THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF WATER

WATER SECTOR DEVELOPMENT PROGRAMME PHASE THREE (WSDP III) 2022/23 – 2025/26

JULY, 2022

WATER SECTOR DEVELOPMENT PROGRAMME PHASE THREE
(WSDP III) 2022/23 – 2025/26

PREFACE

Water is one of the fundamental resources in social economic development as it touches all aspects of human life. Availability of adequate clean, safe and affordable water and sanitation services in a country has impact on the standard of living of people as well as enhancing productivity for economic growth. The Government identifies water as an essential resource in achieving Tanzania Development Vision (TDV) 2025, Five Year Development Plan Phase Three (FYDP III) 2021/22 – 2025/26, *Chama cha Mapinduzi (CCM)* Election Manifesto of 2020 – 2025, Africa Agenda 2063 and Sustainable Development Goals (SDGs) 2030.

Consistent with the National and International Planning Frameworks, all interventions in the Water Sector are implemented within the Water Sector Development Programme (WSDP) which spans for the period of 2006 – 2025. The programme trails on a Sector Wide Approach to Planning (SWAP) and is implemented in phases with a Programme Development Objective (PDO) of Strengthening Sector Institutions for Integrated Water Resources Management and Improved Access to Water Supply and Sanitation Services.

The first phase of the programme (WSDP I) started in July 2009 and ended in June 2016 while the second phase of the programme (WSDP II) started in July 2016 and ended in June 2022. The Final Evaluation Report of WSDP II (2021) observed a cumulative improvement in water resources management and development including establishment of nine functional Basin Water Boards (BWBs); accreditation of seven Water Quality Laboratories; improved water supply service level in rural and urban areas to 72.3% and 86% respectively; improved sanitation of households connected to convention public sewer systems in regional centres to 13% and households in rural areas had improved sanitation facilities to 36%.

The Water Sector Development Programme Phase Three (WSDP III) is the last phase of the programme starting from July 2022 to June 2026. The WSDP III is designed to address challenges of WSDP II and to achieve the programme development objective through interventions to be implemented in five components namely; Water Resources Management and Development; Water Quality Management; Water Supply; Sanitation and Hygiene; and Programme Coordination and Delivery Support.

In this respect, it gives me great pleasure to present the phase three of Water Sector Development Programme to all water sector stakeholders. I also take this opportunity to urge the people of Tanzania, Development Partners and all Water Sector Stakeholders to continue supporting the Water Sector which is crucial in sustaining and driving the socio economy of our country. Therefore, it is necessary that all stakeholders in our different capacities support the initiatives and interventions outlined in WSDP III.

I thank you all in advance for your cordial cooperation and continued participation in this endeavor.

Hon. Jumaa Hamidu Aweso (MP),
MINISTER FOR WATER

ABBREVIATIONS AND ACRONYM

BCD	Behaviour Centered Design
BCM	Billion Cubic Meter
BWB	Basin Water Board
CBWSOs	Community Based Water Supply Organisations
CLTS	Community-Led Total Sanitation
CSO	Civil Society Organisation
CWC	Catchment Water Committee
CWS	Community Wide Sanitation
DAWASA	Dar es Salaam Water Supply and Sewerage Authority
DEWATS	Decentralized Wastewater Treatment Systems
DPs	Development Partners
DWR	Directorate of Water Resources
EDCF	Economic Development Corporation Fund
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EWURA	Energy and Water Utilities Regulatory Authority
FYDP	Five Years Development Plan
GIS	Geographical Information System
GIZ	German Development Cooperation Agency
GoT	Government of Tanzania
HQ	Head Quarter
HCF	Health Care Facility
IAs	Implementing Agencies
ICT	Information Communication and Technology
IDB	Internal Drainage Basin
IWRM	Integrated Water Resources Management
IWRMD	Integrated Water Resources Management and Development
IWRMDP	Integrated Water Resources Management and Development Plan
JSM	Joint Supervision Mission
JWSR	Joint Water Sector Review
KASHWASA	Kahama Shinyanga Water Supply and Sanitation Authority
LGAs	Local Government Authorities
MCM	Million Cubic Meter
MHH	Menstrual Health and Hygiene
M&E	Monitoring and Evaluation
MIS	Management Information System
MoEST	Ministry of Education Science and Technology
MoH	Ministry of Health
MoW	Ministry of Water
MTEF	Medium Term Expenditure Framework
NAWAPO	National Water Policy
NBDSS	Nile Basin Decision Support System

NGOs	Non Governmental Organisations
NRW	Non-Revenue Water
NSC	National Sanitation Campaign
NSMIS	National Sanitation Management Information System
NWF	National Water Fund
O&M	Operation and Maintenance
ODSS	Operational Decision Support System
PAF	Performance Assessment Framework
PDO	Programme Development Objective
PHA	Public Health Act
PO-RALG	President's Office – Regional Administration and Local Government
RMF	Resettlement Management Framework
PPP	Public Private Partnership
PSP	Private Sector Participation
RUWASA	Rural Water Supply and Sanitation Agency
SADCAS	Southern African Development Community Accreditation Services
SBCC	Socio Behaviour Change Communication
SCWC	Sub Catchment Water Committee
SDGs	Sustainable Development Goals
SES	Social and Environmental Safeguard
TDV	Tanzania Development Vision
TSF	Tailing Storage Facility
TWGs	Technical Working Groups
WASH	Water, Sanitation and Hygiene
WI	Water Institute
WPM	Water Point Mapping
WQM	Water Quality Management
WRIS	Water Resource Information System
WRM	Water Resources Management
WRMD	Water Resources Management and Development
WSDP	Water Sector Development Programme
WSSAs	Water Supply and Sanitation Authorities
WUAs	Water User Associations
USD	United State Dollar
ZAMCOM	Zambezi Basin Initiative

TABLE OF CONTENTS

LIST OF TABLES

EXECUTIVE SUMMARY

Background

The Government through the Ministry of Water implements interventions in the Water Sector within the Water Sector Development Programme (WSDP) which spans for the period of 2006–2025. The programme is implemented in three phases and follows a Sector Wide Approach to Planning (SWAP) with an intention to eliminate overlaps and duplication of efforts in water resources management and development, and the provision of water supply and sanitation services.

The WSDP I started in July 2009 and ended in June 2016. The total commitment was 1,364 million USD and as of June 2016, a total of 1,230 million USD was disbursed. The WSDP II started in July 2016 and ended in June 2022 with a total commitment of 3.2 billion USD. As of December 2021, the WSDP II disbursement was 37% of the overall commitment.

The phase three of the Water Sector Development Programme is the last phase with total financial requirements amounting to 6.46 billion USD starting from July 2022 and expected to end in June 2026. This phase aims to contribute in achieving the Tanzania Development Vision (TDV) 2025, Five Year Development Plan phase three (FYDP III) 2021/22 – 2025/26, *Chama cha Mapinduzi (CCM)* Election Manifesto of 2020-2025, Africa Agenda 2063 and Sustainable Development Goals (SDGs) 2030.

WSDP II Key Achievements

The key achievements of WSDP II as of December 2021 are as follows:

(i) Publication of the first Hydrological Yearbook since 1980 containing data from 2010 to 2019 and the first Water Resources Atlas;

(ii) Issuance of 7,623 water use permits (ground and surface water) across all basins compared to the target of 6,000;

(iii) Seven out of nine Integrated Water Resources Management Development Plans (IWRMDPs) for Lake Tanganyika, Lake Nyasa, Lake Rukwa, Internal Drainage, Wami-Ruvu, Ruvuma and Southern Coast and Rufiji basins were developed and implemented including production and dissemination of simplified Swahili versions of the IWRMDPs for Lake Rukwa, Internal Drainage and Rufiji Basins; development of Catchment Conservation Plans and execution of proposed development projects;

(iv) Water quality compliance level in water supply systems improved from 81% in 2016 to 94% in 2021 for Water Supply and Sanitation

Authorities (WSSAs) and from 75% in 2016 to 84% in 2021 for rural areas;

(v) A total of seven (7) existing water laboratories were accredited by SADCAS;

(vi) The number of functional rural water points increased from 32,846 to 114,354 water points serving 28,174,250 people and achieved a 72.3% of rural population access to water services;

(vii) The Regional WSSAs expanded the water networks by 5,820 km with new household connections of 239,501 against the target of 200,000; increased people living in water supply network areas from 72% to 86%; and reduced NRW from 44% to 36.6%; and

(viii) On average, access rates to improved latrines increased from 42% in 2017 to 66% in 2021 and installed handwashing facilities at the household level increased from 14% in 2017 to 40% in 2021.

WSDP II Key Challenges

The implementation of WSDP II faced a number of challenges including:

(i) The declines in water resources endowment resulted from rapid catchment degradation, urbanization, increased industrial growth, uncontrolled migration of livestock to catchment areas, mining sector expansion as well as climate change effects;

(ii) Sector Coordination challenges due to multitude of earmarked projects with different implementation requirements and reporting arrangements. In addition, most of the earmarked projects had different eligibility criteria and terms attached to financing agreements which led to difficulties in programme coordination;

(iii) The WSDP II did not adequately address the expansion of safely managed sanitation services to urban populations in off-grid areas. This is due to the fact that investments in urban sanitation under WSDP II largely focused on expanding sewer lines;

(iv) Low enforcement of the environmental and social safeguard requirements in water and sanitation projects; and

(v) Limited capacities of both water sector and the private sector to identify, prepare, design, construct and supervise specific Public Private Partnership (PPP) projects.

WSDP II Lessons Learnt and Way forward

In the course of implementing WSDP II, several lessons were learnt and were considered in the preparation of WSDP III. These include:-

(i) The necessity to increase financing of water resources management and development to address water security and catchment degradation;
(ii) Importance of having a national IWRMD plan to assist policy formulation and cross sector informed planning;
(iii) Necessity to revisit dialogue mechanism and financing of the sector coordination and M&E;
(iv) Clustering of individual village schemes into multi-village schemes to improve rural water system service delivery and sustainability;
(v) The innovative funding mechanisms such as UKAID's under Payment by Results (PbR) and the World Bank's under Programme for Results (PforR) helped address the sustainability challenges of rural water projects hence need to be expanded during WSDP III;
(vi) Water Quality Management needs to be uplifted to component level to enhance respective interventions in WSDP III;
(vii) WSDP III should focus on promoting access of WSSAs to commercial financing and improving their efficiency to be autonomous and financially self-sustaining;
(viii) Preparation of Water Supply Master Plans at Regional and Country level is a necessity;
(ix) Need to strengthen the enforcement of environmental and social safeguard requirements in water and sanitation projects; and
(x) Undertake research, lesson sharing, training and technical support in the use of PPPs to strengthen private sector involvement in the water sector.

Process of Developing WSDP III

The WSDP III was developed in a participatory approach through collection and analysis of inputs from the Ministry's internal and external stakeholders namely: MoW; Water and Sanitation Authorities; Basin Water Boards; Executive Agencies under the Ministry and Line Ministries (Health, Education and PO-RALG); NGOs and CSOs; and Development Partners. The development of WSDP III considered experiences, lessons, stakeholders' interests and recommendations from the WSDP II Final Evaluation Report (2021).

WSDP III Objectives

The overall Programme Development Objective (PDO) is strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services. The specific objectives for the WSDP III are:-

1. Ensure the nation's water resources are sustainably managed and developed;
2. Universal access to adequate, clean and safe water improved;
3. Universal access to adequate sanitation and hygiene services improved;
4. Planning, coordination, monitoring and evaluation enhanced; and
5. Institutional strengthening and working environment improved.

WSDP III Programme Components

The programme entails five interlinked components with a total of 41 intervention areas. The components and their areas of intervention are as follows:

Component 1: Water Resources Management and Development

The objective of the component is to ensure the nation's water resources are sustainably managed and developed. The component is further divided into two subcomponents of Water Resources Management and Water Resources Development. The key intervention areas for Water Resources Management subcomponent are monitoring and assessment; water resources planning; water allocation; protection and conservation; water use and demand management; dam safety management; flood, drought, storm water and related disaster management; trans-boundary water resources; and climate change in relation to water resources, water supply and sanitation. The Water Resources Development subcomponent interventions comprise of inter and intra-basin water transfers and water sources development.

Component 2: Water Quality Management

This is a new component uplifted to comprehensively address water quality issues and aims at improving water and wastewater quality management. It is divided into two subcomponents of Water Quality Monitoring and Assessment; and Water Quality Technical Support and Development. The intervention areas for Water Quality Monitoring and Assessment subcomponent are ambient water quality assessment and monitoring; drinking water quality assessment and monitoring; and wastewater quality assessment and monitoring. The Water Quality

Technical Support and Development subcomponent involves management support and water quality research and development interventions.

Component 3: Water Supply

The water supply component objective is to improve universal access to adequate clean and safe water services to the population living in both rural and urban areas. The component is categorized into two subcomponents of Rural Water Supply and Urban Water Supply. The areas of intervention for the two subcomponents fall under water supply infrastructure, service delivery, demand management and regulation for water supply services.

Component 4: Sanitation and Hygiene

The component involves implementation of sanitation and hygiene in the country and aims to improve access to sanitation and hygiene services. It further comprises four subcomponents of Sewered Sanitation; Non Sewered Sanitation; WASH in Institutions and Public areas; and Social Behaviour Change Communication Campaign and Hygiene Promotion. The intervention areas for the sewered sanitation and non-sewered sanitation subcomponents are based on infrastructure, service delivery and regulation of sanitation services. The WASH in Institutions and Public Areas subcomponent comprises of WASH in health care facilities; schools; public places; and in transport hubs. The social behaviour change communication campaign and hygiene promotion subcomponent includes social behaviour change and communication campaign; baby WASH; and menstrual health and hygiene management.

Component 5: Programme Coordination and Delivery Support

The component is designed to provide support to other components to deliver expected outputs and outcomes. It is divided into four subcomponents of Policy, Planning and Fiduciary Management; Coordination, Monitoring and Evaluation; Institutional Strengthening and Capacity Building; and Crosscutting Issues. The areas of intervention for the components are policy and legal framework; planning and budgeting; fiduciary management; coordination, monitoring and evaluation; institutional strengthening and capacity building; environmental and social safeguards; gender mainstreaming; HIV/AIDS, non-communicable and pandemic diseases; governance and corruption as well as private sector engagement.

Financial Requirements

The WSDP III shall depend on Government, Development Partners, Private Sector and other sources such as NGOs to mobilize finances for implementation of the programme. The financing modalities are Government Funding; Basket Funding; Earmarked Funding; Innovative Financing; Loans to BWBs and WSSAs and National Water Fund; the Private Sector and PPPs.

The overall investment costs of WSDP III are estimated at **6.46 billion USD**. **Component 1**: Water Resources Management and Development is estimated at **2.10 billion USD** and accounts for **32.5%** of overall programme cost. The cost of **Component 2**: Water Quality Management is estimated at **0.04 billion USD** (**0.7%** of overall programme cost). **Component 3:** Water Supply is estimated to cost **2.60 USD billion** equivalent to **40.2%** of overall programme cost (rural water supply is **1.11 billion USD** and urban water supply is **1.49 billion USD**). **Component 4:** Sanitation and Hygiene is estimated at **1.23 billion USD** (**19%** of programme cost). Furthermore, the cost of **Component 5:** Programme Coordination and Delivery Support is estimated at **0**.**49 billion USD** (**7.6%** of programme cost).

