitation, Environment, Water Development and Management policies and programmes in order to ensure attainment of set objectives
7. Identify and protect potential water resources to enhance water security
8. Identify and delineate ecologically sensitive areas for protection
9. Collaborate with National and International stake holders on the management of water resources, environment, water supply and sanitation.

1.6 STATUTORY BODIES FUNCTION

The following are the functions of the respective Statutory Bodies and their respective functions under the Ministry that are charged with the responsibility of implementing the Ministry's mandate.



1.6.1 National Water Supply and Sanitation Council:

The National Water Supply and Sanitation Council (NWASCO) was established under the Water Supply and Sanitation Act number 28 of 1997. As part of the mandate, the water regulator is empowered under the Act to carry out physical water inspections and sanitation services, further to regulate the provision of water supply and sanitation services for efficiency and sustainability, sustainable service delivery balancing commercial orientation and social consideration, ensure increased access to affordable safe water acceptable sanitation with increased public awareness.



1.6.2 Water Resources Management Authority:

The Water Resources Management Authority (WARMA) was established under the Water Resources Management Act No. 21 of 2011. Its main purpose is to serve as the regulatory body for the management and development of water resources in the country and ensure equal access to water for the various stakeholders. Based on the principles of Integrated Water Resources Management (IWRM), WARMA also take gender and climate change dimensions into account.



1.6.3 Zambia Environmental Management Agency:

Zambia Environmental Management Agency (ZEMA) is an independent environmental regulator and coordinating agency, established through an Act of Parliament, the Environmental Management Act no 12 of 2011. It is mandated to do all such things as are necessary to protect the environment and control pollution, so as to provide for the health and welfare of persons, animals, plants and the environment.

1.6.4 Water Commercial Utilities

Zambia's Water Utilities have the mandate to provide and implement water infrastructure development and support towards water and sewerage services in urban areas and small towns. These Water Utilities include, Southern Water and Sewerage Company (SWSC) in Southern Province, Eastern Water and Sewerage Company (EWSC) in Eastern Province, Chambeshi Water and Sewerage Company (CWSC) Catering for Northern and Muchinga Provinces, Western Water and Sewerage Company (WWSC) in Western Province, Luapula Water and Sewerage Company (LWSC) in Luapula Province, Lukanga Water and Sewerage Company in Central Province, Lusaka Water and Sewerage Company (LWSC) in Lusaka Province, North Western Water and Sewerage Company, Mulonga, Nkana and Kafubu Water and Sewerage Companies in Copperbelt Province.

2.0 PROGRAMMES IMPLEMENTATION AND ACHIEVEMENTS IN 2018

During the period under review, the Ministry implemented the national rural and urban water supply and sanitation programmes in order to improve access to domestic water supply and sanitation. Further, in order to ensure water security, water infrastructure programmes were also implemented. In addition, the Ministry was committed to ensure environmental sustainability programmes were implemented to improve environmental management. The detailed implementation status of the year 2018 is outlined below.

2.1 MANAGEMENT AND ADMINISTRATION

During the Period under review, the total staff establishment was One eighty-eight (188) positions inclusive of the Hon. Minister and the Permanent Secretary. Forty-seven (47) positions in the approved establishment were vacant as the Ministry was still awaiting for Treasury Authority in order to be filled.

Table 1; indicates the summary of the Establishment for the Ministry in the Year 2018 and table 2 highlights staff attrition and retention in the period under review.

Table 1: Summary Staff Establishment Register – 2018

Department	Total Establishment	Filled Posts	Vacant Position	Unfunded	Frozen Position
Hon. Minister	1	1	0	0	0
Permanent Secretary	1	1	0	0	0
HRA	69	49	0	20	0
AUDIT	4	3	0	1	0
PSU	9	9	0	0	0
Finance	11	10	1	0	0
Planning and Research	15	14	0	1	0
Water Supply and Sanitation	25	18	4	3	0
Water Resource Development	40	10	0	20	0
Environmental Management	10	8	0	2	0
TOTAL	187	135	5	47	0

Table 2; staff attrition and retention

Under the review period, the Ministry had 28 officers promoted, and 10 new officers joined the Ministry. Further, the Department of Water Resources recorded 1 deceased and 1 resignation for the year 2018.

Department	Promotion	Incoming	Dismissal	Deceased	Outgoing	Retirement	Resignations
HRA	11	7	0	0	0	0	0
DPR	8	1	0	0	0	0	0
Finance	0	2	0	0	0	0	0
WSS	3	0	0	0	0	0	0
WRD	2	0	0	1	0	0	1
EM	4	0	0	0	0	0	0
TOTAL	28	10	0	1	0	0	1

2.1.1 Human Resource Development

During the period under review, a total of 24 Officers were trained in long term courses as follows;

Table 3 the highlights the Staff on Long-term training 2018

During the period under review, a total of 24 Officers underwent long term training as indicated below;

Type of Training	Number of Officer	
	Male	Female
Masters	4	6
Degree	2	2
Certificate	4	6
Total	10	14

Table 4: Summary on Short-term Training 2018

During the period under review, a total of 27 Officers underwent short term training as indicated below;

Type of Training	Number of Officer	
	Male	Female
Performance Management Package	14	4
Security Awareness	5	1
E-Cabinet	3	-
Total	22	5

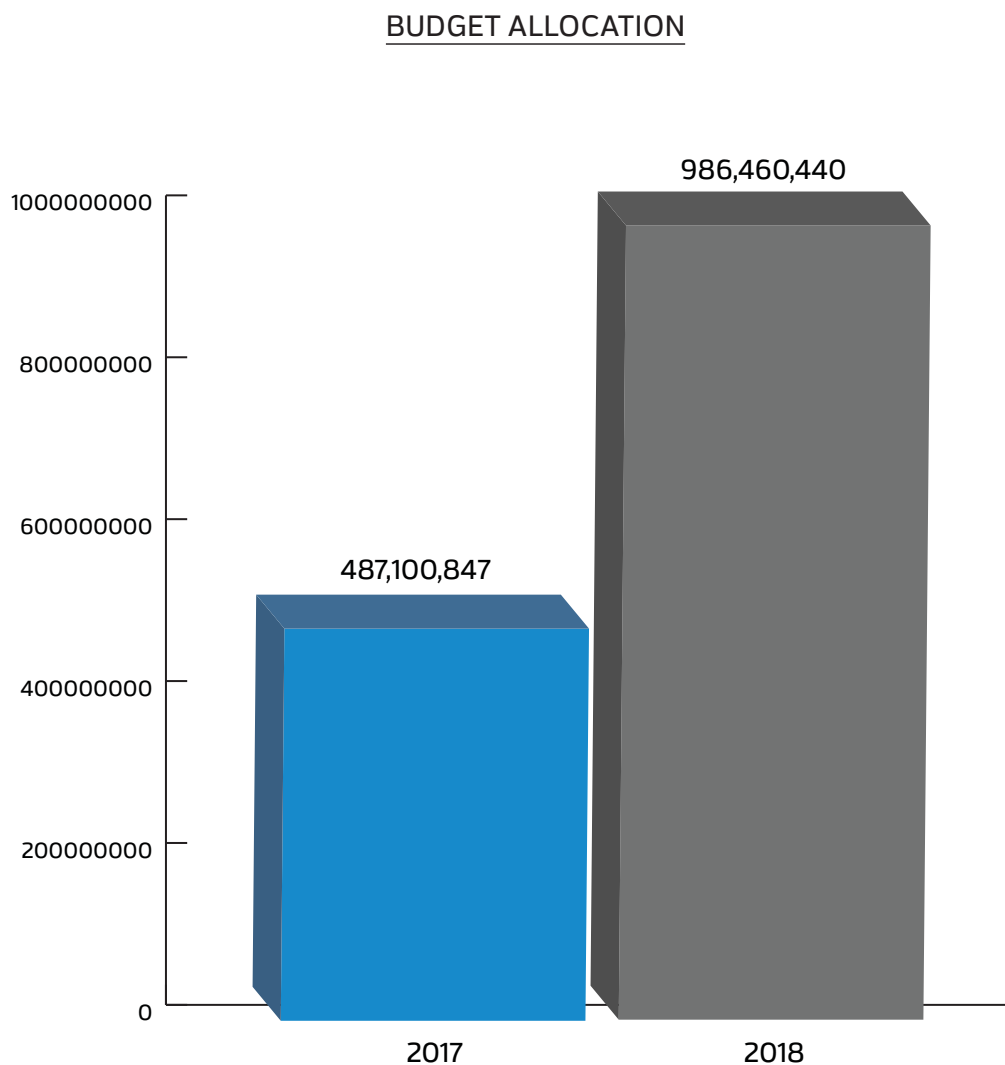
3.0 PLANNING AND BUDGET IMPLEMENTATION

During the period under review, the 2018 Ministerial Annual Work Plan and Budget were prepared in order to ensure that the financial resources were allocated to Ministerial objectives and programmes to support effective implementation. The Ministry also prepared the 2018 Budget Policy Statement and Ministerial Budget briefs for presentation in Parliament by the Cabinet Minister.

3.1 Budget Performance

The Ministry operated in accordance with the Medium Term Expenditure Framework (MTEF) for the period 2018-2019. A total budget of K986,460,440 million was allocated to the Ministry compared to K487,100,847 million allocated in 2017.

FIGURE 1: MWDSEP Budget allocation from the treasury, 2017-2018

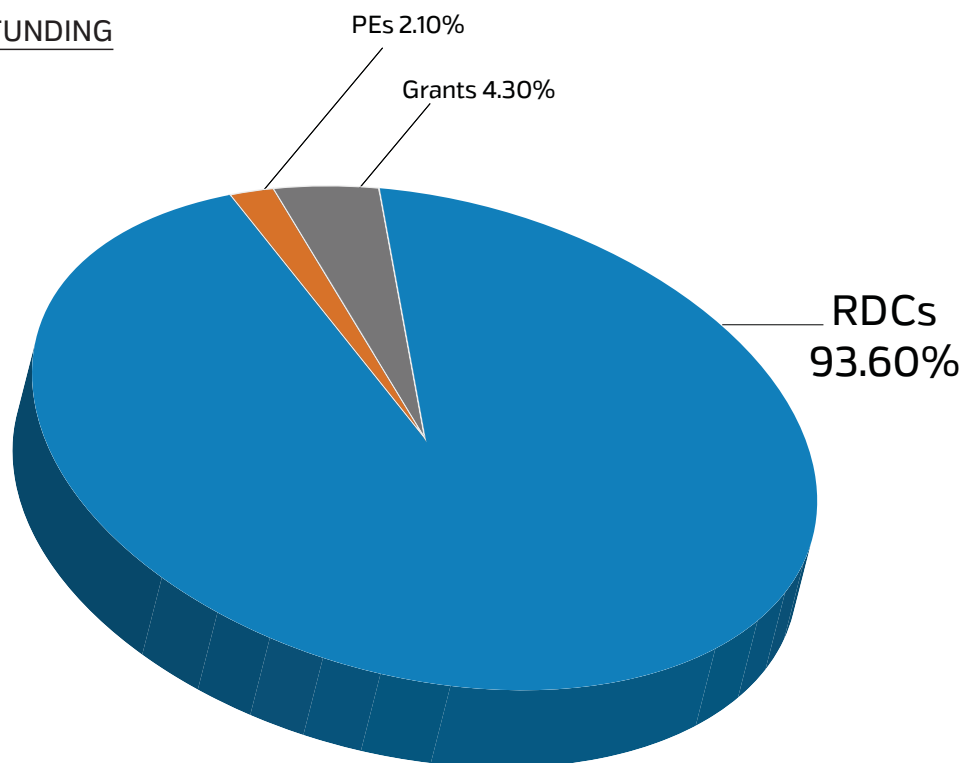


3.2 Funding

Of the total allocated budget, K 42,332,990 million was meant for grant Aided Institutions, representing 4.3 percent of the total budget, while the Recurrent Department Charges (RDCs) had a total budget of K 923,598,930 million and personal emoluments had an allocation of K 20,528,520 million representing 93.6 percent and 2.1 percent respectively.