Structure of the WSDP III Document

The WSDP III document has seven chapters which include: Introduction in Chapter 1; Situation Analysis and Synopsis of Implementation in Chapter 2; Programme Components in Chapter 3; Programme Financing in Chapter 4; Institutional Arrangement in Chapter 5; Programme Risks and Mitigation Measures in Chapter 6 and Monitoring and Evaluation in Chapter 7.

CHAPTER ONE

1.0. INTRODUCTION

1.1. Background

Water is one of the fundamental resources in social economic development as it touches all aspects of human life. Availability of adequate clean, safe and affordable water and sanitation services in a country has impact on the standard of living of people as well as enhancing productivity for economic growth. Despite its importance to quality of life and development, water in Tanzania is a finite and vulnerable resource being unevenly distributed in space, time, quantity and quality across the country. The Government identifies water as an essential resource in achieving Tanzania Development Vision (TDV) 2025, Five Year Development Plan Phase Three (FYDP III) 2021/22 – 2025/26, *Chama cha Mapinduzi (CCM)* Election Manifesto of 2020-2025 and Sustainable Development Goals (SDGs) 2030.

Consistent with the National and International Planning Frameworks, all interventions in the Water Sector are implemented within the Water Sector Development Programme (WSDP) which spans for the period of 2006 – 2025. The policy and legal framework for which the programme is implemented involves National Water Policy (NAWAPO) of 2002; Water Resources Management Act No. 11, 2009 in the management of water resources; and Water Supply and Sanitation Act No. 5, 2019 in provision of water supply and sanitation services. The programme is implemented through a Sector Wide Approach to Planning (SWAP) with an intention to eliminate overlaps and duplication of efforts in water resources management and development, and the provision of water supply and sanitation services.

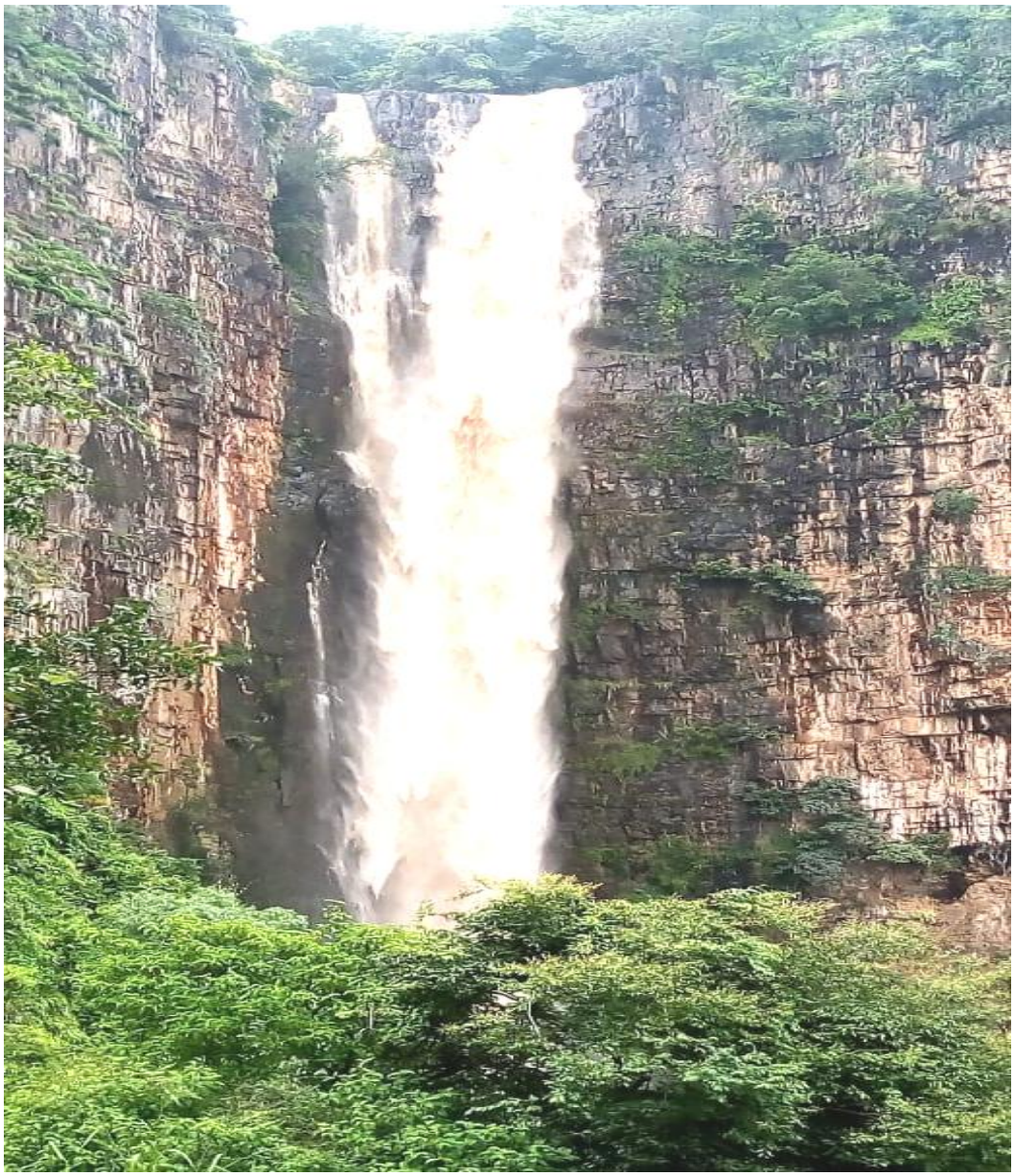
The Water Sector Development Programme Phase I (WSDP I) was initially planned to start in July 2007 and end in June 2012. However, Phase I was rescheduled and started in July 2009 and ended in June 2016. At the start of the phase, the Government of Tanzania and Development Partners committed a total of 951 million USD, but during implementation, more commitments were received increasing the total WSDP I funding to 1,364 million USD; an increase equivalent to 43% of the original commitments. Between July 2009 and June 2016, a total of

1,230 million USD equivalent to 90% of the revised commitments were disbursed.

Phase Two of WSDP II started in July 2016 and was expected to end in June 2021. Financial requirements indicated that during the phase two planning, the programme had an estimated total cost of 3.3 billion USD with total commitments of 3.2 billion USD. The overall WSDP II fund disbursement as of December 2021 for all the components was 37% of the overall commitments.

The Water Sector Development Programme Phase Three (WSDP III) is the last phase of the programme planned for July 2022 to June 2026 with estimated financial requirements amounting to USD 6.46 billion. The phase aims to contribute at achieving the Tanzania Development Vision (TDV) 2025, Five Year Development Plan Phase Three (FYDP III) 2021/22 – 2025/26, Africa Agenda 2063 and Sustainable Development Goals (SDGs) 2030.

1.2. Sector Overview



The country's water sector status is described by taking into consideration the existing situation of water resources management; water quality management; rural and urban water supply and sanitation services; and institutional capacity of the sector. According to the National Atlas for Water Resources (2019 Version), Tanzania is approximated to have water resources fit for human consumption amounting to an annual average of 126 BCM whereby 105 BCM are available as surface water and 21 BCM available as ground water. Considering the population of Tanzania projection of year 2019, the amount of water available per person per year

is approximately 2,250 cubic meters. The amount is above the average of 1,700 cubic meters which is the minimum internationally recommended amount per person per year below which the country is considered to be water stressed.

The country's annual water requirement for different uses such as domestic, irrigation, industries and environment is approximately 47 BCM which is 37.3% of annual renewable water resources. This requirement is expected to increase to approximately 80 BCM per year by 2035[1]. This indicates that the country has enough water resources for socio-economic development. However, due to increased catchment degradation and water requirements, it is important to strengthen management and development of water resources to avoid water stress in the future.

Water quality in different water sources in Tanzania varies from one area to the other. The variation is caused by the nature of rocks, geography of the particular area, climatic conditions and human activities. Also, presence of high level of Nitrogen and Phosphorous in lakes and turbidity in rivers resulting from human activities is among the challenges facing surface water sources. In addition, high level of Salty, Nitrate, Flouride, Iron and Manganese are among the challenges for groundwater quality in some parts of the country. Similarly, presence of high Fluoride concentration in the Rift Valley zone including; Arusha, Kilimanjaro, Manyara, Singida and Shinyanga Regions; and Salt in Coastal areas of Dar es Salaam, Mtwara, Lindi and Tanga Regions; and Central zone in Dodoma and Singida Regions remain a challenge.

Despite the challenges registered in some parts of the country, water from various sources continues to be useful after being treated for designated use and the drinking water supplied to the society has satisfactory quality. In complimenting the water quality management efforts, the Government in collaboration with Development Partners and other Stakeholders has been installing modern treatment technologies such as reverse osmosis plants installed in Gairo and Arusha for desalination and de-fluoridation, respectively. Generally, the quality of water supply in the country for urban areas improved from 81% in 2016 to 94% in 2021 and from 75% in 2016 to 84% in 2021 for rural areas.

[1] Tanzania Water Resources Atlas, 2019

The Final Evaluation Report of WSDP II (2021) observed improvement in Water Resources Management and Development including establishment of nine functional BWBs; accreditation of seven water quality laboratories; improved water supply service level in rural and urban areas to 72.3% and 86% respectively; improved sanitation of households connected to convention public sewer systems in regional centres to 13% and households in rural areas with improved sanitation facilities to 36%.

1.3. Policy and Legal Frameworks

This section maps the international and national policy and legal environment for the programme and specific objectives in Water Resources Management and Development; Water Quality Management; Rural Water Supply; Urban Water Supply; and Sanitation and Hygiene. It is further elaborated below:

1.3.1. International and Regional Commitments

In 2015, United Nations agreed to 17 Sustainable Development Goals (SDGs) for a safer, cleaner and more prosperous world by 2030. Goal number 6 states that there should be universal and equitable access to safe and affordable drinking water and sanitation and hygiene for all. It further emphasizes that clean and accessible water and sanitation for all is an essential part of the world we want to live.

Africa Agenda 2063 (Agenda 2063); It is the blueprint and master plan for transforming Africa into the global powerhouse of the future. It is the strategic framework for delivering Africa's goal for inclusive and sustainable development and is a concrete manifestation of the Pan African drive for unity; self-determination, freedom, progress and collective prosperity pursued under Pan Africanism and African Renaissance. Aspiration 1 of the Agenda is about a prosperous Africa based on inclusive growth and sustainable development. Goal seven of the Agenda 2063 is about environmental sustainability and climate resilient economies and communities. One of the priority areas is water security, others being bio-diversity, conservation and sustainable natural resource management and climate resilience and natural disaster preparedness. The shared vision is for an Africa with equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and environment.

Other conventions, commitments and declarations include:

i) Continental Africa Water Investment Programme (AIP) designed to narrow Africa's water investment gap;

ii) Ramsar Convention; International Convention on the Protection and Use of Trans boundary Watercourses;

iii) Revised Protocol on Shared Watercourses in the Southern African Development Community;

iv) Protocol for the Sustainable Development of Lake Victoria Basin;

v) Memorandum of Understanding between the Government of the Republic of Kenya and the Government of the United Republic of Tanzania for the Joint Transboundary Management of Lake Chala and Jipe; and Umba River ecosystems;

vi) Memorandum of Understanding between Ministry of Water and International Finance Cooperation (IFC) for 2030 Water Resources Group Partnership in Tanzania;

vii) General Co-operation Agreement between the Government of the United Republic of Tanzania and Government of the Republic of Malawi for Development of Comprehensive Co-operation and Friendship for the Mutual Benefit of their People, on the Basis of African Unity and Solidarity and the Principles of Sovereign Equality and Territorial Integrity, Peaceful Settlement of Disputes and Non-interference in Domestic Affairs of Each Other;

viii) Memorandum of Understanding between the Government of the Republic of Kenya and the Government of the United Republic of Tanzania for Joint Water Resources Management of the Transboundary Mara River Basin;

ix) Constitutive Act of the African Union;

x) Consolidated Text of the Treaty of the Southern African Development Community;

xi) The Sharm El-Sheikh Commitments;

xii) Agreement on the Nile River Basin Cooperative Framework;

xiii) Bamaco Convention on the Ban of the Import to Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa;

xiv) *eThekwini Declaration*; and

xv) *N'gor Declaration*.

1.3.2. National Planning Frameworks

The Tanzania Development Vision 2025 (TDV 2025) is the main planning framework providing direction and a philosophy for long-term development. By 2025, Tanzania wants to achieve a high-quality livelihood for its citizens, peace, stability and unity, good governance, a well-educated society, and a competitive economy capable of producing sustainable growth and shared benefits. The vision identifies water as one of the priority sectors contributing to a higher-quality livelihood for all Tanzanians.

The National Five-Year Development Plan Phase Three (FYDP) III 2021/22 – 2025/26 considers water as one of the vital natural resource in all aspects of human life from domestic, agricultural and industrial development to cultural and religious values embedded in societies. The plan considers availability of adequate, clean, safe and affordable water and sanitation services as having an impact on improving the standard of living of people as well as contributing to social economic growth.

1.3.3. Water Sector Policy and Legal Frameworks

The National Water Policy (NAWAPO) of 2002 had an objective to develop a framework for beneficiary participation in planning, construction, operation, maintenance, management of water supply and sanitation projects; and a framework for sustainable development and management of water resources. Water sector legislation include all instruments aimed at optimizing use of water resources, water supply, water quality and sanitations services. The Water Resources Management Act, 2009 and the Water Supply and Sanitation Act, 2019 are the current core legislations for the water sector. The Water Supply and Sanitation Act provides framework for sustainable management, adequate operation and transparent regulation of water supply and sanitation services. Meanwhile, the Water Resources Management Act provides institutional and legal framework for sustainable management and development of water resources and opportunities for participation of stakeholders in the implementation of NAWAPO.

The Energy and Water Utilities Regulatory Authority Act, 2001 established EWURA responsible for technical and economic regulation of water supply and sanitation services in urban areas. The Act provides the

mechanism for promoting economic efficiency, protecting the interests of consumers, and promoting the availability of water supply and sanitation services to all including low-income consumers. Other water sector related legislations include the Environmental Management Act No. 20 of 2004; and the Public Health Act No. 01 of 2009. The water sector legal framework balances economic, environment, social and cultural demands, and establishes norms and standards for the optimal regulation and sustainable management of water resources.

1.4. Objectives of WSDP III

The programme is designed as a tool for implementing NAWAPO with a Programme Development Objective (PDO) of strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services. The specific objectives for WSDP III are: -

i. Ensure the nation's water resources are sustainably managed and developed;
ii. Universal access to adequate, clean and safe water improved;
iii. Universal access to adequate sanitation and hygiene services improved;
iv. Planning, coordination, monitoring and evaluation enhanced; and
v. Institutional strengthening and working environment improved.

1.5. Scope of WSDP III

Building from WSDP II components, the enhancements made to WSDP III components include mainstreaming the aspect of water resources development; uplifting of water quality management as a component; synchronization of water supply issues; and streamlining the sanitation and hygiene component. Therefore, WSDP III is structured into five components of Water Resources Management and Development; Water Quality Management; Water Supply; Sanitation and Hygiene; and Programme Coordination and Delivery Support.

1.6. Process of Developing WSDP III

The WSDP III was developed under a participatory approach through collection and analysis of inputs from the Ministry's internal and external stakeholders, namely: MoW staff; Management; Water Supply and Sanitation Authorities; Basin Water Boards; Executive Agencies under the Ministry; Line Ministries (Health, Education and PO-RALG) and Development Partners. At the initial stage of developing the programme, an internal and external evaluation was conducted to assess the

implementation of WSDP II and its effectiveness in attaining intended objectives and targets. The findings, lessons learnt and recommendations from the stakeholders and evaluations were the basis for the development of WSDP III.

CHAPTER TWO

2.0. SITUATIONAL ANALYSIS AND SYNOPSIS OF IMPLEMENTATION OF WSDP II

This chapter highlights the status of the water sector in Tanzania taking into account the synopsis of performance of the WSDP II. It presents the status building on the assessment of WSDP II implementation as well as insights on the overall performance.

2.1. Water Resources and Water Quality Management

2.1.1. Water Resources Management

Water resources in the country include rivers, lakes, wetlands, springs, reservoirs, groundwater aquifers, and other water bodies shared with neighbouring countries. The annual renewable surface water and groundwater resource for the Tanzanian mainland is estimated at 126 BCM of which 105 BCM is surface runoff and 21 BCM groundwater recharge. The average Water Per Capita is 2,250 m^3/cap/year which is above the globally agreed Water Stress Indicator of 1,700 m^3/cap/year[2].

Under WSDP II, Water Resources Management aimed to ensure availability of water for socio-economic development and environmental sustainability. The Final Evaluation Report of WSDP II (2021) revealed the following:-

a) Institutional Strengthening and Improving the Operational Capacity of Basin-Level Water Boards

In strengthening water resource institutions for water management, eight (8) BWBs out of nine (9) had headquarter offices constructed and 4 catchment offices were constructed; the Water Resources Centre of Excellency was established and operationalized; 98 staff were recruited making a total of 390 staff available; and Water Resources Database (Nile Basin Decision Support System (NBDSS) and AQUARIUS) were installed in all 9 BWBs. In addition, the Communication Strategy was prepared and implemented in all basins as well as enhancing the Performance Assessment Framework (PAF) which is used to assess the performance of BWBs.

[2]Tanzania Water Resources Atlas, 2019 by Ministry of Water

b) Establishment and Strengthening of Water User Associations (WUAs)

In enhancing water resources management, 44 new WUAs were established making a total of 157 WUAs in BWBs; and four (4) WUA buildings constructed at Kilosa, Mkoji, Kimani and Mto wa Mbu. In addition, 100 motorcycles and 100 bicycles as transport facility and other working gears were provided to WUAs.

c) Water Reservoirs and Dam Safety Management

The final evaluation report of WSDP II (2021) asserts that only Leken-Monduli medium dam was rehabilitated; detailed design for Kidunda, Farkwa, Ndembera and Lower Songwe dams were completed; and compensation done in Kidunda and Farkwa projects to affected communities.

With regard to dam safety management, dam safety regulations and guidelines were prepared and implemented. In enforcing dam safety regulation and guidelines, four (4) Tailing Storage Facility (TSF) dams in mining areas were registered; 28 approved professional persons authorized to deal with all aspects of dam safety were registered; and 11 construction permits for 10 TSF and 1 water dam were issued. In addition, a Strategic Action Plan to construct 225 charco dams in arid areas between year 2021 and 2023 was prepared[3].

[3] *Mpango Mkakati kwa ajili ya Ujenzi wa Malambo (Charco Dams) katika Vijiji Vilivyopo Maeneo Kame ambayo yapo Pembezoni mwa Barabara Kuu kwa ajili ya kutatua Changamoto ya Maji 2021/2022 – 2023/2024*

d) Development and Implementation of Integrated Water Resources Management and Development Plans (IWRMDPs)

Seven (7) IWRMDPs were developed and implemented for basins of Lake Tanganyika, Lake Nyasa, Lake Rukwa, Internal Drainage, Rufiji, Wami-Ruvu, and Ruvuma and Southern Coast. Simplified Swahili versions of the IWRMDPs for the basins of Lake Rukwa, Internal Drainage, and Rufiji were produced and disseminated to stakeholders. One flagship achievement of the Rufiji Basin IWRMDP is the ongoing construction of the Julius Nyerere Hydroelectric Power Plant (JNHPP).

e) Improving Systems for Water Resources Monitoring and Allocation

The Ministry published the first Water Resources Atlas (2019) and Hydrological Year Book for the period of 2010-2019 with rivers, lakes and dam's data. The published Hydrological Year Book was a milestone for data quality improvement as it was preceded by a robust data quality check and validation. In monitoring water resources, 18 boreholes were drilled making a total of 95 groundwater stations available for monitoring; 89 stations for rivers and 15 weather/rainfall stations were constructed/rehabilitated making a total number of 287 hydrometric stations and 340 weather/rainfall stations operational in all BWBs. In ensuring efficient water allocation, 7,623 ground and surface water use permits were approved making a total of 11,303 approved water permits in all basins.

f) Enhancing Transboundary Water Resources Management

Tanzania has 14 transboundary water bodies that require cooperation agreements among the riparian countries for the water to be equally beneficial to the shared countries. During WSDP II, IWRMD plan for Lake Nyasa Basin was mainstreamed in the Zambezi Watercourse Commission (ZAMCOM) and Songwe River Basin Commission; joint management mechanisms for each shared water body to deal with IWRM including promotion of joint inter-state catchment management and protection were established; and Joint Songwe River Basin Commission was established with its secretariat fully operational. In addition, the Government established management mechanisms in Ruvuma, Mara, Kagera, and Lake Chala-Jipe-Umba ecosystems. The Ministry completed the Nile River flow forecasting for flood and drought in 2020 and implemented the

Biodiversity Conservation and Utilization of Ecosystem Service of Transboundary Significance in the Minziro Wetland in Kagera.

g) Water Resources Conservation, Protection and Pollution Control

The government has a role of ensuring existing water resources are maintained and conserved to meet current and future needs through identifying, demarcating water sources and eventually publishing them in the Government Gazette for legal protection. The Final Evaluation Report of WSDPII (2021) revealed that 1,231 water sources were identified; 52 new water sources were demarcated making a total of 148 water sources demarcated; and 18 water sources gazetted with the aim of conserving and protecting them. In addition, the Basin Water Boards carried out pollution control to water sources by issuing 163 discharge permits to industries, mines and water treatment plants.

2.1.2. Water Quality Management

Water quality management involves assessment and monitoring the quality of water in the sources and within water supply systems with the purpose of safeguarding public health and conserving ecosystem. Under WSDP II, the objectives of water quality management were to safeguard and enhance public health; conserve ecosystems to improve ambient water conditions as the basis for informing management throughout the decision-making process; to build capacity to water quality laboratories

and to enhance institutional collaboration for sustainability of water quality management. The performance is as follows: -

(a) Water Quality Management for Compliance

On average water quality compliance level in water supply systems improved from 81% in 2016 to 94% in 2021 for WSSAs and from 75% in 2016 to 84% in 2021 for rural areas. This was attributed by provision of technical support on water treatment; application of Water Safety Plan approach; and training of water utilities staff. On the other hand, implementation of Defluoridation Strategy involved Fluoride survey in 2,594 water sources and distribution of bone char defluoridation technology (1,695 Household Defluoridation Units (HDU) and construction of 15 Community Defluoridation Plants (CDP)) which benefits 14,975 people and contributed to compliance percentage increase especially in rural areas. Non-compliance mainly originated from high levels of chemical and bacteriological parameters and main concerns in rural water supply is high levels of Hardness, Salinity, Chloride, Acidity, Nitrate, Manganese, Fluoride and E-coli.

Assessment of ambient water quality in the country indicated variations of water quality from one place to the other. The variations originate from various factors including state of natural rocks, human activities, geographical factors, stream flow, possibility of seawater intrusion, over extraction of ground water sources and less recharge of aquifers and climate change. For surface water, the contaminants which are problematic include high levels of Nitrogen, Phosphorous and turbidity while in groundwater, the main problems include high levels of salinity, acidity, Nitrate, Fluoride, Iron, Manganese and Chloride. Apart from the above deviations, monitoring results showed a quality status of water sources supporting the ecosystem.

In WSDP II, assessment and monitoring of wastewater quality aimed at pollution control and protection of water source. In general, the percentage of compliance of effluent from the municipal sewerage system and industries increased from 45% to 60% for the period of 2015-2020. Non-compliance was contributed by the presence of high organic matter in effluents. Also, under WSDP II, the Government reviewed the General Tolerance Limits for Municipal and Industrial Wastewater of 2005 to enhance management of wastewater quality. However, wastewater treatment and disposal management in urban areas was inadequately

implemented hence wastewater discharges led to contamination of water sources and the environment.

(b) Management Support and Capacity Development

Management support and capacity development was provided to Water Quality Laboratories and Ngurdoto Research Station to enhance water quality management in the country. During WSDP II, Water Quality Laboratories increased from 16 to 17 after establishment of new laboratory in Manyara Region. Laboratories were strengthened through construction of seven (7) new laboratory buildings and rehabilitation of (1) laboratory building whereby all constructed and rehabilitated buildings were furnished and equipped to improve working environment, quality of laboratory services and widen the scope of water quality testing. Through this intervention, seven (7) water quality laboratories were accredited, which is slightly above the target of accrediting five (5) laboratories. This achievement increased the number of accredited Water Quality Laboratories from one (1) in 2015 to seven (7) in 2021.

2.2. Rural Water Supply and Sanitation

The Rural Water Supply and Sanitation (RWSS) component aimed to improve the provision of clean and safe water supply services in rural areas. The planned activities intended to achieve a target of 80% of rural population with clean and safe water by 2019 with several specific interventions including: 1) construction of 38,759 new water points in rural areas; 2) rehabilitation of existing 19,889 non-functioning water points to full functionality; 3) expansion of the infrastructure for 17,686 water points to reach more households; and 4) recruitment and deployment of 386 engineers and 3,338 technicians up to the ward level.

a) Access to Water Supply in Rural

The number of functional rural water points increased from 32,846 to 114,354 water points serving 28,174,250 people and achieved a 72.3% of rural population access to water services.

b) Sustainability and Management of Rural Water

The sector reforms in 2019 led to establishment of Rural Water Supply and Sanitation Agency (RUWASA) under Water Supply and Sanitation Act, 2019 responsible for development and sustainable management of rural water supply and sanitation projects. The act also established Community Based Water Supply Organisation(s) with a mandate of

managing operations and maintaining public taps and or waterworks and providing adequate and safe supply of water to consumers. WSDP II targeted to strengthen CBWSOs capacity to sustainably manage community water services. The programme achieved use of skilled personnel that by December 2021, the registered number of CBWSOs as per new Act reached 2,002 and had 1,746 staffs (940 technicians and 806 accountants) employed.

2.3. Urban Water Supply and Sanitation

The urban water supply and sanitation services component aimed to provide adequate, clean, safe and affordable water and sanitation services to the population living in urban areas. The overall objective of the Urban Water Supply and Sanitation component of WSDP II was to improve and sustain quality and quantity of water supply and sanitation services for urban population. Key players of the component were the Water Supply and Sanitation Authorities (WSSAs), EWURA and MoW. The water utilities were responsible for planning, design, construction supervision and management of their water supply and sanitation systems during and after project completion.

a) Access to Water Supply in Urban

WSDP II aimed to: 1) increase access of water supply from 80% in December 2013 to 98% by 2019 through adding 2,000,000 new beneficiaries, 200,000 household water connections, reducing non-revenue water from 55% to 25%, construction of 887 km of public sewer line and 10,000 km of household sewers connections for Regional

WSSAs; 2) increasing access from 68% in December 2013 to 95% by 2019 by adding 2,257,200 new beneficiaries with 500,000 Household water connections, reduce non-revenue water from 55% to 25%, construction of 156 km of public sewer line and 15,000 km of household sewer connections for DAWASA; and 3) increasing the access from 53% in 2013 to 65% by 2019 through 1,100,000 new beneficiaries through 110,000 household water connections and reduce non-revenue water from 55% to 25% for District Headquarters and Small Towns.

Final Evaluation Report of WSDP II (2021) revealed significant progress in providing urban population with improved water supply services. The utilities expanded the water networks by 5,820km against the target of 2,111 km with new household connection of 239,501 against the target of 200,000; increased people living in water supply network areas from 72% to 86%; and reduced NRW from 44% to 36.6%. In addition, conventional sewer networks were extended by 143 km against targeted 887 km; and there was construction of non-sewers and deployment of cesspit emptiers for some WSSAs.

b) Regulation and Monitoring

EWURA continued with the primary objective of protecting the long-term interests of customers by approving tariffs and business plans, monitoring quality and reliability of water supply and sanitation services and the performance of the water utilities. Currently, EWURA regulates 94 WSSAs, which provide water supply and sanitation services in Regional Headquarters (25), District Headquarters and Townships (62), and National Project Water Authorities (7). However, 26 District and Small Town WSSAs are supervised by RUWASA while 10 District Town WSSAs are under Regional WSSAs supervision.

2.4. Sanitation and Hygiene

The Sanitation and Hygiene component aimed to increase the number of households with improved latrine and possessing handwashing facilities in rural and urban areas. Under WSDP II, the focus was to scale up the National Sanitation Campaign (NSC) through further financing to increase the proportion of population that use improved sanitation facilities from 2.2 million households to 7.8 million households (75%) nationally by 2019; construction and rehabilitation of latrines in 3,500 primary schools including hand-washing facilities, menstrual facilities, and latrines in 700 secondary schools; rehabilitation of WASH facilities in up to 1,000 health

facilities, and the construction of at least eight WASH facilities in highway bus stops.

Under WSDP II, access rate to improved latrines and installed hand washing facilities at the household level increased from 42% in 2017 to 66% in 2021, and from 14% in 2017 to 40% in 2021 respectively. Also, 3,046 primary schools and 716 secondary schools managed to rehabilitate or built new toilets and 4,322 primary schools managed to formulate WASH clubs. Moreover, total of 1,704 Health Care Facilities (HCFs) had improved WASH infrastructures including water supply, toilets, hand washing points, placenta pits and incinerators. In general, sanitation and hygiene received good support from high-level political leaders who championed the *Nyumba ni Choo* campaign leading to high level awareness necessary for behavioral change.

2.5. Programme Management and Delivery Support

Programme Delivery Support component was designed to provide facilitative services that aimed to ensure the delivery of planned outputs and expected outcomes in the Water Sector. This was to be achieved through implementation of four subcomponents namely Fiduciary Management, Programme Coordination and Performance Monitoring; Capacity Development; as well as Environmental and Social Safeguard.

a) Fiduciary Management

Fiduciary management involved planning and budgeting; procurement management; financial management and resource controls such as auditing. The Final WSDP II Evaluation Report (2021) revealed that the annual budgets, MTEFs, auditing and procurement plans were prepared and implemented pursuant to government guidelines. The Management Information System (MIS) was used to ensure collection, storage and dissemination of information on contracts and expenditures to support financial management and reporting. In the meanwhile, MIS improvement was ongoing with enhancements expected to capture real time information.

b) Programme Coordination and Performance Monitoring

This aimed to facilitate performance monitoring and decision making based on stakeholders engagements and informed findings. The Final Evaluation Report of WSDP II (2021) revealed that operationalization of the Joint Annual Sector Review, Water Sector Working Groups and

Thematic Working Groups were not active and vibrant during implementation of WSDP II as in phase I. Stagnation was attributed by the shift of DPs preference from basket to earmarked projects and a weakening joint review of the sector performance. This contributed to inadequate coordination and communication among stakeholders, difficulties in reporting and tracking of the total programme performance.