Figure 2 below presents the total financing for the Ministry during the period under review and the respective breakdowns.

2018 FUNDING



3.3 Budget release

A total amount of k379,842,884 was disbursed by the Treasury to the Ministry and its Statutory Bodies, of which a total amount of K33,783,524.34 million was released to statutory bodies representing 79.8 percent of the grants allocation. k346,059,359.52 million was released to the Ministry representing 35 percent of the total approved budget under RDCs for Ministerial programmes.

Funding	Budget releases 2018
Personal Emolument	K20,528,520
Grants	K33,783,524.34
RDCs	K379,842,884

The Ministry also had a significant increase in resources from cooperating partners mainly attributable to the support from projects being implemented in the Ministry.

4.0 INTERNAL AUDIT

During the year under review, the following audits were carried out:

1. Audit of Drilling Account at Copperbelt Provincial Water Office in Ndola.
2. Audit of Lake Tanganyika Development Project (LTDP).
3. Post Audit of 2018 Recurrent Departmental Charges (RDC) Payment Vouchers.
4. Payroll Audit.
5. Continuous Pre-Payment Audits of TSA transaction in IFMIS.
6. Audit of Arrears and Travels Abroad.

Furthermore, the Ministry also conducted audits for statutory bodies like Water Resource Management Authority (WARMA).

5.0 POLICY, LEGAL FRAMEWORKS REVIEWED/ DEVELOPED

During the period under review, the following policies and legal frameworks were reviewed or developed:

4.1 PARLIAMENTARY AND CABINET ISSUES

With regard to Parliamentary and Cabinet related issues, the Ministry received 50 Parliamentary Question 2018 out of which 42 were responded to. With regard to Action Taken Reports, the following were also processed

- Committee on GRZ Assurances
- Committee on Delegated functions
- Committee on Agriculture, Lands and Natural Resources
- Committee on Economic Affairs, Energy and Labour
- Committee on Cabinet Affairs
- Committee on Energy, Water Development and Tourism
- Committee on Legal Affairs, Human Rights, National Guidance, Gender Matters and Governance.

4.2 POLICIES

The National water Supply, Sanitation and Solid Waste Management (NWSS&SWM) Policy was finalized and is yet to be submitted to Policy Analysis Coordination Division (PAC) at Cabinet of Office. The review of the 2007 National Policy on Environment also commenced during the period under review.

4.3 ACTS

The process of reviewing the Water Supply and Sanitation Bill was on-going during the period under review.

4.4 PLAN

4.4.1 MINISTERIAL STRATEGIC PLAN 2018-2021:

During the period under review the Ministry finalized the development of the 2018-2021 Ministerial Strategic Plan.

4.4.2 NON-REVENUE WATER STRATEGIC FRAMEWORK:

The National Non-Revenue Water Management – Strategic Framework from 2016 to 2018 was developed and launched in December, 2018. During the period under review, the Task Force Team carried out a National Diagnostic of the Non-Revenue Water using the International Water Association Water Network Balance incorporated into a software called NetworkBal. The exercise was done in three Commercial Utility Companies, Namely; Western Water and Sewerage Company, Luapula Water and Sewerage Company and Chambeshi Water and Sewerage Company.

4.4.3 OPEN DEFECATION FREE STRATEGY:

The ODF strategy guides the implementation of sanitation activities with a focus of attaining Open Defecation Free (ODF) status by the year 2030. The Ministry launched the strategy on 19th November 2018 during the National Sanitation Summit.

4.4.4 NATIONAL RURAL WATER SUPPLY AND SANITATION PROGRAM II (NRWSSP 2016 to 2030)

Under the period under review, the NRWSSP II was finalized but yet to be launched.

4.4.5 BEHAVIOUR CHANGE COMMUNICATION STRATEGY

The strategy developed would guide communication and advocacy activities in the water and sanitation sub sector and is still under development. The consultant with support from UNICEF has been procured and is expected to submit the final report in March 2019.

6.0 WATER RESOURCES DEVELOPMENT

During the period under review, the Ministry implemented water resources infrastructure development programmes which included programmes in 7NDP under pillar 1 Economic diversification and Job creation as follows;

6.1 Surface Water

The Ministry had planned to undertake feasibility studies on 15 small dams and one (1) large dam. The Ministry undertook 37 feasibility studies on small dams more than what was targeted and recorded zero on the large dam. Further, regarding the rehabilitation of small dams, four (4) small dams were rehabilitated which included Lifalali and Sianakanga in Zimba District, Southern Province and Funzwe in Kafue District and Sheleni in Chongwe District, Lusaka province. Further, the World Bank funded project Water Resources Development Project was closed in November, 2018.

Table 5.1.1 Summary of infrastructure development

Project Name	Purpose	Location		Nature of Works	% Complete	Start date	End date	Comments
		Province	District					
Lifalale	Crop irrigation, Fish farming and livestock watering	Southern	Zimba	Rehab	100	02/12/2017	16/12/18	Works were completed
Sheleni	Crop irrigation, Fish farming and livestock watering	Lusaka	Chongwe	Rehab	0		31/10/18	Completed rehabilitation works
Funzwe	Crop irrigation, Fish farming and livestock watering	Lusaka	Kafue	New constuction	92	2016		Minor Works were ongoing
Sianankanga	Township water supply and livestock watering	Southern	Zimba	Rehab	75	01/07/2018	5/12/18	The rehabilitation works were completed

In addition, an MoU between Zambia National Service (ZNS), Zambia Air Force (ZAF) and the Ministry of Water Development Sanitation and Environmental Protection was signed in the first quarter to rehabilitate Nangoma dam in Mumbwa District. The works would commence once funds were made available. The preparation of concept notes for the rehabilitation of Mwase, Mutanda Research and Nabuyani dams was on- going.

A review of infrastructure development under the Water Resources Development Project (WRDP) was conducted in which Twelve (12) sites were visited by teams that constituted members from the Consultant and the Department of Water Resources Development. The purpose was to inspect works that had been done and community mobilization on environmental and social safeguard issues

6.2 Ground water development

The Ministry undertook groundwater exploration for the purpose of identifying and mapping the aquifers. Working with other stakeholders, exploratory works were undertaken in ten Provinces with a view of collecting data for the purpose of identifying and mapping the aquifers as shown below.

- The Ministry completed drilling of six (carryover from 2017) exploratory boreholes in Luapula, Central, Northern and Southern Provinces;
- two exploratory boreholes were drilled in Chinsali District, Muchinga Province;
- In western Province, three exploratory boreholes were drilled-two (02) in Sesheke District and one (01) in Sioma District;
- seven exploratory boreholes were drilled in Choma District (04), Kalomo (02) and Namwala (01) in Southern Province;
- Geophysical Survey were conducted at Luanshya Girls Secondary School and Malela Secondary School in Luanshya and Kitwe Districts, respectively, and at the presidential Guest House in Kitwe, Copperbelt Province;
- Three (03) exploratory boreholes were drilled in Northwestern Province.
- A total of fifteen (15) exploratory boreholes were drilled in Lusaka Province of which thirteen (13) were successful and two (2) were dry.
- In Northern Province, six (6) exploratory boreholes were drilled, one (01) in Kasama, and three (03) in Mbala and two (02) in Shiwanga'ndu District of Muchinga Province.
- In central Province, two exploratory boreholes were drilled successfully one at Serenje Boys Technical School and another one at Mukobeko Market in Kabwe District.
- Two (02) exploratory boreholes were drilled and pump testing was conducted at Occupation Health and Community Development Staff College in Kitwe District on the Copperbelt Province.
- In Eastern Province, one exploratory borehole was drilled at Chief Lundu's palace in Chipata District; while four (4) geophysical investigations were done in Sinda and Chipata District.
- Department drilled two (2) exploratory boreholes at Mulupusho Market in Chibombo District, Central Province.

7.0 ENVIRONMENTAL MANAGEMENT

During the period under review,

- Concept note was developed in relation to Environmental Management Contingency Plans and Guidelines for ecological sensitive ecosystems in the Country, for the purposes achieving sound environmental management (e.g Assessments already initiated in Lukanga swamps and Mwekera national forest during the first quarter).
- Efforts were also made to introduce and raise awareness on waste Separation (using 3 waste bin-plastic, paper and organic waste) to be initiated in the city of Lusaka (as a pilot project for enrolment to other towns) which must be adhered to in industries, residential areas, Offices, and Markets in order to curb the negative impacts of solid waste.
- Development of PIF was finalized on "Sustainable Luangwa: Securing Luangwa's water resources for shared socioeconomic and environmental benefits through sustainable catchment management" in partnership with World Wildlife Fund (WWF) Zambia.
- Initiate the development of LDN Baseline report for Zambia as basis for Target setting.

The Ministry through Lake Tanganyika Development Project implemented the following activities during the period under review: under the activity Integrated Natural Resources Management 15,509 hectares of land was allocated for community forests establishment in 5 sites. A total of 426 community members (226 males and 200 females) were trained in conservation farming and agroforestry field days across the targeted 14 villages reached 10,542 fruit trees for improved income generation and nutrition were planted, including 24,854 exotic trees and 60,000 vertical grass.

15 Kilometers of the road was cleared to open game viewing loops in Nsumbu National Park. 3 staff houses and 2 health posts were completed, 4 staff houses, 5 health posts and 6 class room blocks were in the range of 75 to 98 percent. One motor vehicle was procured and camping equipment for Nsumbu national park was procured to accommodate 25 to 30 camping officers.

8.0 WATER SUPPLY AND SANITATION

The Ministry is responsible for the formulation, review and implementation of water supply and sanitation policies, programs and projects in order to ensure improved health and socio-economic wellbeing of the citizens.

The following activities were undertaken to improve access to Water supply and Sanitation during the period under review;

The National Water Supply and Sanitation Programs

Zambia's vision 2030 aims to provide clean and safe water supply and sanitation for all by the year 2030. Currently about 65% of the total population have access to safe water supply and 44% to improved sanitation. A total of over 6 billion USD is required for the water supply and sanitation subsector to achieve the targets. Government facilitated the development of the National Urban and Rural Water Supply and Sanitation programs as policy frameworks for national planning, resource mobilisation and implementation of water supply and sanitation activities throughout the country;

National Urban Water Supply and Sanitation Program (NUWSSP)

The National Urban Water Supply and Sanitation Programme (NUWSSP 2011 -2030) is government's road map for providing clean, safe and reliable drinking water and adequate sanitation to residents in urban and peri-urban areas as well as to commercial, industrial and institutional areas including solid waste management and drainage. The NUWSSP has an overall investment requirement of over US\$4 billion equivalent to K20 Billion and is supported by Government, Cooperating Partners and the private sector. The NUWSSP is implemented through commercial water and sewerage utilities formed by local authorities while implementation of Solid Waste management activities is through the local authorities.

National Rural Water Supply and Sanitation Program (NRWSSP)

The National Rural Water Supply and Sanitation Programme (NRWSSP) was launched in the year 2006 with a planning horizon up to 2015 and extended to 2030. The NRWSSP is Government's road map for providing clean, safe drinking water and adequate sanitation to communities in all rural areas of Zambia. The NRWSSP is supported by both Government and Cooperating Partners and has an overall investment requirement of over US\$2 billion up to the year 2030. The NRWSSP is implemented through the rural local authorities (districts) based on a demand driven approach with participation and involvement of the rural communities.