In addition, M&E Framework (2014) was used to coordinate sector performance monitoring and produced reports such as Water Sector Status Reports, performance reports, annual WSSAs reports and BWBs PAF Reports. It also involved field visits, studies and reviews; internal technical audits and technical supervision missions. In the efforts to improve sector performance monitoring, the Integrated Water Sector Monitoring & Evaluation System (2021) was developed.

c) Capacity Development

Capacity development comprised enhancements of the MoW, Line Ministries and Executive Agencies under the Water Sector. WSDP II evaluation revealed that the Maji House in Dar es Salaam and Dodoma HQ were under construction. Further, construction and rehabilitation of office buildings for BWBs, Water Institute, Water Laboratories, and WSSAs were ongoing in various regions.

On human resources development, at MoW HQ, 610 staff were trained in certificates, 302 diploma and 128 staff on degrees (53 Masters and 2 PhDs) between 2015/16 and December 2019. In addition, 24 (13 PhD, 7 Masters and 4 Bachelor degree) Water Institute (WI) staff were trained as of December 2021. Also, other operational reports indicate that 1,511 staff attended training on environmental and social safeguards, legislations, regulations and guidelines; 745 staff on MIS; and 80 on Project Management. However, cumulative data on trained staff in all sector interventions could not be accessed because of disaggregated reports.

d) Environmental and Social Safeguard

This was designed to provide a strategic guide for the integration of environmental and social consideration in the planning and implementation of the WSDP II activities. Under WSDP II, technical capacity was provided to all IAs whereby 43 staff from MoW and IAs were appointed as designated Environmental Inspectors. The Environmental and Social Management Framework (ESMF), Resettlement Management Framework (RMF), Guidelines of Grievance Redress Mechanism (GRM) and the Good Environmental and Social Practices (GESP) were developed and disseminated. The Environmental and Social Safeguard Section was established at MoW to oversee compliance to environmental and social safeguard issues in the sector and environmental units were established in DAWASA and RUWASA. Other water sector IAs appointed responsible focal safeguard staffs. Despite the improvements, the sector experienced low pace of ESMP and safeguards compliance during programme implementation.

2.6. Financing and Financial Management

Financing was a key factor in execution and attaining desired objectives of WSDP II. The framework for financing water projects was through Basket and Earmarked funding and main source of financing were the Government, DPs and NGOs. The DPs that contributed to WSDP II were World Bank, African Development Bank (AfDB), European Union (EU), Germany – KfW, Agence Française de Development (French Development Bank) - AFD, Arab Bank for Economic Development (BADEA), Department for International Development (UK Government) - DfID, United Nations Development Program/Global Environmental Facility (UNDP/GEF), World Health Organisation (WHO), OPEC Fund for International Development (OFID), EDCF - KOREA, European Investment Bank (EIB), Water Aid, World Wildlife Fund for Nature (WWF – Tanzania),

Netherlands Development Organisation (SNV), Water Supply and Sanitation Collaborative Council (WSSCC), Catholic Relief Services (CRS), Global Climate Fund (GCF), Germany – GIZ, SAUDIA, The United Nations Children's Fund (UNICEF), the Governments of Belgium and India.

The financial requirement for WSDP II was 3.3 billion USD and the total financial commitments were 3.2 billion USD equivalents to 97% of the total requirements. During implementation of WSDP II, from 2016/17 to 2021/22, the mobilized funds were approximately 37% of the total commitments. In addition, the government established and operationalized the National Water Fund aiming to mobilize funds for implementing water projects and about 338 million USD were disbursed.

Innovative sector financing such as commercial loan financing mechanism known as Investment Financing Facility (IFF) Based on Output Base Aid (OBA) – (IFF – OBA) was introduced to WSSAs. The WSSAs were facilitated by MoW in collaboration with the KfW to acquire loans at slightly lower commercial rates against projected cash flows. The WSSAs used cash flows to guarantee loan repayment to achieve the goal of true utility-based lending which is needed globally to supplement insufficient financing for public utilities.

The result – based financing approach through UKAID's Payment by Results (PbR) and the World Bank's Program for Results (PforR) were other innovative financing mechanisms adopted to address the non-functionality of rural water points by ensuring sufficient incentives for service providers to sustainably maintain infrastructure in the immediate post-construction period. Other sources of funds included direct financing and implementation of water projects through NGOs and Community Based Organisations (CBOs) though the amount contributed in WSDP II was not readily accounted due to lack of data.

Despite the notable financial achievements in the implementation of WSDP II, challenges continued to be observed involving inadequate and delay in funds disbursement and low levels of private sector investment.

2.7. Monitoring and Evaluation

Monitoring and Evaluation Framework was designed for continuous follow-up and provision of systematic, consistent and reliable information on programme progress. It was undertaken in various forms to assess relevance, efficiency, effectiveness and sustainability of programme

inputs, outputs, outcomes and impact levels. M&E was undertaken through established data systems and reports which were intended to operationalize the M&E Framework. The data systems and performance reports used during WSDP II include:

a) Data Systems

Performance Appraisal Framework (PAF) for assessment of Basin Water Boards performance; Maji Information System (MajIs) for assessment of Water Supply and Sanitation Authorities performance; and Rural Service Delivery Management System (RSDMS) intended to track water supply and sanitation services in rural areas. Besides, Management Information System (MIS), Education Management Information System (EMIS) and the National Sanitation Management Information System (NSMIS) were rolled out to all the LGAs to enhance monitoring of financial and sanitation campaigns performance. Other data systems operationalized were Nile Basin Decision Support System (NBDSS) and Hydrological Data Management Software (AQUARIUS).

Based on WSDP II final evaluation report, NBDSS, MajIs, Rural Services Delivery Management System and Sanitation campaign monitoring and evaluation subsystems illustrated comprehensive data and information availability though with some technical and financial constraints. The challenges of M&E were contributed by segregated data systems that do not communicate with each other to enable timely generation and sharing of data and information. In addition, some major interventions had neither key performance indicators nor targets.

b) Performance Reports

WDSP II deployed different reports that focused on tracking the programme progress. These include Water Sectors Status Reports, Annual Sector Performance Reports, Annual Budget Parliamentary Speeches as well as Implementation Supervision Missions (ISMs) Reports. Other reports generated include Mid-term WDSP II Review and WSDP II Final Evaluation Report. The report findings were shared to various stakeholders through the arranged dialogue mechanism.

According to the WSDP II Mid-term review and WSDP II Final Evaluation (2021), the overall sector monitoring and evaluation was not effective and efficient in capturing and making timely availability of relevant data and information from monitoring and evaluation exercises undertaken at departmental/agency and individual project levels. This was attributed by

inadequate unification of sub-monitoring and evaluation systems established at different levels. In view of this, WSDP III shall strive at facilitating development and operationalization of relevant and integrative M&E sub-systems to enable assessments of sector interventions.

CHAPTER THREE

3.0. WSDP III COMPONENTS

3.1. Component I - Water Resources Management and Development

Water Resources Management and Development component aims at affirming and developing the country's water resources in terms of both quantity and quality. The WSDP III ensures the nation's water resources are sustainably managed and developed. Emphasize is on integrated planning, effective and efficient water allocation, and conservation of water resources for healthy ecosystems and sustainable development of water security infrastructures. This component is structured into two subcomponents namely Water Resources Management and Water Resources Development.

The subcomponents are further cascaded down into intervention areas, strategies, targets and line of actions as follows: -

3.1.1. Water Resources Management Subcomponent

Water resources in the country are declining due to various factors including hydrological shifts, catchments degradation and increased water uses for socioeconomic activities and challenges on water resources management. Sustainability of water resources requires interventions to ensure availability of water for socio-economic development and environmental sustainability. The WSDP III focus is on effective implementation of the IWRMD plans. In order to cordially address this objective, a set of nine intervention areas are established.

3.1.1.1. Monitoring and Assessment

Monitoring and Assessment of water resources involves establishing water resources data acquisition network, collection, analysis and archiving systems. This is key for sustainable planning and provision of informed decisions on the sustainable utilization of the water resources. The strategies, targets and line of actions under this intervention are as follows:

Strategy 1: Improve availability of water resources data and information

Target 1: Construct 100 and rehabilitate 214 real time monitoring stations by June 2026. The line of actions include: reviewing existing network design for modernization of some stations to real time monitoring; procuring water monitoring instrument and data relay system; construction/rehabilitation of real time monitoring networks; and test and operationalize data relaying system.

Target 2: 10 centres for real time data processing and storage established by June 2026. The line of actions include: developing data management, analysis, modelling, visualization and forecasting tool; establishing Data Quality Management System (DQMS) and acquire accreditation in International Organization of Standardization (ISO 9001: 2015); developing Water Resource Information System (WRIS); procurement and installation of data processing and storage equipment; building capacity to improve skills in data collection, processing and modelling; conducting water resources assessment; and conducting a nation-wide inventory and update status of available surface and groundwater resources.

Strategy 2: Promote accessibility of data and information to users, stakeholders and decision makers

Target 1: Web based water resources information dissemination system developed and implemented by June 2026. The line of actions include: establishing web-based data and information system; awareness creation to users, stakeholders and decision makers; preparation and uploading Hydrological year books and bulletins; and updating and uploading Water Resources Atlas, Fact Sheets and State of the Water Resources Report.

Target 2: Mobile *Maji App* and Water Resources Information System (WRIS) integrated by June 2026. The line of actions include: data formatting in the WRIS to be input to the *maji app*; customization of the *maji app* to provide water resources data and information; awareness creation on the use of the website and *maji app* to get water resources data and information.

3.1.1.2. Water Resources Planning

Water resource planning is an initiative of implementing IWRMD Plans and applied research and interventions for sustainable water resources management and development. It is an essential part of ensuring proper resource allocation and accurate timing of project implementation. The intervention ensures well-established integrated water resources management planning. The strategies, targets and line of actions under this intervention are as follows:

Strategy 1: Ensure development and implementation of Integrated Water Resources Management and Development Plans

Target 1: All sector plans that are included in the IWRMD Plans implemented in each basin by June 2026. The line of actions include: finalizing preparation of IWRMD Plans for the remaining two basins of Lake Victoria and Pangani; review of the completed plans in line with new development priorities; preparation of National IWRMD Plan which include inter and intra basin water transfers; preparation of criteria for prioritizing water resources projects at different levels; establishment of participatory planning procedures for use at different levels; operationalization of IWRMD Plans; and monitoring of IWRM implementation progress.

Target 2: Inter-sectoral collaboration and coordination of IWRM approach at all levels improved by June 2026. The line of actions include: conducting Basin and National multi-sectoral fora, seminars and workshops; developing BWBs communication strategy; preparation and implementation of

communication plans; developing mechanisms for stakeholders' engagement and contribution to water resources management; conducting awareness campaigns on importance of IWRM planning; capacity development to staff and WRM institutions on integrated planning and management of water resources.

Strategy 2: Ensure applied researches on IWRMD are conducted

Target 1: Three (3) applied researches on water resources conducted by June 2026. The line of actions include: identifying research areas; conducting applied researches in collaboration with other experts and research institutions; dissemination of research findings; and monitoring implementation of research findings.

Target 2: Capacity building to 70 staff for carrying out applied researches provided by June 2026. The line of actions include: identification of training needs; training of staff; procurement and installation of research tools and equipment; attachment of staff to specific research centers as well as establishing and implementing learning exchange programs.

3.1.1.3. Water Allocation

Water allocation involves equitably distribution of the available water resources to various water demands. As population grows and economies expand, competition for water to meet household, municipal, agricultural and industrial needs is continuously increasing. The intervention area ensures availability of effective and efficient water allocation systems and mechanisms. The strategies, targets and line of actions under this intervention are as follows:

Strategy 1: Ensure equitable, effective and sustainable water allocation

Target 1: 2,320 water use permits issued by June 2026. The line of actions include: reviewing and implementation of water allocation criteria, procedures and guidelines for all water basins; development and implementation of water allocation plans; issuance of water use permits; establishment of criteria for water allocation during water scarcity; and conducting regular inspection and register all water abstractions.

Target 2: Water allocation decision support system in all water basins installed by June 2026. The line of actions include: identification of appropriate water allocation decision support systems; procure and install the system; classification of water users and allocation priorities; conducting

workshops and fora to stakeholders for discussing water allocation priorities; conducting trainings to staff; and awareness creation on the water allocation decision support system.

Strategy 2: Ensure controls and accurate estimation of allocated water

Target 1: 45 control structures for bulk water allocation constructed by June 2026. The line of actions include: identification of areas which require bulk water allocation; design of control structures; construction of water control and allocation structures; procurement and installation of control instruments; development and implementation of standards for water sources allocation structures; establishment of water allocation infrastructures; and awareness creation on bulk water allocation to stakeholders.

Target 2: 900 bulk meters procured and installed by June 2026. The line of actions include: preparation of requirement specification; procurement of bulk meters; installation of meters; and repairing and replacement of meters.

3.1.1.4. Protection and Conservation of Water Sources

Water sources degradation and pollution are significantly reducing water availability and usability. Protection and conservation of water sources includes identification of water sources, demarcation and gazettement. Additionally, it involves restoration of degraded land cover. The intervention area ensures sustainable water sources conservation and pollution control. The strategies, targets and line of actions under this intervention are as follows.

Strategy 1: Improve protection and conservation of water sources and recharge areas

Target 1: 200 water sources demarcated and gazetted by June 2026. The line of actions include: development and implementation of programmes for catchment restoration; protection and management; conducting research that promote technologies and mechanism that conserve water sources; monitoring of waste water discharge systems to enforce pollution control legislations; dissemination of laws and regulations; implementing catchment management plans; identifying, demarcation and gazettement of water sources and wetlands; mapping of identified water sources and wetlands; compensation of affected communities; and promoting alternative livelihood for communities living in water sources.

Target 2: 45 ground water recharge areas demarcated and gazetted by June 2026. The line of actions include: developing and implementing programmes for vegetation restoration, protection and management of recharge areas; conducting research that promote technologies and mechanism that conserve recharge areas; preparation and dissemination of guidelines on groundwater and recharge management; identify, demarcate and gazette recharge areas; mapping of identified wellfields and recharge areas; compensation of affected communities; and promoting alternative livelihood for communities living in wellfields and recharge areas.

Target 3: 300 discharge permits issued and 121 pollution hotspot areas controlled by June 2026. The line of actions include: developing regulations and guidelines for water pollution control; enforcement of laws and regulations on pollution control; conducting baseline study to establish pollution load in the country; identification of pollution hotspot areas for pollution control monitoring; promotion of cleaner production technology; conflict resolution; preparation of monitoring programmes for industrial effluents and other point sources; awareness creation on industrial effluents and impact of pollution; provision of discharge permits; and developing and implementation of a protocol for extending the financial provisioning clause to all industries that are deemed "*high-risk*" polluters.

Strategy 2: Promote best practices on water sources and catchment management at all levels

***Target 1*:** One (1) best practice on water sources management implemented by June 2026. The line of actions include: identifying best practices on water sources and catchment management; supporting development and implementation of village land use plans; awareness creation on water resources best land use practices and environmental conservation; establishment of ecosystems health indicators; and promoting adoption of best land use practice, smart agriculture and water sources development.