PERFORMANCE OVERVIEW IN RELATION TO PROGRESS IN THE 7NDP

Programme	Activity	Outcome Indicator	Target	Achieved
Water quality monitoring improvement	Water quality systems strengthened	Number of additional water quality assurance facilities (Urban)	19	12
		Percentage of commercial utilities whose water samples meet the national drinking water standard (ZBS/WHO)	50	100
Water supply and sanitation improvement	Water supply and sanitation services	Percentage of population with access to basic drinking water source disaggregated by rural/urban	89 (Urban)	NWASCO to provide information
			48 (Rural)	51
		Percentage of population with access to safely managed drinking water source rural/urban	25 (Urban)	39
			10 (Rural)	41
		Percentage of population with access to basic sanitation service rural/urban	62 (Urban)	63.3
			40 (Rural)	45
		Percentage of population with access to safely managed sanitation services rural/urban	35 (Urban)	45.4
			35 (Rural)	45.4
		Percentage of population practicing Open Defecation (OD) by rural/urban	0.5 (Urban)	1
			18 (Rural)	25
Proportion of health care facilities with WASH services	60	0		
Proportion of schools with basic WASH facilities	30	89.3		
Hygiene practices in households and communities improved	Percentage of population having a hand washing facility with soap and water	25	14	
Communication and advocacy enhancement	Policy Framework for WASH Sector Strengthened	Number of policy strategies developed	1	1
Multi-sectoral coordination to water and sanitation provision enhanced	Multi-sectoral coordination of water and sanitation provision strengthened	Government-led WASH sector coordination mechanism (SCM) established	1	1
		National water supply, sanitation and solid waste policy and strategies in place	1	0
Climate smart water supply and sanitation infrastructure development	Climate smart water and sanitation infrastructure developed	Percentage of existing water infrastructure expanded per year	4	5
		Proportion of people accessing climate smart water supply and sanitation infrastructure	15	15

Programme	Activity	Outcome Indicator	Target	Achieved
Sustainable operation and maintenance of water supply and sanitation infrastructure	Management of water supply and sanitation infrastructure enhanced	Percentage reduction in non-revenue water	43	49.5
		Percentage of functional water points	78	45.5
		Percentage reduction in sewerage flooding	10	7.9
Research and knowledge management improvement	Evidence based decision making on water and sanitation services enhanced	Number of additional applied research publication of WASH sector per year	1	0
		Functional MIS for Water and Sanitation	1	1
Basket financing promotion	Sustainable mechanism for financing of water and sanitation services established and operational	Basket Fund for water and sanitation sector established	1	0
Public-private partnership enhancement	Participation of the private sector in water and sanitation services enhanced	PPP framework for water and sanitation developed	0.8	0
		Number of Public Private Partnership (PPP) initiatives in water and sanitation	0	0

9.0 MAJOR PROJECTS IMPLEMENTED IN WATER UTILITIES COMPANIES UNDER THE NUWSSP

9.1 Lusaka Water and Sewerage Company

9.1.1 Kafue Bulk Water Supply Project Phase I (US\$150 Million)

The Government of the Republic of Zambia mobilized funds amounting to US\$150 Million from the Exim Bank of China for the implementation of phase I of the Kafue Bulk Water Supply Project. The project involves the construction of an intake structure, treatment plant, booster station and transmission lines to deliver a total of 50,000m³/day of water into the existing Stuart Park storage facilities in Lusaka.

Under the review period, the progress of works was at 96%. Once completed, the project is expected to increase water supply to Lusaka City by 50,000m³/day.

9.1.2 Lusaka Water Supply Sanitation and Drainage Project (US\$355 Million)

The Government of the Republic of Zambia mobilized funds amounting to **US\$355 Million** from the Millennium Challenge Corporation (MCC) of the United States of America. The project commenced on 15th November, 2013 and was expected to end on 14th December 2018 and is being implemented by the Millennium Account. The project involves improvement of water supply, sanitation and drainage systems in selected townships of Lusaka city. It has the following major components with the progress of works as follows:

- Contract Packages 1 and 2 (CP1 and CP2) involving the rehabilitation of Iolanda Water Treatment Plant, Transmission Main, Distribution Centres and the construction of the Primary Backbone Network contracted at the sum of **USD49.4 Million** in December, 2015. The Progress of Work is 94%.
- Contract Package 3 (CP3) involving the Construction and Rehabilitation of Water and Sewer Reticulation in the Kamanga, Mtendere, Kaunda Square and Chelston Areas amounting to **USD22.4Million**. The overall progress of works is at 71%.
- Contract Package Four (CP4) amounting to USD10Million was signed on 28th September, 2015 with a contract duration of 24 months. It involves rehabilitation and expansion of Kaunda Square Waste Stabilization Ponds. The project component has been completed and handed over.
- Contract Package 5 (CP5) involving the Construction of water distribution network in Ndeke/Vorna Valley, Kwamwena, SOS Village, Chipata and Ng'ombe. This contract is expected to be implemented over a period of 24 months and works on the original scope of works have been completed and the overall progress of works on the additional works is at 81%.
- Contract Package six (CP6) amounting to **USD32.6Million** was signed on 6th January 2016 with a contract duration of 24 months. This is a Non-revenue water reduction project targeting 14 Demand Management Areas (DMAs). The project aims at reducing NRW from 45% to 25% in Lusaka. The project component was terminated at 47% progress and a new contractor has since been engaged.

The compact closed on 15th November 2018 and the overall progress at closure was 86%. Government already fulfilled its obligation of releasing the outstanding US\$22 million counter - part funding and it is expected that the Millennium Challenge Account -Zambia will use these funds to complete the outstanding project scope of works including Contract packages 3, 5 and 6

This therefore means that an optimal management structure from the Millennium Challenge Account - Zambia will remain to manage the completion of the project until August 2019 when the project is expected to be completed using the available GRZ counter - part funding.

9.1.3 Lusaka Sanitation Programme (US\$300Million)

Regarding the Lusaka Sanitation Programme (LSP) that was funded by World Bank (WB), African Development Bank (AfDB), European Union (EU) and KfW with a contract sum of US\$300 Million recorded the following progress under the review period;

The programme is divided into four Components:

- Component 1- Sewerage works. The progress status of this component is at 29% Complete
- Component 2-Onsite Sanitation. The progress status of sanitation works is 19% Complete
- Component 3-Institutional Capacity Development. The progress status of the institutional capacity development stands at 60% Complete
- Component 4- Programme Management. The progress status of this component is at 47% Complete

The overall progress of the programme is at 32%.

9.1.5 Chongwe Water Supply Project (Lot 1 and Lot 2)

Government through the Ministry of Water Development, Sanitation and Environmental Protection is implementing the

Chongwe Water Supply System Project amounting to K23 Million. The project which is divided into two (2) lots and being executed by Zambezi Drilling Limited and SAWA Group

The overall progress of works stands at 88% complete. Once completed, the project will result in improved water supply to Chongwe District by about 3,450m³/day.

9.1.6 Emergency Water Supply Improvement Project to Selected Peri-Urban Areas of Lusaka

The Ministry embarked on an Emergency project for the improvement of water supply in selected peri-Urban areas of Lusaka at a Contract amount of US\$153.6Million using GRZ funding.

The project commenced in April, 2018 and was expected to be completed by April, 2019 with an objective of improving water supply in the following Townships which were worst hit by Cholera that included Kanyama, Chawama, Bauleni, Chipata, Chunga, Garden House.

The overall progress of works is now at 59% with more activities in Kanyama, Chawama and Garden House. However, implementation has been slow due to the rocky nature of Kanyama Township which requires continuous drilling and blasting of rocks. Once completed, approximately 95,000 people will have access to improved water supply in the above Townships and this will greatly contribute towards the reduction of occurrence of waterborne diseases in the areas even as other stakeholders such Ministry of Local Government and Lusaka City Council improve their services in the Townships.

9.1.8 Kafue Bulk Water Supply Project Phase II

Under the Kafue Bulk Water Supply Project Phase I, a 150,000M³/day Intake Structure has been constructed with only 50,000M³/day being equipped at the Intake and corresponding capacities in the pump stations, booster pump in Chilanga as well as an 800 mm Diameter pipeline to Lusaka. However, arising from the water deficit in Lusaka, Government is in the process of securing US\$330 Million for the Kafue Bulk Water Project Phase II with an overall objective of equipping the New Iolanda Intake by 100,000M³/day with corresponding water treatment plant and booster station expansion works to match the additional 100,000M³/day of water produced. This will also include a 1200mm diameter pipeline from Kafue to Lusaka as well as New Distribution Centers

Under the review period the project was currently at resource mobilization stage with the Detailed Feasibility Study already done and awaiting Detailed Designs and Implementation.

9.2 Southern Water and Sewerage Company

9.2.1 Water and Sewerage Infrastructure project in Choma

Component 1: Consultancy Services (K6.2Million)

The Designs and tender documents were completed, and the consultant is currently on site. The phase I (Design) was at 100% complete while the Phase II (Supervision) is at 5% Complete as the Contractor has suspended the works.

Component 2: Works (K95Million)

The Contractor (China State Cooperation) is currently on site. Due to non-release of advance payment, the contractor has slowed down activities on site after completing the camp establishment.

The scope of works involves:

- The rehabilitation and/or dredging of the Munzuma and Choma dams
- Construction of the water treatment plant, storage tanks and water distribution network
- Installation of Water Meters.

Currently, the project stands at 5% Complete and the contractor have since suspended works awaiting release of advance payment.

9.2.2 Water Supply Project in Chikankata

Under the review period, the Water Supply Project in Chikankata with support from Land Development Fund (LDF) amounting to **K1.4 Million** recorded progress of works to 90%. However, works have stalled due to an injunction. Once completed about 2,400 households will have access to clean water supply.

9.2.3 Water Supply Project at Chikankata Turnpike

The Water Supply Project in Chikankata at the cost of **K2.1 Million** using Land Development Fund (LDF). Under the review period, the overall progress of works was at 98%. The Official handover has been set for first quarter of 2019.

9.2.4 Kazungula Emergency Water Supply Project in Matinangala – Immediate Measures

The Ministry was implementing the Kazungula Water Supply and Sanitation Emergency Project in Kazungula at the cost of **USD542, 945.21**. The project was financed by CRIDIF. The project has been completed and awaiting commissioning scheduled for first quarter of 2019.

9.3 NORTH WESTERN WATER AND SEWERAGE COMPANY

9.3.1 Mufumbwe Water Supply Project (K7.9 Million)

Under the review period, the Mufumbwe Water Supply and Sanitation Project in Mufumbwe at the cost of **K7.9 Million**, recorded an overall progress of works to 95%. Once completed an additional 3,600 people will have access to clean water

supply and sanitation services.

9.3.2 Mushitala Phase 2 Water Supply Project (K2 Million)

The Mushitala Water Supply and Sanitation Project in Solwezi district was being implemented at a cost of K2 Million with support from DTF and the project was completed. Currently awaiting completion of household connections by North Western Water and Sewerage Company. So far, 600 out of the total 2,500 have been connected due to limited funds. However, once complete about 15,000 people will have access to adequate, clean and safe drinking water.

9.3.3 Solwezi Treatment Plant Upgrade (K2 Million)

North Western Water and Sewerage Company is implementing the Solwezi Water Treatment Plant Upgrade Project amounting to **K2 Million** with support from INVESTRUST Bank Limited. The project involves the upgrade of the Water Treatment Facilities. The final shipment of ultra-filtration plant and associated appurtenances has been delivered to site, awaits connection and the overall progress of works is at 85%.

9.3.4 Consultancy Services for Detailed Feasibility Study for Water Supply and Pre-feasibility of Sanitation infrastructure in Solwezi – Dutch support (Neverland Enterprise Agency)

Government through the Ministry of Finance has signed the Grant Financing Agreement amounting to **Euro900,000** with the Netherlands Enterprises Agency (RVO.nl) as support for phase one (1) of the Solwezi Water Supply and Sanitation Project which will involve the development of Detailed Feasibility Study for Water Supply and Pre-Feasibility Study for Solwezi District. Furthermore, Netherlands Enterprises Agency has pledged to support 50% of the estimated cost of **Euro 40Million** for the actual works and financing of the remaining 50% of the construction works was expected to be financed by either Government or another Cooperating Partner.

The project will involve construction of a new water source on Mutanda River with an appropriate water retaining structure such as a Dam/or weir as well as complete overhaul of water and sewerage facilities in Solwezi.

Under the review period, the Consultant submitted the Inception Report and the Water Quality Assessment Report. The Feasibility Study for Water Supply and Pre-feasibility Studies for Sanitation were expected to be completed within 12 months.

9.4 Western Water and Sewerage Company

9.4.1 Muoyo Water Supply Project (K9.9 Million)

The Ministry through Western Water and Sewerage Company was implementing the Muoyo Water Supply Project at the cost of K9, 889,375.14. The project aims at improving water supply in Nalolo which was declared a new district in December 2012. The project scope involves:

The contractor was paid K1.9 million out of K2.4 million as advance payment to commence the works. The Contractor has since mobilized and works have since commenced. In terms of progress works stand at 12%

9.4.2 Kaoma Emergency Works - Water Supply Project (K1.3 Million).

Under the review period, Kaoma Water Supply Project at the cost of **K1.3 Million** recorded overall progress of works to 98%. Currently awaiting connections once completed, over 3,774 people would have access to clean and safe water supply.

9.4.3 Mwandi Water Supply Project – Tank Installation (K4.5 Million)

The Ministry through Western Water and Sewerage Company is implementing the Installation of elevated water tank in Mwandi through Abbeco Tanks (pty) Limited at a total cost of **K4.5Million**. The project aims at improving water supply in Mwandi. The project scope involve:

- Supply and erection of 1No. steel elevated tanks (406.75m³).

The contractor is due to mobilise once advance payment - 85% of total value is paid based on the submitted Bank guarantee.

9.4.4 Mwandi Water Supply Project – Office block reconstruction (K710,324.00)

The Ministry through Western Water and Sewerage Company is implementing the reconstruction of office block in Mwandi through Eldaman Business Solution Limited at the cost of K710, 324.00. The project aims at improving the efficiency in improving water supply in Mwandi. The project scope involve:

- Reconstruction of office block – Superstructure
- Roofing
- Finishes

The contractor is due to mobilise once advance payment is made.

9.4.5 Rehabilitation of Kalabo Water Treatment Plant (K500, 000.00)

The Ministry through Western Water and Sewerage Company engaged Davies and Shirliff (Z) Ltd to supply and install pressure filters for the Kalabo Water Treatment Plant. The project scope involves:

- Replacement of Filter fingers
- Replacement of filter media
- Finishes

Western Water and Sewerage engaged Davies and Shirtliff for the 'Supply and installation of the filter fingers as well as filter media. Works have since been completed and the water is now clearer. Commissioning awaits laboratory results to ascertain the quality of water.

9.5 Integrated Small Towns Water Supply and Sanitation Programme

The Government of the Republic of Zambia has acquired a loan amounting to USD 135 million from African Development Bank (AfDB) to finance the construction and rehabilitation of water supply and sanitation infrastructure in Western, Luapula, Northern and Muchinga Provinces of Zambia.

The project will comprise the following three main components:

- Water Supply Infrastructure Development
- Sanitation Services Improvement (covering Sewerage Infrastructure Development and Sanitation and Hygiene promotion)
- Institutional Capacity Building and Program Management.

The engagement of the Main Consultants to undertake the design review and supervision has reached an advanced stage and is due to be concluded in the first quarter of 2019. The procurement of operational motor vehicles and office equipment has been completed. The construction of water and sewerage infrastructure is scheduled to commence in the fourth quarter of 2019.

The Ministry also received a grant amounting to US\$1.6 million from the African Development Bank to undertake the development of full feasibility studies, designs and tender documents for four of the prioritized districts under North-Western, Lukanga and Southern Water and Sewerage Companies. The procurement process for the consultant is expected to be concluded by the first quarter of 2019.

9.6 Nkana Water and Sewerage Company

9.6.1 Nkana Water Supply and Sanitation Project Phase II (US\$ 200 million)

The Government of the Republic of Zambia has mobilized funds amounting US\$ 200 million for the implementation of the Phase II of Nkana Water Supply and Sanitation Project through an Engineer Procure Construct (EPC) Contract where the contractor secures financing, designs, builds and hands over the completed project to the client from the Chinese Government. The project involves the rehabilitation and expansion of the water supply and sanitation infrastructure which was not addressed under Phase I of the AfDB funded Nkana Water Supply and Sanitation project in Kitwe, Kalulushi and Chambishi Towns. The works include:

- Expansion of the Nkana East water works in Kitwe
- Construction of a dam on the Kafue River in Bulangililo area of Kitwe
- Installation of water transmission mains and distribution network
- Replacement of sewage pipes
- Installation of pre-paid meters
- Priority works (Quick wins) which do not require detailed designs such as pipe replacements, installation of water meters and replacement of selected sewer pipelines

The progress so far is as follows.

- The contractor is currently working on the detailed designs which are expected to be completed by end of December, 2018 and procurement of the Design Review and supervision consultant is almost complete with the Draft Contract already submitted to Ministry of Justice for clearance
- Replacement of Transmission Mains is at 81.6% with 19.17 km of rising mains installed out of the planned 23.5 km in Kitwe Kalulushi and Chambishi
- 30.6 km of distribution mains has also been done in Kitwe, Kalulushi and Chambishi
- Replacement of selected sewers is 84.4% complete with 67.5 km of trunk sewers replaced out of 80 km new planned total in Kitwe, Kalulushi and Chambishi
- Prepaid meter installation is at 97.75 % complete with 13,740 meters installed out of the 14,100 planned and installed in Buchi, Kamitondo and other low cost areas in Kitwe
- 10,000 Automatic Meter Readers have been received and commencement of installation awaits completion of the ongoing customer sensitisation
- Replacement of worn out sewer trunk mains and networks in Kalulushi complete with Man holes has been completed and has resulted in reduced sewer flooding.

Furthermore, the procurement process for the engagement of the Design Review and Supervision Consultant is almost complete awaiting the clearance of the Draft Contract by The Attorney General and Final award.

Main Works (works which do not require detailed designs) are expected to commence in the third quarter of 2019.

9.7 Kafubu Water and Sewerage Company

9.7.1 Danida Mixed Credit Facility Project (US\$104 Million)

The Government of the Republic of Zambia acquired a loan amounting to **USD 104 Million** from the Danish Government to improve water supply in Ndola, Luanshya and Masaiti. The project involves the rehabilitation of water supply and sanitation facilities in Ndola, Luanshya and Masaiti towns. The project is aimed at restoring the initial capacity of the various water supply and sewerage infrastructure in the above towns and involves:

Rehabilitation Itawa Water Treatment Plant

Rehabilitation of Misundu Pumping Stations and booster stations

Rehabilitation of transmission Mains and Reservoirs in Ndola, Luanshya and Masaiti

Extending water supply services to un-serviced areas & replacement of asbestos cement pipes in the three districts

- Metering of all un-metered customers
- Installation of Network Monitoring System (GIS and hydraulic modelling)
- Acquisition Mobile Unit for Sewer Inspections and Water Supply Leakage Detection
- Water Supply and Sewerage Monitoring System (SCADA)
- Rehabilitation of Old Kanini and Lubuto Sewage Treatment Plant and laboratory
- Rehabilitation of Old Lubuto Sewage Treatment Plant and pump stations
- Rehabilitation of Kafubu intake pumping stations and mains
- Rehabilitation of Mikomfwa and Fisenge Water Treatment Plant and intakes in town
- Rehabilitation of Roan, Mpatamato, Golf and Kamirenda sewage stabilization ponds and pumping stations
- Rehabilitation of Masaiti water distribution system

The overall progress of works is at 99% and the project is expected to be completed by the beginning of the 1st Quarter 2019 while the Utilization Period of funds is expected to end by end of March, 2019.

9.7.2 Kafulafuta Water Supply System Project (US\$449 Million)

The Government of the Republic of Zambia mobilized funds from the Chinese Government for a Contractor Procurement Construction (EPC) Contract where the contractor secures financing, design, build and hand over to the client amounting to **US\$449 Million** for the implementation of the Kafulafuta Water Supply Project. The project aims at improving water and sanitation services in Ndola, Luanshya, Masaiti and Mpongwe and involves the following:

- The construction of a 125 Million m³ Multi-Purpose Dam on Kafulafuta River in Ibenga area
- Water intake pump station with a capacity of 300,000m³/day but only 150,000m³/day will be equipped for the design life of the project. The remaining 150,000m³/day will be equipped beyond the design life of the project
- Raw water transmission main and Midway pump station to Kafubu, Makoma and Mikomfwa water treatment plant with a dedicated line also to Masaiti District
- Construction of new KWSC head quarter offices complete with furniture.
- Replacement of transmission mains from existing plants to reservoirs
- Extension of water supply to selected un-serviced areas in Ndola, Luanshya, Mpongwe and Masaiti Districts
- Construction of reservoirs in selected areas
- Metering of customers and Reduction of Non-Revenue Water
- Implementation of the Approved Resettlement Action Plan

The Contractor has commenced earth works for the Dam works and the progress is generally, as follows:

- The implementation of the Resettlement Action Plan (RAP) is 95% complete with all the 268 Resettlement houses completed and occupied. Only an institution called Foundation for Cross-Cultural Education remains to be compensated in order to complete the RAP implementation
- Detailed Designs for the un-serviced areas including the transmission mains replacements have been completed
- A total of 15km out of 30Km DN1000 and DN1200 Ductile Iron pipes for the main works have been delivered on site
- Construction of the 19Km Overhead Power supply line from Luanshya to the Dam Site is **95%** complete and partially handed over with only the installation of the earth wire being awaited.
- Foundation Excavation of the Mid-way Pump station **60%** complete
- The Ministry is finalizing the procurement process of recruiting the Project Implementation Team of Individual Consultants/or Experts who will carry out the Supervision of the Project
- Commencement of the main works was officially launched by His Excellency the President of The Republic of Zambia, Mr. Edgar Chagwa Lungu on 21st September, 2018

The Overall progress is at 15% Complete.

9.8 Mulonga Water and Sewerage Company

9.8.1 Zambia Water Supply and Sanitation Project (€ 156 Million)

The Government of the Republic of Zambia mobilised €156 million (€75 million and €50 million of which are loans from the European Investment Bank -EIB and Agence Française de Développement -AFD respectively). €20 million is a contribution by GRZ to the project while €6 million is a grant arranged by EIB from the European Union under the Cotonou Agreement through the European Union Development Fund (EDF) to fund the technical assistance for the implementation of the project. A further €5 million is expected to be provided from the European Union water facility pooling mechanism specifically to improve water and sanitation services in the peri-urban areas of the Project Towns. The project aims at the following;

- Reduction of Non-Revenue Water (NRW)
- Water and sanitation expansion programmes in peri-urban areas.
- Investment in required rehabilitation and expansion of key water and sanitation infrastructure;
- Capacity building (business improvement) of MWSC

The project involves the Rehabilitation and Expansion of water and waste-water infrastructure in Mufulira, Chililabombwe and Chingola Districts and will result in about 290,000 people having access to clean water supply and sanitation services. It is expected that a 100% coverage (of the existing population) will be achieved by the end of the project.

The progress so far is that:

- The procurement of the design and supervision consultant is complete, and contract signed
- The procurement process for consultant for the detailed designs of the network and supervision is under way. Technical evaluation done, awaiting for a No Objection to open financials from the European Investment Bank.
- Mulonga has issued the prequalification documents sent to EIB for No Objections for the contractor for the design and build for the treatment plants. Awaits for No Objection.
- The project has an estimated lifespan of six (6) years from the date of signature (2013) of the EIB financing agreement.