Target 2: One (1) best practice on wetlands management implemented by June 2026. The line of actions include: identifying best practices on wetlands management; support development and implementation of village land use plans; awareness creation on water resources best land use practices and environmental conservation; establishment of ecosystems health indicators; establishment of wetland protection framework; and promoting adoption of best land use practice, smart agriculture and water sources development.

3.1.1.5. Water Use and Demand Management

Proper management of water use and demand is key for minimizing the pressure on water resources. The intervention area ensures water demand management for water use efficiency. The strategies, targets and lines of actions under this intervention are as follows:

Strategy 1: Promote water use efficient technologies.

***Target 1*:** Water use efficiency improved by 15% for all productive sectors by June 2026. The line of actions include: establishment of baseline data on water use efficiency; facilitation of identification and promote the use of technologies that improve water use efficiency; awareness creation on water use efficient technologies; preparation and operationalization of guidelines and regulations for demand management; development and implementation of efficiency monitoring programmes of water uses across sectors; identifying and promotion affordable water re-use technologies; and development of water demand management at basin level.

Target 2: 9 schools and 3 universities facilitated to develop low-cost efficient water use technologies by June 2026. The line of actions include: facilitating schools and universities competition on research of low-cost efficient water use technologies; facilitating the development of low-cost efficient water use technologies; dissemination of the technologies; awareness creation on the adoption and use of low-cost efficient water use technologies.

Strategy 2: Ensure water use fees and charges are based on economic value of water.

Target 1: Water billing and fee collection efficiency improved to 100% by June 2026. The line of actions include: conducting inventory of all water users; Updating the Basin and prepare National water use register; reviewing water use tariffs; establishment of effective system for billing and fee collection based on value for water; and awareness creation on water use accounting.

Target 2: The economic value of water in the country established by June 2026. The line of actions include: conducting a study to determine the current water availability; conducting study to determine the current projected demand; conducting thorough analysis of water against demand; determine the economic value of water; estimation of the annual contribution of water resources in the country's economy; and awareness creation and dissemination.

Strategy 3: Promote conjunctive use of surface and groundwater.
The target is conjunctive use of surface and ground water implemented in nine (9) areas by June 2026. The line of actions include: identify areas which requires conjunctive use of surface and groundwater; quantification of groundwater and surface water; implement conjunctive use of surface and groundwater in selected areas; promote concept of conjunctive use of surface and groundwater; and promote rain water harvesting at household and institutional level; implement conjunctive use of surface and groundwater in selected areas.

3.1.1.6. Dam Safety Management

The management of dam safety includes proper designing and location of dams, preparation and implementation of dam safety standards and guidelines. The intervention ensures effective and efficient dam safety management systems. The strategy, targets and lines of actions under this intervention are as follows:

Strategy 1: Enhance dam safety management systems
The target is standards and guidelines for dam safety reviewed and implemented by June 2026. The line of actions include: reviewing guidelines for dam safety management; reviewing the existing standards and prepare and operationalize new standards; reviewing the current dam safety regulation; enforcement of dam safety design standards; reviewing criteria for registration of Approved Professional Persons (APPs); reviewing criteria for registration of water dams and tailing storage facilities; establishing and maintaining dam construction permit, dams and APPs register; conducting inventory of existing dams to determine their status; establishment of dam safety monitoring plan; developing and enforcing dam/reservoir operational rules and criteria; awareness creation on rules and regulations for dam safety; performing periodic environmental assessment; and conducting training on dam safety.

3.1.1.7. Trans-Boundary Water Resources

Trans-boundary water resources are shared water resources that cross national boundaries. Tanzania has 14 trans-boundary water resources including Lakes Victoria, Tanganyika, Nyasa, Natron, Chala and Jipe. Others are Kagera River, Mara, Malagarasi, Momba, Mwiruzi, Umba, Ruvuma and Songwe Rivers. Management of these water resources is implemented under the framework of cooperation with countries of Burundi, Rwanda, Congo-DRC, Kenya, Uganda, Malawi, Mozambique and Zambia. Other

countries are Angola, Botswana, Ethiopia, Egypt, Namibia, Sudan, South Sudan, Zimbabwe and Eritrea. Utilization of the transboundary water resources requires bilateral or multilateral agreement with partner states. The intervention ensures effective management, development and equitable utilization of trans- boundary water resources. The strategies, targets and lines of actions under this intervention are as follows:

Strategy 1: Promote optimal use of trans- boundary water resources to meet rapid increasing social, economic and environmental demands

The target is trans-boundary water resources projects implemented in 7 areas by June 2026. The line of actions include: conducting feasibility studies; inventory of trans-boundary water resources investment potential areas; designing of trans-boundary water resources projects; implementation of trans-boundary water resources projects; and capacity building to staff.

Strategy 2: Promote co-operation and collaboration among riparian states

Target 1: National database on trans-boundary water resources established by June 2026. The line of actions include: establishment of data and information exchange protocol; establishing and maintaining national database on trans-boundary water resources; promoting technical collaboration on research, data collection and information dissemination; promotion and participation in the development of transboundary water related infrastructure; creation of public awareness on effective use and conservation of transboundary water resources; improving national capacity for negotiations and management of trans-boundary water resources; promote joint transboundary water quality monitoring; and participation in relevant regional and international organs, commissions, institutions and committees.

Target 2: Water related trans-boundary policies and legal frameworks harmonized by June 2026. The line of actions include: promoting joint studies on harmonization of water related policies and legislations; promoting harmonization of water related policies and legal frameworks; and awareness creation on policies and legislation frameworks.

Strategy 3: Promote governance and management of trans-boundary water resources

Target 1: Share of Tanzania in all trans-boundary water resources quantified by June 2026. The line of actions include: conducting assessment and

quantification of the share of Tanzania in trans-boundary water resources; and promoting joint studies on trans-boundary water resources.

Target 2: Seven (7) arrangements for trans-boundary aquifers (Coastal sedimentary basin-1; Coastal sedimentary basin-3; Karoo-Sandstone aquifer; weathered basement; Tanganyika aquifer; Kilimanjaro aquifer; and Kagera aquifer) management in place by June 2026. The line of actions include: establishing arrangements for management of trans-boundary aquifers; developing instruments for utilizing trans-boundary aquifers; conducting joint study on trans-boundary aquifers; establishment of protection and management strategies for trans-boundary aquifers; and promoting data and information exchange among riparian states.

3.1.1.8. Flood, Drought, Storm Water and Other Related Disaster Management

Floods and droughts are attributed by skewness of rainfall intensities and duration. Other factors include land cover modification that reduces infiltration rate. Disaster caused by these phenomena leads to detrimental effects on human life, loss of properties, damage of infrastructure, food insecurity and other risks. Monitoring of these disasters and providing early warnings is of paramount importance on reduction of risks. The intervention ensures effective and efficient flood, hydrological drought and other water related disaster management systems. The strategy, targets and lines of actions under this intervention are as follows:

Strategy 1: Establish flood and drought early warning and forecasting systems

Target 1: Flood and drought early warning system in place by June 2026. The line of actions include: designing and developing flood forecasting and early warning system; installation and implementation of Operational Decision Support System (ODSS) integrated with Water Resource Information System (WRIS) in all Basins; capacity building to staff on flood and drought early warning systems; preparation of maps for flood prone, landslide and mudflows areas; integrating findings into urban planning and land use; construction of flood and drought early warning and monitoring systems; and promoting coordination among relevant sectors for effective flood and drought management.

Target 2: Hydrological drought monitoring and mitigation plans are prepared and implemented by June 2026.The line of actions include: developing drought monitoring and contingency plans; capacity building to staff on undertaking forecasting of hydrological drought; and awareness creation to water users on hydrological drought, impacts and adaptation measures.

Target 3: Storm water management regulation reviewed and guidelines prepared by June 2026. The line of actions include: reviewing the Water Resources Management (Control and Management of Storm Water) Regulations, 2018; preparation of storm water management guidelines; promotion of rainwater harvesting technologies to reduce storm water runoff; identification, demarcation and mapping of areas that are prone to floods; installation of warning signs along flood prone areas; promotion of alternative economic activities along flood prone areas; participation in the Regional Consultative Committees (RCC) and District Consultative Committees (DCC) to provide information and guidance on hydrological characteristics of catchments to facilitate proper storm water management when planning for urban or township development; and public awareness on storm water management.

3.1.1.9. Climate Change and Variability - in relation to water resources, water quality, water supply and sanitation

Climate change impact is a global concern as revealed at regional and local levels in the country. Increased zero rain days in a year and poor rainfall distribution in the rain season is among the climate change impacts. The limited water resources availability needs to be allocated wisely with risk-

based approach during times of severe drought. The intervention promotes climate change adaptation in relation to water resources, water quality, water supply and sanitation. In addition, the intervention implements the National Climate Change Response Strategy (2021-2026). The strategies, targets and lines of actions under this intervention are as follows:

Strategy 1: Develop risk-based approach to water resource management.

Target 1: Climate risk-based management framework for water use developed and rolled out by June 2026. The line of actions include: developing risk management approach in water uses; developing principles, framework, models and processes of risk-based regulation appropriate to Tanzania's context; conducting a national assessment to identify the current and future climate change risks on water resources; preparing road-map for transition from current approach to a risk-based paradigm; and roll out the risk based management framework.

Target 2: Four (4) climate risks emergency response units established by June 2026. The line of actions include: identification of alternatives and risk areas; establishment of response zones; establishment of response units and modality; capacity building to the response units; and awareness creation on emergency response modality.

Strategy 2: Promote climate change adaptation measures in the water sector

Target 1: Climate change adaptation program developed by June 2026. The line of actions include: developing alternative water storage programs and water harvesting technologies for communities; promoting new water saving techniques in irrigation; promoting smart water adaptation and planning; promoting recycle and reuse facilities in industrial sector and household; and creation of public awareness and cross-sectoral coordination and collaboration on climate change.

Target 2: Climate change adaptation and mitigation mainstreamed in water resources at different levels by June 2026. The line of actions include: establishment of climate sensitive water use levels; classification of risk levels; setting priorities for risk response on water allocation; preparation of adaptation measures; preparation of mitigation measures; awareness creation on climate change impacts, adaptation and mitigation.

Table 1: Summary for Water Resources Management Subcomponent

S/N	Intervention Area	Strategies	Target/Expected Output
1	Monitoring and Assessment	Improve availability of water resources data and information	Construct 100 and rehabilitate 214 real time monitoring stations by June 2026
			Establish 10 centres for real time data processing and storage by June 2026
		Promote accessibility of data and information to users, stakeholders and decision makers	Web based water resources information dissemination system developed and implemented by June 2026
			Mobile *maji app* and Water Resources Information System (WRIS) integrated by June 2026
2	Water Resources Planning	Ensure development and implementation of Integrated Water Resources Management and Development Plans	All sector plans that are included in the IWRMD Plans implemented in each basin by June 2026
			Inter-sectoral collaboration and coordination of IWRM approach at all levels improved by June 2026
		Ensure applied researches on IWRMD are conducted	Three (3) Applied Researches on Water Resources conducted by June 2026
			Capacity building to 70 staff for carrying out applied researches provided by June 2026
3	Water Allocation	Ensure equitable, effective and sustainable water allocation	2,320 water use permits issued by June 2026
			Water allocation decision support system in all water basins established by June 2026
		Ensure controls and accurate estimation of allocated water	45 control structures for water bulk allocation constructed by June 2026
			900 bulk meters procured and installed by June 2026
4	Protection and	Improve protection and	200 water sources demarcated and gazetted by June 2026

S/N	Intervention Area	Strategies	Target/Expected Output
	Conservation of Water Sources	conservation of water sources and recharge areas	45 ground water recharge areas demarcated and gazetted by June 2026
			300 discharge permits issued and 121 pollution hotspot areas controlled by June 2026
		Promote best practices on water sources and catchment management at all levels	One (1) pilot best practices on water sources management implemented by June 2026
			One (1) pilot best practices on wetlands management implemented by June 2026
5	Water Use and Demand Management	Promote water use efficient Technologies	Water use efficiency improved by 15% for all productive sectors by June 2026
			9 schools and 3 universities facilitated to develop low-cost efficient water use technologies by June 2026
		Ensure water use fees and charges are based on economic value of water	Water billing and fee collection efficiency improved to 100% by June 2026
			The economic value of water in the country established by June 2026
		Promote conjunctive use of surface and groundwater	Conjunctive use of surface and ground water implemented in nine (9) areas by June 2026
6	Dam Safety Management	Enhance dam safety management systems	Standards and guidelines for dam safety reviewed and implemented by June 2026
7	Trans-Boundary Water Resources	Promote optimal use of trans- boundary water resources to meet rapid increasing social, economic and environmental demands	Trans-boundary water resources projects implemented in 7 areas by June 2026

S/N	Intervention Area	Strategies	Target/Expected Output
		Promote co-operation and collaboration among riparian states	National database on trans-boundary water resources established by June 2026
			Water related trans-boundary policies and legal frameworks harmonized by June 2026
		Promote governance and management of trans-boundary water resources	Share of Tanzania in all trans-boundary waters quantified by June 2026
			Seven (7) arrangements for trans-boundary aquifers (Coastal sedimentary basin-1; Coastal sedimentary basin-3; Karoo-Sandstone aquifer; Weathered basement; Tanganyika aquifer; Kilimanjaro aquifer; and Kagera aquifer) management in place by June 2026
8	Flood, Drought, Storm Water and Other Related Disaster Management	Establish flood and drought early warning and forecasting systems	Flood and drought early warning system in place by June 2026
			Hydrological drought monitoring and mitigation plans are prepared and implemented by June 2026
			Storm water management regulation reviewed and guidelines prepared by June 2026
9	Climate Change - in relation to water resources, water quality, water supply and sanitation	Develop risk-based approach to water resource management	Climate risk-based management framework for water use developed and rolled out by June 2026
			Four (4) climate risks emergency response units established by June 2026
		Promote climate change adaptation measures in the water sector	Climate change adaptation program developed by June 2026
			Climate change adaptation and mitigation mainstreamed in water resources at different levels by June 2026

3.1.2. Water Resources Development Subcomponent

The country's renewable water resources are estimated to be 126 BCM/year of which 105 BCM/year is surface runoff and 21 BCM/year is groundwater.

On the other hand, the current country's constructed water storage infrastructures (dams and reservoirs) are estimated to be 5,421.7 MCM which is only 5.2% of the available annual surface runoff in the country. The current total annual water demand in the country is estimated to be 47 BCM which is 37.30% of the country's annual renewable water resources and is projected to increase to more than 80 BCM in the year 2035. In cognisant of this, the WSDP III focus is on construction of large multipurpose strategic water storage infrastructures and projects for intra and inter-basin water transfers to ensure sustainable water supply to meet the demand. This subcomponent has the following interventions:

3.1.2.1. Inter and Intra Basin Water Transfers

Water resources in the country are abundant but natural geographical distribution is uneven. Some areas have much water availability and others have less water. It is important to transfer water from water rich areas to boost socio-economic activities in dry areas. The aim is to ensure equitable and sustainable use of water for socioeconomic development. The strategy, targets and line of actions under this intervention are as follows:

Strategy 1: Develop inter and intra-basin water transfer infrastructures

Target 1: Studies for Bulk Water Transfer (National Water Grid) from all potential water sources conducted by June 2026. The line of actions include: conducting pre-feasibility and detailed feasibility studies; conducting environmental and social assessment studies; carrying out detailed design; preparation of tender documents; and construction of infrastructures.