9.8.2 Kasumbalesa Water and Sanitation Augmentation Project (K million)

The Ministry through Mulonga Water and Sewerage Company is implementing the Kasumbalesa Water and Sanitation Augmentation Project amounting to K10.5 Million in Kasumbalesa District. The project which is fully funded by the Government involves the following:

- Construction of 15.9Km of water supply network
- Construction of 15.8Km of sewer network
- Drilling and equipping of 3No. boreholes
- Construction of the 200m³ elevated water tank
- Construction of perimeter wall fences at the borehole sites and Water Distribution centre, a guard house, operator's office and a shower room

The overall progress is as follows:

- The water supply works are 97% complete with only a small section of customers required to be metered in order to complete the project component
- Sewerage works have stalled at 71% as the contractor passed on over a year ago and all efforts with the administrators of the Company have not yielded any progress on site. In this regard, Mulonga Water and Sewerage Company still awaits response on the Legal Opinion sought from Ministry of Justice before Terminating the contract

9.9 Luapula Water and Sewerage Company

9.9.1 Rehabilitation and Construction of Water Storage Tanks in Mansa and Kashikishi Towns

The Government of the Republic of Zambia has acquired a grant amounting to K2.6 million from the Danish government (DANIDA) to finance the construction and rehabilitation of water storage tanks in Mansa and Kashikishi Towns of Luapula Province. This project involves the construction of 2 No. X 500m² water storage tanks. This project is at 0% due to contractual obligations of the initially installed tanks which later collapsed.

9.9.2 Expansion and Rehabilitation of Water and Sewerage Infrastructure in Nchelenge and Chiengwe Districts (K107.5million)

The Ministry through Luapula Water and Sewerage Company is implementing the expansion and rehabilitation of water and sewerage infrastructure in Nchelenge and Chiengwe Districts at a total cost of ZMW107.5 million. This project is fully funded by the Government of Zambia and involves the following:

- Construction and rehabilitation of water supply infrastructure
- Construction of sewerage infrastructure
- Construction, rehabilitation and expansion of water supply and sewerage networks

The contractor has mobilised and has since established site offices and awaits the payment of Advance Guarantee of K22 Million

9.9.3 Improvement of Water Supply and Sewerage infrastructure in Urban and Rural areas

The Government of the Republic of Zambia is in a process of acquiring a grant amounting to USD200million from Save Rural Africa Relief Fund (SaRAF) aimed at improving water supply and sanitation infrastructure in Luapula Province through the Finance, Build, Operate and Transfer Model. The scoping study has since been completed and a detailed proposal will have to be prepared, reviewed and submitted to the Ministry of Finance for subsequent financing of the proposed infrastructure.

9.10 Eastern Water and Sewerage Company

9.10.1 Water Supply and Sanitation in Chanida, Mwami and Mchinji – USD1.5 Million

The Government of the Republic of Zambia through Eastern Water and Sewerage received aid from UKaid amounting to **USD1.5Million** to improve water coverage and quality in Chanida, Mwami and Mchinji towns of Eastern Province through African brothers. The project aims at improving water supply and sanitation services in the three towns through:

- Drilling and equipping of production boreholes
- Laying of new network
- The construction of new elevated water tank,
- Construction of new ablution blocks.

The overall progress of works is at 100% Complete and the Commissioning and hand-over was done by the Permanent Secretary –Ministry of Water Development, Sanitation and Environmental Protection.

9.10.2 Water Supply and Sanitation Project in Nyimba East – USD2.5 Million

The Government of the Republic of Zambia through N WASO (DTF) and Eastern Water and Sewerage funded **K2.5Million** to improve water coverage and quality in Nyimba East of Eastern Province and its being done in house. The project aims at improving water supply and sanitation services in Nyimba east through:

- Construction of water reticulation and household connections.

The overall progress of works is at 100% Complete

9.10.3 Sanitation data collection and customer data base cleanup – K568, 646.35

The Government of the Republic of Zambia through Eastern Water and Sewerage received funding from GIZ amounting to **K568, 646.35** to improve data management and reduce Non-Revenue Water.

Data Analysis and impact assessment at 100% Complete, whereas the Construction of water reticulation and household connections is yet to commence.

9.11 Lukanga Water and Sewerage Company

9.11.1 New Serenje Water Supply and Sanitation Project (K22.6Million)

The Ministry through Lukanga Water and Sewerage Company is implementing the Serenje Water Supply and Sanitation Project amounting to K22.6 million. The project is funded by the Government of the Republic of Zambia and aims at improving water supply and sewerage system in Serenje District through:

- The construction of an elevated water tank,
- Drilling of production boreholes
- Construction of a new water supply network in Serenje.

The Ministry has terminated the contract with Meltcast Engineering Ltd due to non-performance. The overall progress of works is at 65% and the remaining works will be completed in house by Lukanga Water and Sewerage Company.

9.11.2 Kapiri-Mposhi Sanitation Project (K4.8Million)

The Ministry through Lukanga Water and Sewerage Company is implementing the Kapiri Mposhi Sanitation Project amounting to K4.8 million. The project is funded by the Government of the Republic of Zambia and involves:

- The rehabilitation of the sewage collection system
- Construction of the sewer pumping station in Kapiri Mposhi.

The overall physical progress of works is 98%. The project is expected to be completed end of February 2019. It is expected that over 2,000 people will have access to adequate sanitation once the project is completed.

9.11.3 Makululu Water Supply Project (K13.5 Million)

The Ministry through Lukanga Water and Sewerage Company is implementing the Makululu Water supply Project amounting to K13.5 million. The project is funded by the Government of the Republic of Zambia and involves:

- Equipping 3 boreholes
- Construction of 350 m³ tank
- Construction of 5 water kiosks
- Connections to 1000 households

Due to shareholding disputes within the Contractor, Julen Engineering, leading to the Bank cancellation of project Guarantees, the Ministry has written to Ministry of Justice for “No Objection” to cancel the contract which has been done. The Ministry has since embarked a new procurement process.

9.11.4 Kabwe Multi Facility Zone Water Supply and Sanitation Project (MFEZ)

The Ministry through Lukanga Water and Sewerage Company is implementing the Kabwe Multi-Facility Economic Zone Water Supply and Sanitation Project amounting to **K75,556,000.00**. The project which is planned to be financed through the Industrial Development Corporation (IDC) will involve Procurement and installation of new Water Supply and Sanitation Infrastructure and upgrade of selected Plants. Following guidance received from MWDSEP, LgWSC has written to IDC for project funding.

9.12 Chambeshi Water and Sewerage Company

9.12.1 Nakonde Water Supply Project (K33.9 million)

The Ministry through Chambeshi Water and Sewerage Company is implementing the Nakonde Water Supply Project amounting to K33.9 million in Nakonde District. The project is funded by the Government of the Republic of Zambia and involves:

- The rehabilitation of the existing network,
- Rehabilitation of the old dam
- Construction of a new water supply distribution network.
- Construction of 2 X 500 m³ elevated water tanks
- Rehabilitation of the existing water treatment plant
- Construction of the new modular water treatment plant
- Installation of water meters

The overall progress of works is 95% with the modular treatment plant installed in the third quarter of 2018. The remaining are minor works which include the upgrade of the transformer and procurement of start-up chemicals. This project seeks to improve the hours of water supply from the current 11hours to 20 hours and will result in more than 13,000 people having access to safe and clean water supply. In principle, the Project is complete and was commissioned and handed over to Chambeshi WSC.

9.12.2 Construction and Rehabilitation of Water Supply Project in Chinsali District (K51.1 million)

The Ministry through Chambeshi Water and Sewerage Company is implementing the Chinsali Water Supply Project amounting to K40.8 million. This is an Integrated Construction Unit (ICU) type of project, where the consultant and contractor team up as a unit to design and construct the infrastructure. This project is fully funded by the Government of the Republic of Zambia and involves:

- The installation of a modular water treatment plant and pump house,

- Construction of transmission mains into the town and the newly constructed Robert Masaka University
- Construction of water storage reservoirs and new water network.
- Installation of water meters

The overall progress of works is 95% with the remaining major works being the upgrade of the transformer and installation of water meters. Upon completion, this project will improve the hours of water supply from the current 8 hours to 24 hours and will result in 15,000 people having access to safe and clean water supply.

9.12.3 Construction and Rehabilitation of Water Supply Project in Isoka District (K36.0 Million)

The Ministry through Chambeshi Water and Sewerage Company is implementing the Isoka Water and Sanitation Project amounting to K32.9 million. The project is also an Integrated Construction Unit (ICU) type of project where the consultant and contractor team up as a unit to design and construct the project. It is funded by the Government of the Republic of Zambia and involves:

- The rehabilitation of the water supply system and water treatment plant
- The rehabilitation of the sewer networks
- Construction of water storage reservoirs.
- Installation of water meters

The overall progress of works on the project is 98%. The project has achieved improved hours of supply from 6 hours to 24 hours and has resulted in 6,000 additional people gaining access to safe and clean water. This project has been completed and handed over to Chambeshi Water and Sewerage Company and only awaiting the delivery of a Water Bowser.

9.12.4 Water Supply and Sanitation Project in Kaputa District (K161.3 million)

The Ministry through Chambeshi Water and Sewerage Company is implementing the Kaputa Water Supply and Sanitation Project at a total cost of K161.2 million. This project is funded by the Government of the Republic of Zambia and involves:

- The supply and installation of a compact water treatment plant
- Construction of water reservoirs and water network
- Construction of a water transmission pipeline from the Mwawe/ Kasungwe River located some 15km from Kaputa Town because of the following reasons:
 - The source of Choma River which is currently supplying Kaputa District is from Congo DR and due to mining activities in Congo DR, the river is highly turbid thus affecting the quality of water especially in the rainy season
 - The farming activities near the river by the villagers has made the river susceptible to rapid soil erosion thus affecting the water quality and subsequently raising cost of treatment
 - Furthermore, hydrological data on the Choma River shows that it dries up during the dry season therefore construction of water infrastructure on such a source would not avert the lack of clean and safe water and would subsequently be an uneconomical investment.

The overall physical progress of works is 72% complete. Currently, the Contractor is constructing the sewer system. The raw water pump station has been delivered to site with the remaining major works being the installation of plant components, pump sets as well as the construction of the sewerage system which is underway. Other structures like the District Office is 100% complete with the 13KM water transmission pipe line and access road at 90% completion.

Once completed this project will result in more than 3,000 people having access to clean and safe water and adequate sanitation.

9.12.5 Water Supply and Sanitation Project in Mpulungu District (K167 Million)

The Ministry through Chambeshi Water and Sewerage Company is implementing the Mpulungu Water Supply Project amounting to K167 million. The project is funded by the Government of the Republic of Zambia and involves:

- The rehabilitation the old water infrastructure
- Construction of new water intake at Lake Tanganyika and a Raw Water Pipeline thereof
- Construction of new water infrastructure including storage tanks.

The project is expected to improve the hours of water supply from the current 14hrs to 24hrs. Construction of the water intake is ongoing while the installation of the 3Km Raw Water pipeline has been completed. The overall progress of works is 12% and once completed, more than 12,000 people will have access to safe and clean water. The contractor is awaiting the financing of K14 million, being the balance on the Advance Payment request of K25 million

9.12.6 Six Towns Water Supply Project (US\$12.4 Million)-Phase II

The Government of the Republic of Zambia has acquired a loan amounting to USD 12.4 million from the Arab Bank for African Economic Development (BADEA) to finance phase II of the Six Towns Water Supply Project. The project involves:

- The rehabilitation of intake, water treatment plant, construction of water storage reservoirs, water intakes and networks in Mpika, Mbala and Kasama.
- The overall progress is 98% completion and the project is expected to be completed by beginning of 1st Quarter of 2019.
- The contractor is awaits the release of K12 million, being the balance on the Counterparty contribution by Government.