Target 2: Two (2) inter-basins water transfers infrastructure constructed by June 2026. The line of actions include conducting detailed feasibility study and design of inter basin water transfers infrastructure; construct inter basin water transfers infrastructure; establish management of inter basin water transfers; establish payment systems for ecosystems services.

Target 3: Nine (9) intra-basin water transfers infrastructure constructed by June 2026.The line of actions include: conducting detailed feasibility study and design of intra-basin water transfers infrastructure; construction of intra-basin water transfers infrastructure; establishment of management of intra-basin water transfers; establish payment systems for ecosystems services.

3.1.2.2. Water Sources Development

Water security remains an important goal to Tanzania despite abundant endowment of freshwater resources. The causes of water insecurity include inadequate investment in constructed water storage and other water resources infrastructures; inadequate water quality management and pollution control; and inadequate capacity for groundwater development. The aim is to ensure equitable and sustainable management and development of water resources. The strategies, targets and lines of actions under this intervention are as follows:

Strategy 1: Construct strategic water storage infrastructures for water security.

Target 1: Four (4) strategic water storage infrastructures constructed and nine (9) new sites identified by June 2026. The line of actions include: identification of new potential dam sites; conducting feasibility studies, ESIA and designs; construction of dams; supervision of construction works; and operation and maintenance of the dams.

***Target 2*:** 20 medium size storage infrastructures constructed in dry areas by June 2026. The line of actions include: conducting feasibility studies; conducting ESIA and designs; construction of dams; supervision of construction works; and operation and maintenance of the dams

Strategy 2: Promote ground water development.

Target 1: Groundwater potential area maps (lithology, structure, topography, physical chemical) at Basin level and National level prepared by June 2026. The line of actions include: conduct geophysical survey; conduct assessment of groundwater resources; drilling of bore holes in potential aquifers; preparation of groundwater aquifer map and atlas; reviewing and developing information and data to determine status of groundwater quality and quantity; and development of National Ground Water Database platform and respective Basin Water Boards database.

Target 2: One (1) project on Managed Aquifer Recharge (MAR) implemented by June 2026. The line of actions include: identifying aquifer which require MAR; conduct detailed feasibility study and design for MAR infrastructure; construction of MAR infrastructure; awareness creation on MAR; conducting regular identification of vulnerable recharge areas and

potential groundwater sources for protection; and determine measures for protection of vulnerable recharge areas.

Strategy 3: Promote desalination and wastewater recycling

Target 1: One (1) desalination project implemented by June 2026. The line of actions include: conducting research on potential and affordable technologies for water desalination; implementing desalination project; and awareness creation on technologies for desalination of water.

Target 2: One (1) wastewater recycling project conducted by June 2026. The line of actions include: conducting research on potential and affordable technologies for wastewater recycling; implementing wastewater recycling and re-use project; and awareness creation on technologies for wastewater recycling and re-use.

Table 2: Summary for Water Resources Development Subcomponent

S/N	Intervention Area	Strategies	Target/Expected Output
1	Inter and Intra Basin Water Transfers	Develop inter and intra-basin water transfer infrastructures	Studies for Bulk Water Transfer (National Water Grid) from all potential water sources conducted by June 2026
			Two (2) inter-basins water transfers infrastructure constructed by June 2026
			Nine (9) intra-basin water transfers infrastructure constructed by June 2026
2	Water Sources Development	Construct strategic water storage infrastructures for water security	Four (4) strategic water storage infrastructures constructed and nine (9) new sites identified by June 2026
			20 medium size storage infrastructures constructed in dry areas by June 2026
		Promote groundwater development	Groundwater potential area maps (lithology, structure, topography, physical chemical) at Basin level and National level prepared by June 2026
			One (1) project on Managed

S/N	Intervention Area	Strategies	Target/Expected Output
			Aquifer Recharge (MAR) implemented by June 2026
		Promote desalination and wastewater recycling	One (1) desalination project implemented by June 2026
			One (1) wastewater recycling project conducted by June 2026

3.2. Component II-Water Quality Management

Water quality is essential for planning and development of water sources for different socioeconomic activities as well as for the smooth functioning of ecosystems. Water quality management involves among other things, assessment and monitoring of quality of water sources, water supply systems, wastewater and quality of water treatment chemicals. The deterioration in water quality is a factor of growing concern due to point and nonpoint sources of contaminants. In addition, inadequate investments in water quality management draws back provision of the desired quality of service in the country. Therefore, WSDP III has established a specific

component to deal with water quality management to ensure that water quality assessment and monitoring is effective and efficient as possible.

The objectives of this component are to ensure nation's water resources are sustainably managed and developed by monitoring and assessment of ambient water quality; improving universal access to adequate, safe and clean water; and access to adequate sanitation and hygiene services for protecting both ecosystem and human health. In addition, institutional strengthening and working environment improvement are considered under Water Quality Technical Support and Development. This component encompasses two subcomponents namely Water Quality Monitoring and Assessment and Water Quality Technical Support and Development. The subcomponents with their respective interventions, strategies, targets and line of actions are elaborated as follows:

3.2.1. Water Quality Assessment and Monitoring Subcomponent

In line with quantitative surface and groundwater data, it is important to pay attention to the quality of water sources and water supplied. Quality of water is assessed and monitored to ascertain its suitability for a particular purpose including human consumption, agricultural production, industry or environment needs. Water quality monitoring has been conducted whereby data and information was collected and disseminated to communities and decision makers for various use.

Water quality assessment and monitoring in different water sources and water supply networks in urban and rural is vital in ascertaining levels of natural and human induced contaminants for public and ecosystem health management interests. The subcomponent safeguards and enhances public health; and conserves ecosystems to improve ambient water conditions as the basis for an informed decision-making process. Water Quality Assessment and Monitoring subcomponent includes three intervention areas: -

i. Ambient Water Quality Assessment and Monitoring;
ii. Drinking Water Quality Assessment and Monitoring; and
iii. Wastewater Quality Assessment and Monitoring.

3.2.1.1. Ambient Water Quality Assessment and Monitoring

Reliable ambient water quality data is essential in providing relevant information on the status of water resources for planning and informed decision-making. A number of water quality monitoring stations are

established by the Government to enable acquisition of water quality data countrywide. The stations capture information on the health of water bodies for the management of water resources and the environment. The intervention provides an efficient and effective ambient water quality management system through comprehensive assessment and monitoring of the quality of water sources. The intervention includes the following strategies, targets and line of actions:-

Strategy 1: Conduct ambient water quality assessment and monitoring
Target 1: 2,091 water sources are monitored and assessed annually by June 2026. The line of actions include: establish ambient water quality monitoring networks, develop national ambient water quality map, undertake water quality data collection and analysis, establish/enhance automatic water quality monitoring stations for collection of real time data.

Target 2: Ambient water quality baseline conditions for 20 surface water and 4 ground water bodies established by June 2026. The line of actions include: review Water Quality Management and Pollution Control Strategy; review existing water quality monitoring networks; set the water quality standards; and institute water quality monitoring tool of Sustainable Development Goals (SDG 6.3.2).

3.2.1.2. Drinking Water Quality Assessment and Monitoring

The quality of water for drinking purposes is determined through its physical, chemical and biological properties. Drinking water quality is required to comply with Tanzanian Standards for Drinking Water. The drinking water quality deterioration is attributed by increased natural and anthropogenic contaminants in water sources and distribution systems. Under WSDP III the implementation of drinking water quality management employs the following strategies, targets and line of actions: -

Strategy 1: Conduct drinking water quality assessment and monitoring.
Target 1: Drinking water quality monitoring and assessment conducted in all water supply schemes in rural and urban areas annually. The line of actions include: conduct regular drinking water quality operational and surveillance monitoring; assess and control the quality of water treatment chemicals; prepare guidelines on water treatments and supervise its implementation; prepare and review drinking water quality monitoring programs and supervise its implementation.

Target 2: Drinking water quality standards and guidelines reviewed and implemented by June 2026. The line of actions include: review and update standards for water treatment chemicals; review and disseminate National Guidelines on Drinking Water Quality Monitoring and Reporting; and create awareness on compliance to water quality standards and guidelines.

Strategy 2: Promote adoption and implementation of Climate Resilient Water Safety Plans

Target 1: 1,000 Water Safety Plans for rural water supply entities developed and implemented by June 2026. The line of actions include: facilitate the preparation and implementation of Climate Resilient Water Safety Plan for Rural Water Supply Schemes; review of rural Water Safety Plan guiding document; development of the strategy for implementation of rural water safety plan guidelines; conduct monitoring of implementation of rural Climate Resilient Water Safety Plan; and dissemination of the Rural Climate Resilient Water Safety Plan.

Target 2: 94 Water Safety Plans for urban water supply utilities developed and implemented by June 2026. The line of actions include: facilitate the preparation and implementation of Climate Resilient Water Safety Plan for Urban Water Supply Scheme; review and disseminate urban Water Safety Plan guiding document; development of the strategy for implementation of urban water safety plan guidelines; monitoring implementation of Urban Climate Resilient Water Safety Plan.

3.2.1.3. Wastewater Quality Assessment and Monitoring

It is estimated that water supplied results to generation of about 80% wastewater. Wastewater generated by households can result in the spread of pathogens and detrimental nutrient loadings in receiving waters if discharged without treatment and if the sanitation chain is not properly managed. Also, wastewater generated by economic activities such as manufacturing industries may contain a variety of pollutants including hazardous substances. The government devised a number of ways to manage discharges of pollutants from various sources including monitoring and assessment of quality of wastewater discharges to the environment and water sources. The aim is to ascertain compliance to effluent standards and determine the efficiency of treatment facilities. The WSDP III focus includes the following strategies, targets and line of actions in implementation of wastewater quality management.

Strategy 1: Enhance wastewater quality monitoring and assessment system

Target 1: Domestic and industrial wastewater quality are monitored and assessed annually. The line of actions include: prepare guidelines for wastewater quality monitoring and assessment; review and update wastewater quality monitoring network; review and harmonize wastewater quality monitoring programs; conduct regular monitoring of wastewater and ascertain performance of wastewater treatment facilities.

Target 2: Wastewater quality standards and guidelines reviewed and implemented by June 2026. The line of actions include: prepare inputs for preparation and review of effluent standards; prepare guidelines for wastewater quality management, disseminate effluent standards; conduct wastewater quality monitoring; and establish appropriate criteria in order to apply polluter pays principle.

Target 3: Recycling and re-use of wastewater promoted by June 2026. The line of actions include: preparing guidelines on the recycling and re-use of wastewater; and dissemination of guidelines on the recycling and re-uses of recycled water based on the quality.

Table 3: Summary for Water Quality Assessment and Monitoring subcomponent

S/N	Intervention Area	Strategies	Target/Expected Output
1	Ambient Water Quality Assessment and Monitoring	Conduct ambient water quality monitoring and assessment	2,091 water sources are monitored and assessed annually by June 2026
			Ambient water quality reference conditions for 20 surface water and 4 groundwater bodies established by June 2026
2	Drinking Water Quality Assessment and Monitoring	Conduct drinking water quality monitoring and assessment	Drinking water quality monitoring and assessment conducted in all water supply schemes in rural and urban areas annually.
			Drinking water quality standards and guidelines reviewed and implemented by June 2026
		Promote adoption and implementation	1,000 Water Safety Plans for rural water supply entities developed and implemented by June 2026

S/N	Intervention Area	Strategies	Target/Expected Output
		of Climate Resilient Water Safety Plan	94 Water Safety Plans for urban water supply utilities developed and implemented by June 2026
3	Wastewater Quality Assessment and Monitoring	Enhance wastewater quality monitoring and assessment system	Domestic and industrial wastewater quality are monitored and assessed annually.
			Wastewater quality standards and guidelines reviewed and implemented by June 2026
			Recycling and re-use of wastewater promoted by June 2026.

3.2.2. Water Quality Technical Support and Development Subcomponent

The scope of sustainability of water quality management includes creating an enabling environment with appropriate policy and legal frameworks; institutional development including community participation, awareness creation and human resources development (including motivation and commitment) and strengthening managerial systems. Under WSDP III, Water Quality Technical Support and Development focus on the efficiency of mechanisms that are necessary to ensure sustainability of water quality management for public and ecosystem health as well as bridging the gap in areas where relevant information is required for operational and decision-making. The subcomponent has the following interventions areas:

3.2.2.1. Management Support

Management Support is essential to build a successful implementation of water quality management interventions in the country. It provides assistance to meet water quality management objectives and the expected outputs and outcomes. Management support in Water Quality is intended to Ministry, Water Quality Laboratories, WSSAs, CBWSOs, BWB and other institution in the field of water quality management. The aim is to enhance water quality management at all levels. Under WSDP III management support intervention employs the following strategies, targets and line of actions.

Strategy: 1: Establish Water Quality Data and Information Management System

Target 1: Water quality data and information management system established by June 2026. The line of actions include: harmonization of water quality data and information management systems; develop systems to enable data and information access by stakeholders and the public; develop protocols and operationalize Laboratory Information Management System (LIMS); prepare guidelines for water quality data collections and dissemination; establish water quality database; and provide relevant modernized tools for management of water quality data.

Target 2: Water quality data and information disseminated by June 2026. The line of actions include: provision of technical advice on water quality; prepare and disseminate annual water quality books; awareness creation on water quality issues; promote data and information collection and dissemination techniques; establish incentives for good water quality practice; and utilize the existing organs and forums to educate consumers on the importance of water quality issues.

Strategy 2: Enhance coordination on Water Quality Management.

Under this strategy, coordination is enhanced to improve working relations among the full range of public and private organizations to support sound water-quality decision-making at all levels. The target is water quality stakeholders' engagement strategy prepared and implemented by June 2026. The line of actions include: conducting joint planning water quality assessment programs; establishing water quality forums; promoting public awareness on water quality management; developing and disseminating water quality guidelines and regulations; create public awareness on drinking water quality within their respective areas; and identify water quality risk areas in trans-boundary waters and develop jointly responses with riparian countries; prepare protocols on the transboundary water quality management.

3.2.2.2. Water Quality Research and Development

Water Quality Research and Development is important for water quality management because it provides useful information that can be used in decision-making. Under WSDP III, research intends to bridge the gap in areas where relevant information is required for operational and decision-making. The strategy, targets and line of actions are as follows: -.

Strategy 1: Enhance applied water quality research programs

Target 1: Five (5) water quality applied researches conducted by June 2026. The line of actions include: prepare and implement research program on emerging water contaminants; prepare and implement water quality modelling; conduct research on water treatment technologies; conduct research on nutrients and harmful algal blooms; conduct research on Arsenic; conduct reach on Fluoride in drinking water; and conduct research on control of opportunistic pathogens and disinfection by-products (DBPs).

Target 2: The use of applied research findings promoted by June 2026. The line of actions include: create awareness on wastewater treatment technologies, disseminate research findings on quality management for drinking water and treatment chemicals; develop dissemination strategy; create and distribute program materials; and dissemination of defluoridation technology strategy.