Once completed, this project is expected to improve the hours of water supply to 24 hours. In addition, water quality is

expected to improve with the metering ratio projected to increase to 100%.

9.12.7 Consultancy Services for Water Supply and Sanitation Project in Mungwi District (K3.7million)

The Government of the Republic of Zambia has mobilized resources to finance Techno-economic Feasibilities studies for the construction of water and sanitation infrastructure in Mungwi District. The consultant has done about 80% of the services with the feasibility studies completed and currently finalizing engineering designs and tender documents.

9.12.8 Emergency Water Supply Project in Mungwi District (K37million)

The Ministry through Chambeshi Water and Sewerage Company is implementing an emergency water supply project in Mungwi at a cost of K37million aimed at improving water supply hours. This project involves:

- Construction of 2No. X 500m³ Elevated Tanks
- Installation of the steel rising main
- Installation of the 2No. pump sets
- Installation of the water meters
- Construction of production boreholes
- Rehabilitation of pump house
- Construction of the district office.

Furthermore, this project aims to sustain the water source through impoundment of water and installation of a new raw water pipeline fitted with an online filter. The project is currently at 5% completion.

9.12.9 Consultancy Services for Water Supply and Sanitation Project in Shiwang'andu District (K2.5million)

The Government of the Republic of Zambia has mobilized resources to finance feasibility studies for the construction of water and sanitation infrastructure in Shiwang'andu District. The consultant has since done about 80% of the services with the studies completed and currently developing engineering designs and tender documents.

9.12.10 Emergency Water Supply Project in Mporokoso District (K56.4million)

The Ministry through Chambeshi Water and Sewerage Company is implementing an emergency water supply project in Mporokoso at a total cost of K56.4million aimed at improving water supply hours. This project involves:

- Construction of 2No. X 500m³ Elevated Tanks
- Installation of the steel rising main
- Installation of the 2No. pump sets
- Installation of the water meters
- Rehabilitation of pump house
- Rehabilitation of sewer networks and manholes
- Rehabilitation of sewer ponds
- Construction of the district office

The project is currently at 5% completion with the project materials procured and awaiting delivery.

3.12.11 Consultancy Services for Water Supply and Sanitation Project in Mafinga District

The Government of the Republic of Zambia has mobilized resources to finance Techno-economic Feasibilities Studies for the construction of water and sanitation infrastructure in Mafinga District. The consultant has since done about 60% of the services with feasibility studies completed and currently finalizing engineering designs and tender documents.

3.12.12 Integrated Small Towns Water Supply and Sanitation Programme (USD 135 million)

The Government of the Republic of Zambia has acquired a loan amounting to USD 135 million from African Development Bank (AfDB) to finance the construction and rehabilitation of water supply and sanitation infrastructure in Western, Luapula, Northern and Muchinga Provinces of Zambia.

The project will comprise the following three main components:

- Water Supply Infrastructure Development
- Sanitation Services Improvement (covering Sewerage Infrastructure Development and Sanitation and Hygiene promotion)
- Institutional Capacity Building and Program Management.

The engagement of the Main Consultants for Design Review and Supervision has been concluded with Ministry and Ministry of Justice with only AfDB to give final "No Objection" to award. The procurement of operational motor vehicles and office equipment was completed. The construction of water and sewerage infrastructure is scheduled to commence in the fourth quarter of 2019.

3.12 The Urban Basket Financing Mechanism Project

The Government of the Republic of Zambia received a grant amounting to **USD 8,000,000.00** from the German Government through KfW to support the implementation of the National Urban Water Supply and Sanitation Programme (NUWSSP) for the establishment and implementation of a Basket Financing Mechanism Project. This project involves:

- Establishment of procedures and standard documents for the implementation of the Urban Basket Financing Mechanism
- Designs and tender documents for Non-Revenue Water and Energy efficiency

Under this project, water commercial utilities are invited to submit proposals of projects to be financed using the funds under the Basket. So far, two calls for proposals have been issued to the commercial utilities to apply for funding.

The first call involves the measures to reduce non-revenue water under Western, North Western, Chambeshi and Luapula Water and Sewerage Companies. The First Call involves the following:

- Supply and installation of 3,367No. Water Meters and 2,800No. couplings to Western Water and Sewerage Company
- Supply and installation of 13,494No. Water Meters and 700No. couplings to Chambishi Water and Sewerage Company
- Supply of 2,000 No. and 1,950No. couplings Water Meters to Luapula Water and Sewerage Company
- Supply of 3,000 No. Water Meters and 3,550No. couplings to North Western Water and Sewerage Company

The progress of works is as follows:

- All the 3,367No. Water Meter have been delivered at Western Water and Sewerage Company and installation is at 100%. The 2,800No. Couplings for maintenance works in Mongu have been procured and delivered as well.
- All the 13,494No. Water Meter have been delivered at Chambeshi Water and Sewerage Company awaiting installation. The 700No. couplings for maintenance works in Kasama have been procured and currently being transported to site
- All the 2,000No. Water Meter have been delivered only at Luapula Water and Sewerage Company as per the contract. The 1,950No. couplings for maintenance works in Mansa have been procured and currently being transported to site
- All the 3,000No. Water Meter have been delivered only at North Western Water and Sewerage Company as per the contract. The 3,550No. Couplings for maintenance works in Solwezi have been procured and currently being transported to site.

The Second Call for proposals was meant to address Energy Efficiency of Water Supply and Sanitation Installations and/or facilities. However, During the negotiations between the Germany and Zambian Government in Berlin, Germany on 7th and 8th December 2016, the Germany Government announced the cancellation of the Urban Basket due to lack of compliance to financial regulations. In this regard, it was announced that only the already committed contracts shall be allowed to be executed and the rest of the activities were suspended including the Second Call for Proposals.

10.0 MAJOR PROJECTS UNDER THE NATIONAL RURAL WATER SUPPLY AND SANITATION PROGRAM

The major projects which were implemented included borehole construction and rehabilitation, construction of piped water schemes and sanitation facilities at public institutions.

The following are some of the major projects being undertaken and financed by the Government and various Cooperating Partners.

UNICEF WASHE Support

10.1.1 Water Supply

The Government of Zambia with support from UNICEF towards the National Rural Water Supply and Sanitation Program planned to undertake the following activities:

- a. Construction of forty (40 No.) Boreholes in four districts in Muchinga province namely: Nakonde, Isoka, Chinsali and Kanchibiya and two (2No.) small piped water schemes in Kanchibiya. The estimated cost of the works is about ZMW 2,000,000.00 and once completed a total of 12,500.00 more people will have access to clean and safe water supply. These works have been completed and all the 40 No. boreholes have been drilled, equipped with hand pumps, the 2 No. boreholes have also been constructed and handed over to the communities.
- b. Capacity building training to District, Provincial and National level staff in operation and maintenance have been conducted in Southern (choma), Eastern (Chipata), Copperbelt (Luanshya), North-Western (Solwezi), Northern (Kasama) and Muchinga (Chinsali) Provinces. Three people from each rural district were trained and a total of 153 people were trained.
- c. Upgrading of 100 India Mark II hand pumps to Afridev in three districts namely Mansa (22), Milenge (40) and Chembe (38) at a total cost of K765, 029.97. The assessments have been done and implementation will commence before the end of the year in areas which are accessible.
- d. Development of the Technical Guidelines for the piped water schemes. This technical guide manual will address the issues of planning, construction, standards, operation, management and maintenance of piped water schemes which currently has gaps. The final draft of the guidelines have been developed and awaits validation.
- e. WASH interventions in Mantapala refugee camp in Nchelenge district of Luapula province. This intervention is being supported by UNICEF and UNHCR. A total of 2,051 ventilated pit latrines (VIP) and 1249 hygiene facilities (bath shelter) constructed and benefiting a total of 11,400 people. A total of 51 boreholes equipped with hand pumps have been constructed and handed over to the communities and are benefiting a total of 12,750 people.

10.2 Chinese Grant Aided boreholes Project

Government received a grant amounting to RMB 139,500,000.00 from the People's Republic of China for construction of 920 boreholes in Central and Luapula Provinces. A total of 40 boreholes have been constructed per each district in Luapula and Central Provinces. To date all 900 boreholes have been drilled in Central Province and Luapula province covering all the districts in the two provinces. This project has resulted in 230,000 people accessing safe water. The project is under defects and liability period until December 31, 2018.

10.3 German Development Co-operation Support

4.3.1 RWSS Basket Phase I

The Government received a grant from the Germany Government amounting to EURO 10 million for the implementation of rural water and sanitation using basket financing mechanism project in 49 districts of Eastern, Lusaka, Southern, Central and North Western Provinces. This project involves strengthening of capacities of districts in project management which includes procurement, contract management, supervision and creation of tools and strengthening of systems which district are using to effectively implement various water and sanitation projects.

In phase I, the project involved construction of 550 boreholes, 240 latrines and other sector support activities. All the 550 boreholes have been completed and handed over to communities and has benefited a total of 137,500 people and the 240 Ventilating Improved Pit latrines have been completed and handed over to the communities. Each one of the 49 district has been allocated a total of 25 boreholes for rehabilitation. This gives a total of 1225 boreholes which will eventually be rehabilitated. So far, all these non-functional boreholes have been assessed, bill of quantities produced. Once the boreholes are rehabilitated, a total of 306,250 people will have access to clean and safe water supply.

10.1.2 RWSS Basket II

This phase has a total funding of Euro 7 million and will target four provinces, namely Eastern, Central, Lusaka and North

western. The engagement of the consultant to offer technical assistance has stalled because the financier has demanded a comprehensive audit of the project. The audit is currently going on and once complete, the future of the project will be decided, and the project will resume once the consultant has been engaged and the audit report has been cleared among other pre-conditions to be fulfilled by the government.

4.4 Construction of 780 Boreholes with GRZ Funding

The Ministry has been constructing 780 boreholes equipped with hand pumps in rural communities in the ten (10) provinces at a total cost of K19,566,892.60. This project is about 77.9 % complete. Upon successful completion of this project, total of 495,000 people will have access to safe and clean water in rural areas. A total of 680 boreholes have been drilled, equipped and handed over to the communities and a total of 170,500 people have benefited under this project so far. The remaining works are in Chavuma 10 boreholes, Zambezi 10, Chiengwe 10, Lufwanyama 10, Senanga 10, Mitete 10, Kalomo 10, Gwembe 10, Kazungula 10 and Sinazongwe 10. The non release of funds by the treasury has caused the delay in the completion of the project. The works are ongoing and below is the allocation.

No.	Province	No Boreholes	Completed	Remaining
1	Southern	110	70	40
2	Lusaka	60	60	0
3	Luapula	40	30	10
4	North Western	50	30	20
5	(a) Western	60	50	10
6	(b) Western	90	80	10
7	Central	60	60	0
8	Muchinga	50	50	0
9	Eastern	90	90	0
10	Northern	80	80	0
11	Copperbelt	90	80	10
Total	Total	780	680	100

4.5 Construction of 1200 boreholes complete with hand pumps with GRZ Funding

The Ministry in the year 2015 awarded contracts for construction a total of 1200 at a cost of K55, 293,553.12 covering seven provinces listed in the table below. Upon completion, the project is expected to benefit a total of 300,000 people. Works on this project only commenced in July, 2017 due to non-release of funds from the treasury in the year 2016 to pay their advance payments.