Table 4: Summary for Water Quality Technical Support and Development subcomponent

S/N	Intervention Area	Strategies	Target/Expected Output
1	Management Support	Establish water quality data and information management system	Water quality data and information management system established by June 2026
			Water quality data and information disseminated by June 2026
		Enhance coordination on Water Quality Management	Water quality stakeholders engagement strategy prepared and implemented by June 2026
2	Water Quality Research and Development	Enhance applied water quality research programs	Five (5) water quality applied researches conducted by June 2026
			The use of applied research findings promoted by June 2026

3.3. Component III - Water Supply

The Government goal is to provide adequate, clean, safe, and affordable water services to the population living in both rural and urban areas. The national policies and planning frameworks recognize that there is still a proportion of the population which has no access to water services in both rural and urban areas due to inadequate water supply infrastructure

investment, water quality and dilapidated infrastructures. In order to address these issues, the WSDP III has set the objective to improve universal access to adequate, clean and safe water. This chapter covers rural and urban sub components as follows: -

3.3.1. Rural Water Supply Subcomponent

Under WSDP III the Government in collaboration with Stakeholders ensures that water as a basic human right is provided to population living in rural areas including marginalized people. The Rural Water Supply Subcomponent focus is on rehabilitation and expansion of existing water schemes, construction of new projects that cut across to more than one village and ensuring sustainability of rural water supply service delivery.

The subcomponent has the following interventions areas: -

i) Water supply infrastructure in rural areas; and
ii) Service delivery, demand management and regulation in rural areas.

3.3.1.1. Water Supply Infrastructure in Rural Areas

The water infrastructure for rural areas covers water sources, storage water tanks, water treatment facilities, pipe networks, customer connections and

water meters. Under WSDP III, provision of funds and financial support of the capital costs for new water supply systems, rehabilitation and expansion of water supply systems is priority.

In addition, support is intended to implementing agencies in mobilization of funds and encouraging communities to participate in all stages of implementation of rural water supply projects to enhance sustainability. The implementation of rural water supply projects aims to score the FYDP III target of reaching 85% of rural population with clean and safe water by the year 2025.

The aim of water supply infrastructure intervention is safe, reliable, adequate, and sustainable rural water supply. Under WSDP III the focus includes construction of new water supply systems; rehabilitation of existing water supply schemes; and expansion of water supply schemes. The strategies, targets and lines of actions for water supply infrastructure are explained below:

Strategy 1: Construct and expand new water supply systems

Target 1: 37,648 new water points constructed and 60,139 household connected which serves 9,770,000 people by June 2026. The line of actions include: prepare project proposals; feasibility study and detailed design; mobilize and disburse funds; install bulk meters; establish baseline of household connections; and construction of water supply systems. Also, develop and install/construct various models of treatment facilities as well as develop and implement water safety plans to new rural water supply schemes.

Target2: 2,400 boreholes drilled by June 2026. The line of actions include: conduct geophysical surveys; identification of well fields; drilling of boreholes; and mobilize equipment and machinery related to drilling activities.

Strategy 2: Rehabilitate of Water Schemes

Target 1: 15,484 non-functioning water points rehabilitated and restore water supply services to 3,871,000 people by June 2026. The line of actions include: change of expensive technologies to low cost technologies; rehabilitation of water schemes; and install bulk meters to monitor NRW in existing rural water supply schemes.

Target 2: 1,745 treatment facilities installed/constructed in water supply

schemes by June 2026. The line of actions include: identifying water supply with no treatment facilities; develop and install/construct various models of treatment facilities; and develop and implement water safety plans.

3.3.1.2. Service Delivery, Demand Management and Regulation in Rural Areas

Water Demand in rural areas is increasing at a high rate due to population growth and socio-economic activities such as livestock keeping, public and private institutions such as education, health facilities and economic activities. The high-water demand necessitates more investments and expansion of water supply services and engagement of technological and institutional means to realize efficient water demand management.

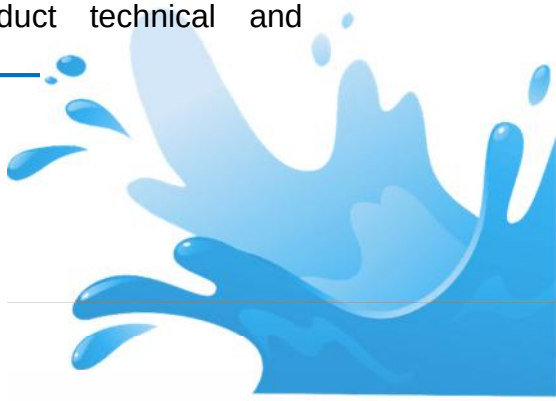
The operation and maintenance of rural water supply schemes is managed by community organisations whereby at the end of WSDP II, 2,466 Community Based Water Supply Organisations (CBWSOs) were registered under RUWASA. However, the sustainability of service delivery is affected by the slow pace of formation and inadequate capacity of CBWSOs to manage facilities; high cost of operation and maintenance especially pumping schemes; inadequate supply chain for spare parts for maintenance; unwillingness of communities to pay the set tariffs; inadequate involvement of private sector in operating rural water supply facilities; and improper regulation of rural water supply services.

In order to ensure sustainability, the Government through Water Supply and Sanitation Act No. 5 of 2019 gave RUWASA power to carry out monitoring and regulation of community-based water supply organizations. RUWASA is to develop and review the cost reflective and inclusive tariff for the water supply schemes and regulate community organisations.

The aim of the intervention is to strengthen monitoring and regulation of rural water supply and sanitation services. The intervention is divided into areas of service delivery and regulation of services in rural areas. Strategies, targets and line of actions are as follows: -

Strategy 1: Provision of rural water supply service delivery

Target 1: Service coverage of clean and safe water to rural population increased to 85% by June 2026. The line of actions include: review/implement guidelines for operation and maintenance of water supply facilities; establish and maintain database; conduct technical and



management audit of rural water supply entities; review/implement rural water supply sustainability strategy; and prepare and implement capacity development plans for implementing agencies of rural water supply; and promote Public Private Partnership in water service provision.

Target 2: Non-Revenue Water minimized to 20% by June 2026 in rural areas. The lines of actions include: establish NRW baseline for rural water supply services; install bulk meters; install water meters to all customers and water points; create awareness on efficient use of water; and use of appropriate tariffs.

Strategy 2: Regulate water supply services in rural areas

Target 1: 3,520 CBWSOs established in water supply schemes by June 2026. The line of actions include: develop and implement Guidelines on Regulation of Community Water Services Management; facilitate preparation of business plan, Client Service Charter and Water Quality Monitoring Plan; and sensitize and create awareness to the community to participate in water supply projects.

Target 2: Cost recovery tariffs established to rural water supply schemes by June 2026. The line of actions include: consult communities during tariff setting processes; develop and implement tariff setting guidelines; conduct willingness and ability to pay studies; and establish subsidy mechanism to cover part of operation and maintenance costs.

Table 5: Summary for Rural Water Supply Subcomponent

S/N	Intervention Area	Strategies	Target/ Expected Output
1	Water supply infrastructure in rural areas	Construct and expand new water supply systems	37,648 new water points constructed and 60,139 households connected which serves 9,770,000 people by June 2026.
			2,400 boreholes drilled by June 2026
		Rehabilitate of water schemes	15,484 non-functioning water points rehabilitated and restore water supply services to 3,871,000 people by June 2026

S/N	Intervention Area	Strategies	Target/ Expected Output
			1,745 treatment facilities installed/constructed in water supply schemes by June 2026
2	Service Delivery, Demand Management and Regulation in rural areas	Provision of rural water supply service delivery	Service coverage of clean and safe water to rural population increased to 85% June 2026
			Non-Revenue Water minimized to 20% by June 2026 in rural areas
		Regulate water supply services in rural areas	3,520 CBWSOs established in water supply schemes by June 2026
			Cost recovery tariffs established to rural water supply schemes by June 2026

3.3.2. Urban Water Supply Subcomponent

The provision of water supply and sanitation services in urban areas is managed under Water Supply and Sanitation Authorities (WSSAs). The WSDP III aims at improving demand forecasting; selection of water sources; planning; reduce non-revenue water; water quality management; water supply network analysis; billing systems; control of operating costs; and the resource mobilization. This subcomponent has the following intervention areas:

i. Water supply Infrastructure in urban areas;
ii. Water supply service delivery in urban areas;
iii. Water supply services demand management in urban areas; and
iv. Regulation of water supply services in urban areas;

3.3.2.1. Water Supply Infrastructure in Urban Areas

The water supply infrastructure for urban areas includes water sources development, transmission main/water conveyance, water treatment plants, reservoir/storage water tanks, distribution networks, customer connections and water meters. Notable measures were undertaken to ensure improvement of water supply in urban areas but still some implemented water supply projects are without distribution networks. The aim is to improve water supply infrastructure by implement the following strategies, targets and line of actions:

Strategy 1: Construct and expand new water supply systems

Target 1: 3,600km of new transmission main and 10,000km of new distribution water supply networks constructed by June 2026. The line of actions include: prepare project proposals; feasibility study and detailed design; construct transmission main and distribution networks; install bulk meters and water meters to monitor NRW; prepare Joint/City wide planning guidelines for water services development; and prepare city wide water services plans and install system for automated operational monitoring for water supply systems and infrastructure.

Target 2: 240 new water storage tanks with 576,000,000 litres constructed by June 2026. The line of actions include: prepare project proposals; feasibility study and detailed design; install bulk meters to monitor NRW; and construction of storage tanks.

Target 3: 25 new treatment plants constructed by June 2026. The line of actions include: prepare project proposals; feasibility study and detailed design; install bulk meters to monitor NRW; and construction of water

treatment plants.

Target 4: 600,000 new household connections that serve 3,600,000 people by June 2026. The line of actions include: prepare project proposals; feasibility study and detailed design; install water meters; and construction of distribution networks.

Target 5: 64 boreholes drilled by June 2026. The line of actions include: conduct geophysical surveys; identification of well fields; drilling of boreholes; and mobilize equipment and machinery related to drilling activities.

Strategy *2:* Rehabilitate dilapidated water schemes

Most of existing infrastructures require rehabilitation especially in districts, small towns and National Projects because are old and cannot cope with the increasing demand. The targets and line of actions are as follows: The target is 500 km of transmission main and 1,500 km of distribution water supply network rehabilitated by June 2026. The line of actions include: prepare project proposals; conduct design review; rehabilitate transmission main and distribution networks; and replace/install bulk meters and water meters to monitor NRW.

Strategy 3: Protect major water supply infrastructures

Target is all water supply infrastructures protected by June 2026. The line of actions include to install mark posts to all water supply infrastructure; register, demarcate and acquire title deeds to all intakes and major immovable infrastructure; acquire way leave to major water supply main lines; prepare Standard Operating Procedures and maintenance works; conduct periodic inspection to all water infrastructures; disseminate information to community for protection of water infrastructures; procure technology for protection of water infrastructure; and prepare asset management plan.

Strategy 4: Develop emergency water supply infrastructures in urban areas

The target is 25 water supply emergency infrastructures in regional centres constructed by June 2026. The line of actions include: develop and implement contingency plans; conduct regular repair of all breakages; conduct feasibility study and detailed design; construct reservoir tanks for

water storage; procure and install standby generators; and rehabilitate and install fire hydrants and install meters to all fire hydrants.

Strategy 5: Promote technology development and application on operation and maintenance of water supply infrastructures

The target is technology for reduction of operational and maintenance cost developed and implemented in two (2) WSSAs by June 2026. The line of actions include: conduct researches on technology involving the operation and maintenance of water supply infrastructures; identify the appropriate technologies; develop and implement the technology; and promote innovations in services delivery.

3.3.2.2. Water Supply Service Delivery in Urban Areas

Water Supply and Sanitation Authorities are mandated in provision of water supply and sanitation services in urban areas. Despite the improved access of water supply a significant proportion of the urban population remains un-served, some with water rationing and water quality variations prevailing in some areas. In addition, private sector engagement in urban water supply service provision is limited to boreholes and water tankers. This intervention is to ensure universal access to safe, reliable and sustainable water services for all uses through the following strategies, targets and line of actions:

Strategy 1: Provide adequate, clean and safe water supply for all uses

The target is urban population with access to safe and clean water increased to 95% at Regional Centres and 85% at National Projects, District Headquarters and Small Townships by June 2026. The line of actions include: connect new customers; improve customer relations; improve billing system; manage customer complains; control commercial water losses; conduct regular treatment of water; conduct regular water quality monitoring; and upgrade/update management information system for water supply services.

Strategy 2: Provision of water supply to the low-income population

The target is all low-income population provided with water by June 2026. The line of actions include: identifying low-income groups and vulnerable households; and construct kiosks and supply services to low-income population.

Strategy 3: Promote bulk water supply

The target is three (3) bulk water supply services established by June 2026. The line of actions include: establish baseline on bulk water supply services; identify strategic areas for construction of bulk water infrastructures; conduct detailed feasibility study and design for bulk water infrastructure; and construct bulk water supply infrastructure.

3.3.2.3. Water Supply Services Demand Management

Water demand in urban areas is increasing at a high rate due to population growth and socio-economic activities. The high-water demand necessitates more investment in expansion of water supply services. The aim is to ensure the efficient, equitable and sustainable use of water in urban areas. This can be achieved by implementing the following strategies, targets and line of actions:

Strategy 1: Promote water use efficiency

Target 1: NRW reduced to 20% by June 2026. The line of actions include: conduct assessment to detect and quantify the magnitude of wasted water; conduct regular inspection of customer meters; replace defective water meters; establish District Metering Areas (DMAs); conduct customer inspection to identify illegal connections; establish incentives to whistle blowers; create awareness on reducing NRW; develop software programs in NRW reductions; conduct technical and management audit; and to provide training and incentives to staff for change management.

Target 2: Public awareness on economical use of water improved by June 2026. The line of actions include: conduct meetings on issues of economical use of water to various stakeholders; conduct regular individual customer's water meter inspection; conduct customer satisfaction survey; and participate in local and national exhibitions.

3.3.2.4. Regulation of Water Supply Services in Urban Areas

The main aim of a regulator is to protect long-term sustainability of service provision by approving tariff application for water supply services; business plans; handle consumer complains; ensure reliability of water supply services; monitor quality of services and performance of the water service provider; and promote availability of regulated services to all consumers including low income, rural and disadvantaged consumers. Under this intervention, the aim is to improve sustainability of service provision and

efficiency in provision of water supply services through the following strategies, targets and line of actions:

Strategy 1*:* Provide cost reflective tariff

The target is cost reflective water tariffs in all water utilities reviewed by June 2026. The line of actions include: supporting utilities to set and apply for tariff adjustment; establishing cost of services; regulate rates and charges for water services; review of tariff setting guidelines; conduct assessments for renewal of tariff; developing conditions to be attached to the tariff order; prepare/review of business plan; and enhance efficiency of production and distribution of services.

Strategy 2: Issue Licenses

The target is all water supply and sanitation service providers have valid licenses by June 2026. The line of actions include: review and implement licensing framework; review and implement guidelines for application of license; support water utilities to apply for license and set license conditions; and conduct assessments for renewal of license.

Strategy 3: Conduct monitoring of water supply services

The target is all WSSAs develop and implement M&E systems by June 2026. The line of actions include: review indicators and targets for performance monitoring; update performance monitoring systems; conduct inspections on implementation of orders and directives; prepare annual performance report; establish standards, terms and conditions for water supply services; evaluate compliance to customer service charters; monitor performance of the water supply services; support WSSAs to develop/review M&E System; and conduct awareness/dissemination workshops for improvement on identified areas.