So far, a total of 290 boreholes have been drilled in Eastern province (130), Muchinga Province (50), Western Province (50), Copperbelt Province (20) and Northern (40). These have so far benefitted 37,500 people. Nevertheless, works are ongoing because of the slow release of funds, below is the table of the allocation of the boreholes of the 1200 boreholes:

LOT NO.	PROVINCE	NO. OF BOREHOLES	Boreholes Drilled	Boreholes Remaining	NO. OF DISTRICTS
LOT 1:	Southern	150	0	150	5
	Lusaka	40	0	40	4
LOT 2:	Northern	92	40	52	7
LOT 3:	Western	200	50	150	16

LOT NO.	PROVINCE	NO. OF BOREHOLES	Boreholes Drilled	Boreholes Remaining	NO. OF DISTRICTS
LOT 4:	Muchinga	84	50	34	7
	Eastern	440	130	310	5
LOT 5:	Copperbelt	40	20	20	4

4.6 Construction of 50 piped water schemes

The Ministry planned to construct 50 piped water schemes in selected rural growth centres amounting to ZMW25 million. This project was also aimed at improving access to water supply in rural areas and once completed 25,000 people would have benefited. The project had reached procurement stage (evaluation stage) and the evaluation report was presented to the Ministry Procurement Committee. The procurement process was suspended.

4.7 Contract for Drilling of 19 out of 31 Commercial Boreholes and construction of a water reticulation System at District Administrative Centers of New Districts

This project aims at drilling 19 out of 31 commercial boreholes, installation of submersible pumps, construction of elevated water storage tanks and construction of water distribution network. The project is divided into three LOTS, 1, 2 and 3. The re-engagement of the contractors for LOT 2 and 3 is currently going on and the Ministry Procurement Committee gave a No Objection to award the two contractor. The contracts have since been sent to Ministry of Justice for a legal opinion and clearance. Under LOT 2 and 30% of the works were done before the contract expired.

4.8 Project for the Drilling and Equipping with Hand Pumps of 500 Emergency Boreholes in Southern Province

The National Rural Water Supply and Sanitation Programme Project No. 2100150013198 was implemented in Luapula, Northern and Muchinga provinces. The unutilized funds from this project amounting to UA 2,936,032.00 were moved to Southern Province to facilitate the implementation of a project involving the under listed activities in drought prone areas.

10.1.3 Drilling of 500 boreholes in Southern Province.

All the 500 boreholes have been drilled, equipped with hand pumps and handed over to the communities. The project is under defects and liability. The table below gives a summary of the completion of the 500 boreholes.

LOT	NO. OF BHs	NAME OF DISTRICTS	ALLOCATION OF BHs per DISTRICT	No. of BHs DRILLED	No. of BH Developed.	No. of BHs Pump Tested	Civil works done	No. of BHs installed with HPs
1	140	Kazungula	50	50	50	50	50	50
		Zimba	30	30	30	30	30	30
		Kalomo	60	60	60	60	60	60
2	150	Namwala	60	60	60	60	60	60
		Sinazongwe	40	40	40	40	40	40
		Choma	50	50	50	50	50	50
3	90	Monze	40	40	40	40	40	40
		Pemba	30	30	30	30	30	30
		Gwembe	20	20	20	20	20	20
4	120	Mazabuka	40	40	40	40	40	40
		Chikankata	40	40	40	40	40	40
		Siavonga	40	40	40	40	40	40
TOTAL	500		500	500	500	500	500	500

Procurement of seven water bowsers.

During the period under review, the procured seven (7) water bowsers for selected commercial utilities; these include LuWsc, WWSc, NWSc, LWSC, SWSC, LPWSC, and CWS

Transforming Rural Livelihoods Water and Sanitation Project - (AfDB)

The Government has mobilized funds amounting to US\$38.23million for the rural water supply and sanitation project namely improving rural livelihoods in the 16 districts of Western Province. The program is being financed by the African Development Bank, African Development Fund (ADF) RWSSI Trust Fund, OPEC Fund for International Development (OFID) and Government of Zambia as indicated in the table below.1.1 below. The project is being implemented over a period of 5 years. The project will involve construction of 1231 boreholes, 10 water schemes and 916 sanitation facilities at public institutions. Currently the local authorities have mobilised the communities and the bank has since disbursed funds based on the work plans. Engagement of program implementation consultants are in progress. The project once completed is expected to increase access to improved water supply to about 745,000 people and increase access to improved sanitation to about 573,000 people. This intervention is expected to create 12,501 jobs for unskilled and semi-skilled youth in the target districts.

Financing Agencies and Financing Plan

Source of Funds	Total (USD)	Instrument
ADF Loan	15.50 million	Loan
ADF RWSSI Trust Fund	4.84 million	Grant
OFID	14.00 million	Loan
GRZ	3.88 million	GRZ contribution (kind or cash)
Total	38.23 million	100

In addition to the above, the Nordic Development Fund (NDF) is also financing climate resilience and adaptation program up to a total cost of Euros 2.25 million. The grant financing agreement was signed on 4th December, 2015.

Breakdown of water facilities to be constructed per district under the project

DISTRICT	Number of Boreholes Construction	Number of Hand dug Wells	Number of Manually Drilled Boreholes	Number of Water Schemes Constructed	Number of boreholes rehabilitated	Number of Hand dug wells rehabilitated
Kalabo	83		25		60	30
Kaoma	80	60		1	35	30
Lukulu	87	50	10		36	30
Mongu	107	45	15	1	89	50
Senanga	76	50			85	40
Sesheke	70		20		45	25
Shangombo	97	45	20	1	30	25
Mwandi	65		20	1	30	27
Mulobezi	68			1	35	30
Sioma	89			1	30	31
Nalolo	70		10	1	55	20
Mitete	75		10		35	20
Luampa	68			1	45	20
Nkeyema	76			1	40	30
Limulunga	63		10	1	70	30
Sikongo	57		10		50	32
Total	1231	250	150	10	770	470

With Regards to Sanitation and Hygiene: the program will construct a total of 830 communal sanitation facilities schools, 70 for health centres, 16 at public institutions such as markets and bus stops and 16 demonstration facilities.

In addition the program will finance the construction of 20 m3 biogas digesters in 6 boarding schools. i.e (Mongu, Kaoma, Lukulu, Kalabo, Lukona and Sesheke High Schools). This will improve the integration of human activities in the ecosystem. The technologies are utilizing organic waste in an environmentally friendly matter and turn it to Biogas, irrigation water and fertilizer.

Status of the project is as follows:

- Constructed 160 boreholes out of 1231 boreholes with about 40 equipped with hand pumps,
- Tender for 770 Boreholes to be Rehabilitated closed and evaluations been conducted. Awaiting No Objection from the bank.
- Awarded 5 out 10 water schemes for Lot 1 to be Constructed and in the process to tender the other 5 water schemes for Lot 2
- Awarded contracts for 150 Manually drilled boreholes and Construction works about to commence
- Initiated procurement of 470 Hand Dug Wells to be Rehabilitated
- Contracts awarded and Constructing 9 spare part shops in nine districts. About 6 shops commenced construction
- Tender for 900 sanitation facilities to be constructed in schools and Health Centres closed and evaluations to be conducted
- Bid Document for 6 Bio digesters & 32 Institutional Sanitation Facilities been developed and submitted to AfDB for No Objection
- Trained 375 of Area Pump Menders and repaired 40 hand pumps
- Procuring 32 motor cycles for all the 16 districts
- Procuring 879 bicycles to be used by champions during data collection
- Contract for a consultant for Community Led Total Sanitation been signed and inception report been produced.
- Contract for Consultant for climate change adaptation been signed and consultants submitted the inception report which was approved.
- Contract for consultancy for Gender Audit consultant been signed and inception report been produced.
- The consultant for design and supervision is providing support towards the construction of 10 water schemes is available for supervision of construction of water schemes
- The Program Support Team (PST) is providing support to the project.

Kashiba and Lukwesa Piped Water Schemes

Two piped water schemes constructed at Lukwesa and Kashiba in Mwense District in Luapula Province at a total cost of ZMW 16 million has been completed and are under defects and liability. The project has been handed over to Luapula Water and Sewerage Company. The Ministry is preparing to commission the project.

The two projects are now providing access to clean and safe water to about 21, 000 people in Kashiba and Lukwesa communities.

Construction of Kazembe Pipe Water Scheme

The Ministry is constructing Kazembe Water scheme at a cost of K1,200,000.00. The construction of the system has been completed. The elevated Braithwaite tank, commercial borehole, installation of submersible pump and the distribution network of 2.5 km and 15 public stand pipes have been completed. The system is currently being tested in readiness for operation.. The project will benefit a total of 3,000 people in the central business district of Mwanabombwe.

4.12

Shichama and Kanyemba Water Supply Project

This project involves the construction of water supply reticulation system at Shichama and Kanyemba in Mwense district of Luapula province. The system will be constructed at an estimated 10 million Zambian Kwacha and once completed, it will benefit a total of 15, 000 people. The works on the project have commenced and the contractor has since been paid a total of ZMW1,500,000.00.

Infrastructure Maintenance

Sustainable Operation and Maintenance Programme of Hand Pumps (SOMAP)

The Ministry is implementing the ***Sustainable Operation and Maintenance Programme*** with the objective “to sustain the state of operation and maintenance of at least 70% constructed facilities with the full participation of the beneficiary communities”. The programme component target was to have an O&M system that would ensure the supply chain of spare parts as well as systems for maintenance of water points from district to community level. Through the SOMAP initiative, the programme is expected to improve the functionality rate of constructed water point facilities to over 80% by 2030. This program is being implemented with support from the Government of Zambia and Cooperating Partners.

During this reporting quarter, the Programme archived following:

SOMAP National Progress

S/N	Project	Output	Location	Financier	Status
1	Rehabilitation of 23No. Hand pumps	Improved water supply	Chitambo	GRZ	100% complete
2	Construction of spare parts shop	Improved availability of hand pump spares	Chitambo	KfW	At procurement stage
3	Repair of hand pump at Chief Munkochi's Palace	Improved access to water supply	Munkonchi	World Vision/GRZ	100% complete
3	Drilling Supervision Training	Improved hand pump functionality	Mwandi, Sesheke, Sioma and Mulozezi	AfDB/GRZ	12No. Water Supply Coordinators and Area Pump Menders trained
4	Community Based Management of WSS training	Improved hand-pump functionality and Sustainability	Western Province	AfDB/GRZ	89No. V-WASHE committees trained
5	Repair of 41 hand-pumps	Improved access to water supply	Mansa	Community/Council	41No. Handpumps repaired and functional
6	Rehabilitation of 2 handpumps at Chikuni Health Centre and Correctional Facility	Improved access to water supply	Samfya	Council	2No. handpumps rehabilitated and handed over
7	Restocking of seedstock of spare parts in SOMAP Shop	Improved availability of handpump spareparts	Mansa	Council/Community	Fast moving spareparts restocked
8	Training in Hand-pump Repair and Maintenance	Improved hand-pump functionality and Sustainability	Manyinga	UNICEF/GRZ	20No. Area Pump Menders, Shop Attendant and 6No. DWASHE members trained in O&M
9	Rehabilitation of 205 dysfunctional boreholes	Improved access to water supply	Solwezi, Kasempa, Mufumbwe, Manyinga, Kabompo, Zambezi, Chavuma, Mwinilunga	KfW/GRZ	Assessments of non-functional boreholes currently ongoing
10	Rehabilitation of 275No. dysfunctional boreholes	Improved access to water supply	Southern Province	GRZ	Assessments are on-going and so far 2No. boreholes have been rehabilitated in Chikankata
11	Training in O&M of Small Piped Water Schemes	Improved access to water supply	Pemba	World Vision	3No. Water Scheme committees trained in mechanized O&M principles
12	Rehabilitation of spareparts Shop	Improved availability of hand-pump spares	Namwala	KfW	Spareparts shop rehabilitated and awaiting stocking.

The low rate of programme implementation is largely due to no or inadequate disbursements from the treasury. Therefore, if access to water supply is to be sustained, there is urgent need to invest in O&M through this programme.

Major Activities under Community Development

Sanitation and Hygiene Promotion

Government with support from UNICEF and DFID is implementing a Sanitation and Hygiene Programme. Under this programme, Community Led Total Sanitation (CLTS) is being rolled out through the Local Authorities with the involvement of key line Ministries, NGOs, Cooperating Partners, and traditional leadership. The approach focuses on engaging communities to end Open Defecation through mobilising collective action to build and use toilets. The programme is currently being rolled out countrywide, and a total of 72 rural districts have been trained in community approaches to total sanitation out of which 46 have been transitioned to full government oversight. Over 177,672 have so far gained access to sanitation against the 300,000 planned for 2018.

Scaling Up Nutrition Programme

The Ministry is participating in the implementation of the Scaling up Nutrition Programme focused on preventing stunting in children. Support from the programme focuses on providing water supply and sanitation in 14 districts (Mumbwa, Chipata, Lundazi, Chinsali, Mbala, Kasama, Kaputa, Mongu, Kalabo, Shangombo, Mwinilunga, Zambezi, Samfya and Mansa) most affected by malnutrition. Good sanitation and clean water prevent diarrheal diseases thereby preventing stunting. The SUN through the National Food and Nutrition Commission is supporting the Ministry implement water and sanitation activities in the 14 districts towards the fight against child stunting. Support has also been through the following;

- Program implementation funds,
- Support the salary of a technical assistant (Expert)
- And also has purchased a vehicle for supporting the program.

The next phase of the project will run from 2018 to 2022 targeting the 14 districts already receiving support and an additional 86 districts by 2022.

Monitoring, Evaluation and Reporting

The Monitoring, Evaluation and Reporting (MER) Unit in the water and sanitation section was established in 2013 with an overall purpose of supporting the achievement of Zambia's goal of universal access to safe water and improved sanitation in rural areas by 2030. The information system (WASH MIS) established and managed by the MER unit provides a holistic Monitoring and evaluation framework that encompasses all players in the Water Supply and Sanitation sector. The Unit supports the M&E functions by:

- Ensuring that systems and tools are designed and implemented
- That approaches, and indicators used by different agencies are harmonised
- That data is collected, analysed and reported in a timely fashion and
- That capacities are built at national, Provincial and District levels

In 2013 with support from UNICEF, the Ministry developed a web-based WASH MIS using DHIS2 platform. DHIS2 is an open source software developed and customised to support monitoring/reporting of WASH activities. The system has been so far rolled to 106 districts with support from technical partners. All the 106 districts have been transitioned to full Government control through DPI. With support from AfDB, the Ministry has rolled out to all 16 in Western Province. The intention of the department is to roll out M2W to all the districts. The system is being integrated in the Department of Planning and Information. UNICEF supported the Ministry to train DPI staff on management of the DHIS2.

Revision of M&E Framework

To further strengthen the Monitoring and Evaluation Framework for the National Water Supply and Sanitation sub-sector for Zambia, the Ministry with support from World Bank through the Lusaka Sanitation Project engaged a Consultant to develop the harmonized Water Supply and Sanitation Monitoring and Evaluation Framework for WASHE sector. The document was submitted and reviewed by the Ministry during the period under review.

6.3.2 Communication and Advocacy International Partnerships

Zambia belongs to regional and global institutions such as the Southern Africa Development Community (SADC), the African Union, the AfricaSan, Sanitation and Water for All (SWA) where we have made a number of commitments to improve water and sanitation so as to reach universal access by 2030. It is our goal to continue participating in such structures as they provide a platform for exchange of ideas, innovation and resource mobilisation, we move forward on Sustainable Development Goal targets on water and sanitation.

- The Sustainable Development Goals provide an opportunity to achieve universal access and eliminate inequalities. Zambia hosted a SWA workshop at which Malawi participated to discuss the SWA framework and how it could be applied to strengthen the sector, introduce the SWA accountability mechanism + potential for pioneering, obtain feedback on the use of the SDG costing tool, announce upcoming cycle of meetings and follow-up on outcomes of 2017 HLMS and update on the role of focal points and get input on the process for updating the list.

Other Achievements

As a result of investments made by government and cooperating partners, progress is being realized in the provision of water supply and sanitation;

- To the Ministry hosted the First Ever Sanitation Summit in the country, “Whose theme is: Collective Action Towards Sustainable Sanitation and Hygiene Services for ALL” from 19th to 21st November, 2018 at Mulungushi International Conference Centre.

Challenges

During the period under review, challenges faced during programme implementation included

- Inadequate financial resources against high investment requirement for the sector. The challenge for service provision especially in rural and peri-urban areas, is overwhelming and requires huge and timely financing.
- Despite poor access to sanitation adversely affecting the health and well-being of the majority of people, particularly in rural and peri-urban areas, sanitation has received low investments over the years in comparison to water supply
- Most Water Utility Companies are not financially viable and still require financial support in addition to project financing to enable them carryout their mandate of providing safe drinking water and sanitation services;
- The mushrooming of unplanned settlements which pose serious challenges in the provision of water supply and sanitation services
- Vandalism of the existing water supply and sanitation infrastructures.
- Huge outstanding water and sewerage bills by some government departments.
- Pollution of water sources especially by mining activities is posing a serious danger to sustainability of water resources and also contributes to high cost of water treatment.
- Interruption in ZESCO power supply is resulting in loss in water production and supply hours hence affecting service provision by the commercial utilities.
- The Department of Water Supply and Sanitation, though given cabinet Authority for new positions, the Treasure Authority is yet to be granted in to have a fully-fledged functioning department

11.0 EVENTS AND CROSS CUTTING ISSUES

The Ministry participated in commemorating the following events:

a. INTERNATIONAL WOMEN'S DAY

Zambia like most countries joint the rest of the international community in commemorating the International Women's Day which falls on 8th March every year under the theme “Time is now: Rural and Urban Activist Transforming women's lives”. A total 40 officers participated in the march past.

b. INTERNATIONAL LABOUR DAY

The 2018 Labor Day celebrations was commemorated under the theme, “Building Partnership for Sustainable National Development through Decent Job Creation and Social Justice”. A total 24 officers participated in the march past.

c. PUBLIC SERVICE DAY

The 2018 Public Service Day was commemorated under the theme, “**Combating Corruption in the Public Service through Stakeholder Participation and Promotion of Ethical Leadership to realise the objective Agenda 2063 and Sustainable Development Goals**”. Among the activities carried out were show casing and offering services that the ministry offers to the General Public during the Road show and Exhibition.

d. INTERNATIONAL TRADE FAIR

The International Trade Fair of 2018 was commemorated under the theme “Private Sector Key to Industrialization”. The interpretation of the theme was based on the portfolio functions mandated to the Ministry of Water Development, Sanitation and Environmental Protection.

Participation

The Quasi institutions that participated under the umbrella of the Ministry were Zambia Environmental Management Agency (ZEMA) and Water Resources Management Authority (WARMA). Public exhibitions were held from 29th June to 3rd July 2018 at Levy Mwanawasa Hall, exhibitors provided the background and the services provided by the Ministry. The Department of Water Supply and Sanitation showcased a model showing how sanitation was being handled in the urban and peri-urban areas. The Environmental management showcased the different ways of getting rid of waste products by displaying various bins categorized accordingly.

e. COMMEMORATION OF 2018 WORLD WATER DAY

The 2018 World Water Day was commemorated under the theme, ‘Nature for Water’ in Kabwe District, Central Province. Activities leading to the commemoration of the 2018 World Water Day were spearheaded by the Ministry and stakeholders in the water and sanitation sectors actively participated. Among the activities carried out were public awareness, public exhibitions and a march past.

The theme highlighted how nature could be used to overcome the water challenges of the 21st century and would therefore include issues related to climate change, green infrastructure and grey infrastructure.

f. COMMEMORATION OF 2018 WORLD ENVIRONMENT DAY

The 2018 World Environment Day was commemorated under the theme, ‘Beat Plastic Pollution’ Nature for Water’ in Lusaka Province. Activities leading to the commemoration of the 2018 World Environment Day were spearheaded by the Ministry and stakeholders in the water and environment sectors actively participated. Among the activities carried out were public awareness, public exhibitions and a march past.

The theme focused on exploring nature based solutions to the water challenges faced in the 21st century. The central

message was that nature based solutions such as reconnecting rivers to flood plains, and restoring wetlands, is a sustainable and cost effective way to help rebalance the water cycle, mitigate effects of climate change and improve human livelihoods. The theme also aimed to encourage the contribution to the creation of a circular economy, at the same time as helping to protect the natural environment and reduce pollution which are both key targets in the Sustainable Development Goal 6, which commits the world to ensure availability and sustainable management of water and sanitation for all 2030.

g. GLOBAL HAND WASHING DAY

The Ministry participated in the 2018 Global Handwashing Day which took place on 15th October, 2018 which was commemorated under the theme 'Clean hands – a recipe for health' focuses on the link between handwashing, food and nutrition, creating awareness on the need for handwashing with soap at critical times such as after using the toilet, before cooking, eating, or feeding others

h. ZAMBIA SANITATION SUMMIT

The Ministry of Water Development, Sanitation and Environmental Protection, and its partners, convened the Zambia Sanitation Summit to galvanise political and multi-stakeholder will, and existing commitments, into accelerated action aimed at improving sanitation and hygiene services for all and ending open defecation by 2030. The summit was held from Monday, 19th November 2018 to Wednesday, 21st November 2018, at Mulungushi International Conference Centre in Lusaka under the Theme **“Collective Action towards Sustainable Sanitation and Hygiene Services for All”** Over 600 participants were drawn from the Government (both national and sub – national levels), Traditional Leadership, the United Nations, Cooperating Partners, Non-Governmental Organizations, Civil Society Organization, Research Institutions, the Private Sector and the media were in attendance at the three-day event. It was recognized that although much has been achieved in the last decade, only 31% of the population has access to basic sanitation and 15% practice Open Defecation posing a serious threat to the quality of life, control of disease, and the environment.

i. 2018 WORLD AIDS DAY COMMEMORATION

World AIDS Day commemoration falls on 1st December every year. Human Resource and Administration requested Edutainment Health Foundation provides an onsite integrated Health Care Service. Activities leading to the commemoration of the 2018 World AIDS Day were spearheaded by the Ministry. Among the activities carried out were HIV testing, group session for questions and answers, one on one counseling session, Eye Screening, Breast, Prostate, Cervical cancer screening, dissemination of information about Adherence/Treatment and Cervical cancer screening, dissemination of information about Adherence/Treatment and HIV/AIDS.



12.0 CHALLENGES, RECOMMENDATIONS, CONCLUSION

12.1 CHALLENGES

Despite the successes of the Ministry during the period under review, a number of challenges were faced during the review period which included but were not limited to the following:

- a. Untimely release of funds from the Treasury hampered the full implementation of most programmes in the Ministry.
- b. Inadequate financial resources against high investment requirement for the sector. The challenge for service.
- c. The mushrooming of unplanned settlements which pose serious challenges in the provision of water supply and sanitation services.
- d. Huge outstanding water and sewerage bills by some government departments
- e. Transport
- f. Inadequate staffing levels and staff at sub-nation levels
- g. Inadequate ICT equipment

12.2 RECOMMENDATIONS

- Timely release of funds in accordance with funding profiles.
- Improved capacities in the Commercial Water Utilities and Local Authorities
- Government debt to Water Utilities need to pay off in order to assist in financial sustainability of the CUs and enable them to expand to new areas such as peri urban and rural growth centres where most-poor Zambians reside.
- Finalization of the water supply and sanitation and solid waste policy
- revision of the Water Supply and Sanitation Act no. 28 of 1997
- Revision of the articles of Association for the Commercial Water and Sanitation utilities to improve corporate government in order to promote commercial viability and profitable