Table 6: Summary for Urban Water Supply subcomponent

S/N	Intervention Area	Strategies	Target/ Expected Output
1	Water Supply Infrastructure in urban areas	Construct and expand new water supply systems.	3,600 km of new transmission main and 10,000 km of new distribution water supply networks constructed by June 2026
			240 new water storage tanks with 576,000,000 litres

S/N	Intervention Area	Strategies	Target/ Expected Output
			constructed by June 2026
			25 new treatment plants constructed by June 2026
			600,000 new household connections that serves 3,600,000 people by June 2026
			64 boreholes drilled by June 2026
		Rehabilitate dilapidated water schemes	500 km of transmission main and 1,500 km of distribution water supply network rehabilitated by June 2026
		Protect major water supply infrastructures	All water supply infrastructures protected by June 2026
		Develop emergency water supply infrastructures in urban areas	25 water supply emergency infrastructures in regional centres developed by June 2026
		Promote technology development and application on operation and maintenance of water supply infrastructures	Technology for reduction of operational and maintenance cost developed and implemented in two (2) WSSAs by June 2026
2	Water Supply Service delivery in urban areas	Provide adequate, clean and safe water supply for all uses.	Urban population with universal access to safe and clean water increased to 95% of the Regional Centre and 85% National Projects District Headquarters and Small Townships by June 2026
		Provision of water supply to the low-income population	All low-income population provided with water by June 2026
		Promote bulk water supply	Three (3) bulk water supply services established by June 2026
3	Water Services	Promote water use efficiency	NRW reduced to 20% by June 2026

S/N	Intervention Area	Strategies	Target/ Expected Output
	Demand Management		Public awareness on economical use of water improved by June 2026
4	Regulation of Water Supply Services in urban areas	Provide cost reflective tariff	Cost reflective water tariffs in all water utilities reviewed by June 2026
		Issue Licenses	All water supply and sanitation service providers have valid licenses by June 2026
		Conduct monitoring of water supply services	All WSSAs develop and implement M&E systems by June 2026

3.4. Component IV - Sanitation and Hygiene

In the context of the programme (WSDP), sanitation means measures taken to safely manage human excreta from containment, emptying, transportation, treatment and disposal or re-use as well as management of wastewater. On the other hand, hygiene refers to practices that help to keep away excreta from human contact such as hand washing with soap, disposal of child faeces and cleaning of toilets. The programme objective is to improve universal access to adequate sanitation and hygiene services essential for health, general wellbeing, environmental protection, and economic development while also being a basic human right.

The WSDP III advocates for increased access to improved sanitation and hygiene as addressed under SDG 6.2 and focus on elimination of open defecation and accelerating towards universal access to improved sanitation and basic hygiene practices so that no one is left behind. Similarly, other emerging issues namely; Baby WASH and Menstrual Health and Hygiene (MHH) are addressed under the programme. Equally important, sanitation and hygiene in institutions and public places such as schools, Health Care Facilities (HCFs), transport hubs and public gathering areas are among the priorities of the programme.

This component comprises four subcomponents namely: i) Sewered Sanitation; ii) Non-Sewered Sanitation; iii) WASH in Institutions and Public Areas and, iv). Social Behaviour Change Communication Campaign and Hygiene Promotion. Details for each subcomponent is as follows: -

3.4.1. Sewered Sanitation Subcomponent

Sewered sanitation aims to increase access to sewer infrastructure that includes conveyance and treatment facilities and services for the safe disposal of sewage in urban centres. The sewered sanitation services in urban areas are still low due to insufficient investment in extension of sewer systems, rapid urbanization as well as old infrastructure that results into leakage and ineffective treatment of wastewater. The areas of interventions, targets and line of actions for sewered sanitation are as follows: -

3.4.1.1. Sewered Infrastructure

The sewer infrastructure in urban areas involves physical customer connections, conveyance systems, treatment and effluent disposal facilities. The WSDP III plans to improve access to sewer sanitation services in urban areas from 13% to 30% by June 2026. The programme focuses in infrastructures development and service delivery in the entire sanitation chain and wastewater treatment. The following strategies, targets and line of actions are included.

Strategy 1: Promote joint town level master planning

The target is 60 joint town level master plans developed by June 2026. The line of actions include: conducting assessment of existing sanitation tools; review joint/city-wide planning guidelines; identify sanitation stakeholders; prepare citywide sanitation plans; and create awareness on implementation of city-wide sanitation projects.

Strategy 2: Construct and expand new sewerage systems

Target 1: 3,000km sewerage network constructed and 5,000 new customers connected to the sewer system by June 2026. The line of actions include: prepare project proposals; conduct feasibility study and detailed design; construction of sewerage network; connect new customers; develop preventive maintenance plan of sewerage network, equipment and machinery and review operation and maintenance manual for sewerage infrastructures.

Target 2: Nine (9) treatment plants with total capacity of 198,000m^3/day constructed by June 2026. The line of actions include: preparation of project proposals; conduct feasibility study and detailed design; construction of treatments plants; develop sewerage asset management plan; develop operation and maintenance manual for treatment infrastructure; and develop preventive maintenance plan of treatment facilities, equipment and machinery.

Target 3: 17,000 customers connected to sewer system by June 2026. The line of actions include: preparation of project proposals; identify customers not connected to the network; and connect new customers.

Target 4: Studies on sewerage systems in 20 urban centres conducted by June 2026. The line of actions include: identification of towns or urban areas that require sewerage systems; conduct pre-feasibility studies, feasibility study and detailed design; conduct Environmental and Social Impact Assessment; and prepare tender documents.

Strategy 3: Rehabilitation of dilapidated sewerage systems

Target 1: 150km of sewerage network and eight (8) wastewater treatment plants rehabilitated by June 2026. The line of actions include: reviewing design of existing sewerage infrastructure; rehabilitate sewerage systems; and review operation and maintenance manual for sewerage infrastructures.

Target 2: 150 customer connections restored by June 2026. The line of actions include: reviewing design of existing sewerage infrastructures; rehabilitate sewerage systems; connect customers; and review operation and maintenance manual for sewerage infrastructures.

Strategy 4: Promote appropriate technologies

Target 1: 26 DEWATS constructed by June 2026. The line of actions include preparation of project proposals; feasibility study and detailed design; construction of DEWATS; land acquisition, connect new customers; develop DEWATS asset management plan; develop operation and maintenance manual for DEWATS infrastructures; and develop preventive maintenance plan of facilities, equipment and machinery.

Target 2: 25% of treated sewage re-used /recycled by June 2026. The line of actions include to conduct research on technologies for recycling and re-use of effluent; promote use of new technologies; adopt new technologies; construct infrastructure for end product; and promote use of treated wastewater and other end products.

Strategy 5: Protection of major sewerage infrastructures

The target is all sewerage infrastructures protected by June 2026. The line of actions include: install mark posts to all sewerage infrastructure; register, demarcate and acquire title deeds to all intakes and major immovable infrastructure; acquire way leave to major sewerage main lines; prepare Standard Operating Procedures and maintenance works; conduct periodic inspection to all sewerage infrastructures; disseminate information to community for protection of sewerage infrastructures; procure technology for protection of sewerage infrastructure; and prepare asset management plan.

3.4.1.2. Sewered Service Delivery and Regulation

Only 11 towns/cities have sewerage services with coverage of 13% of the population served. The WSDP III aims at enhancing the sewer sanitation services provision through various capacity development investment programmes in urban areas. The following strategies, targets and line of actions are employed: -

Strategy 1: Provide cost reflective tariff

The target is improved tariffs, rates and charges for sewered sanitation services by June 2026. The line of actions include: supporting utilities to set and apply for tariff adjustment; establishing cost of services; regulate rates

and charges for sewer sanitation services; review of tariff setting guidelines; conduct assessments for renewal of tariff; developing conditions to be attached to the tariff order; prepare/review of business plan; and enhance efficiency of production and distribution of services.

Strategy 2: Comply with licence conditions

The target is all sewered sanitation service providers fully comply with license conditions by June 2026. The line of actions include: review and implementation of licensing framework; review and implement guidelines for application of license; monitor and enforce compliance to licence conditions; and conduct assessments for renewal of license.

Strategy 3: Conduct monitoring of sewered sanitation services

The target is improved monitoring of sewered sanitation services by June 2026. The line of actions include: establish indicators and targets for performance monitoring; update performance monitoring systems; conduct inspections on implementation of orders and directives; prepare annual performance report; establish standards, terms and conditions for sewer sanitation services; evaluate compliance to customer service charters; monitor performance of the sewered sanitation services; and conduct awareness/dissemination workshops for improvement on identified areas.

Table 7: Summary for Sewered Sanitation subcomponent

SN	Intervention Area	Strategies	Target/expected output
	Sewered Infrastructure	Promote joint town level master planning	60 joint town level master plans developed by June 2026
		Construct and expand new sewerage systems	3000 km sewerage network constructed and 5,000 new customers connected to the sewer system by June 2026
			Nine (9) treatment plants with total capacity of 198,000m3/day constructed by June 2026
			17,000 customers connected by June 2026
			Studies on sewerage systems in 20 urban centres conducted by June 2026
		Rehabilitation of	150 km of sewerage network

SN	Intervention Area	Strategies	Target/expected output
		dilapidated sewerage systems	and eight (8) wastewater treatment plants rehabilitated by June 2026
			150 customer connections restored by June 2026
		Promote appropriate technologies	26 DEWATS constructed by June 2026
			25 Percent of treated sewage re-used /recycled by June 2026
		Protection of major sewerage infrastructures	All sewerage infrastructures protected by June 2026
	Sewered Service Delivery and Regulation	Provide cost reflective tariff	To have improved tariffs, rates and charges for sewered sanitation services by June 2026
		Comply with licence conditions	All sewered sanitation service providers fully comply to license conditions by June 2026
		Conduct monitoring of sewered sanitation services	To have improved monitoring of sewered sanitation services by June 2026

3.4.2. Non Sewered Sanitation Subcomponent

Non-sewered sanitation chain consists of capture, containment, emptying/ collection, transportation, treatment of faecal sludge and safe end use, recycling and disposal. The challenges facing non-sewered sanitation include non-emptiable toilets; inadequate emptying, transportation and faecal sludge treatment facilities; and unsafe disposal practices.

The WSDP III focus is promoting technological and innovative approaches to facilitate safe management of the human excreta generated in planned and unplanned areas not connected to a networked sewer system. The planned intervention areas, strategies, targets and line of actions employed are detailed below.

3.4.2.1. Non Sewered Infrastructure and Equipment

The infrastructure and equipment related to non-sewered sanitation include capture and containment; emptying and transportation machineries and equipment; treatment infrastructure; and disposal and/or re-use facilities. The aim is to have a reliable, affordable, sustainable and safely managed non-sewered sanitation services. The following strategies, targets and line of actions are included:

Strategy 1: Promote proper management of faecal sludge

Target 1: Six (6) location specific maps for six towns with recommended capture and containment technologies prepared by June 2026. The line of actions include: conduct baseline survey; prepare topographical maps/guidelines with recommended specific capture and containment technologies; conduct training to Town Planning Officers in all LGAs; and disseminate maps/guidelines.

Target 2: Capture and containment manual reviewed, harmonized and implemented by June 2026. The line of actions include: promote innovative ideas and initiatives in designing and constructing non sewered infrastructures; identify technologies applicable for capture and containment; prepare manuals for capture and containment infrastructure; identify and register artisans for construction of capture and containment facilities; conduct training on capture and containment infrastructure; and dissemination of the manuals.

Target 3: 60 emptiers and 200 transfer stations provided by June 2026. The line of actions include: identify and demarcate areas that require emptying services; procure emptiers and working gears; construct transfer stations; register emptying service providers; and conduct training.

Target 4: 22 Faecal Sludge Treatment Plants (FSTPs) with capacity of 131,000m3/day constructed by June 2026. The line of actions include: promote innovative technologies and initiatives in designing and constructing non sewered infrastructures; preparation of project proposals; conduct feasibility study and detailed design; construction of FSTPs; develop faecal sludge asset management plan; develop operation and maintenance manual for faecal sludge infrastructure; and develop preventive maintenance plan of faecal sludge facilities, equipment and machinery. Other actions include conduct training on non-sewered sanitation chain; rehabilitate/construct FSTPs; review non sewered sanitation guidelines; and dissemination of the guidelines.

***Target 5*:** 100 disposal/end use or recycling facilities constructed by June 2026. The line of actions include: preparation of project proposals; conduct feasibility study and detailed design; construction of disposal/end use or recycling facilities; develop operation and maintenance manual; and develop preventive maintenance plan of facilities, equipment and machinery.

Strategy 2: Protection of faecal sludge infrastructure

Target 1: All faecal sludge infrastructures protected by June 2026. The line of actions include: install mark posts to all faecal sludge infrastructures; register, demarcate and acquire title deeds to major immovable infrastructure; prepare Standard Operating Procedures and maintenance works; conduct periodic inspection to all faecal sludge infrastructures; disseminate information to community for protection of faecal sludge infrastructures; facilitate protection of faecal sludge infrastructure; and prepare asset management plan.

Target 2: 100 disposal sites acquired in all urban centres and emerging townships by June 2026. The line of actions include: promote and participate in joint town planning; identify areas suitable for disposal sites; acquire the disposal sites.

3.4.2.2. Regulation of Non Sewered Service

Regulation is needed to support the management of each step of the service in sanitation chain including the capture and containment, collection, transport, treatment, and end use or disposal of faecal sludge. The following strategies, targets and line of actions are employed: -

Strategy 1: Comply with minimum quality standards

The target is quality standards for non-sewered sanitation services improved by June 2026. The line of actions include: review standards operating procedures; review operation and maintenance guidelines for safe construction, operation, transportation, use and emptying of containment; conduct training to different actors; create awareness on safe containment, emptying and transportation of faecal sludge; and conduct monitoring and supervision on non sewered services.

3.4.2.3. Non Sewered Service Delivery

Non-sewered service delivery obligations are under Urban Water Utilities and RUWASA. Currently, service providers are engaged in emptying and transportation of faecal sludge business. The strategies, targets and line of actions are as follows.

Strategy 1: Comply with non-sewered sanitation service delivery standards

The target is to improve non-sewered sanitation services by June 2026. The line of actions include: promote safely managed non-sewered services in the

communities; establish charges to facilitate the cost; procure dislodging and transportation equipment and working gears; conduct monitoring on compliance to non-sewer of service provision; review/prepare standards and guidelines for non-sewered services; disseminate standards and guidelines; promote occupations and safety measures to protect non-sewered sanitation worker's health and the public at large.

Strategy 2: Promote appropriate technologies

The target is appropriate technologies for non-sewered sanitation chain promoted by June 2026. The line of actions include: promote technologies for non-sewered sanitation chain including recycling and re-use of effluent and sludge; conduct training and dissemination of appropriate technologies.

Table 8: Summary for Non Sewered Sanitation Subcomponent

S/N	Intervention Area	Strategies	Target / Expected Output
	Non Sewered Infrastructure and equipment	Promote proper management of faecal sludge	Six (6) location specific maps for six towns with recommended capture and containment technologies prepared by June 2026
			Capture and containment manual reviewed/harmonized and implemented by June 2026
			60 emptiers and 200 transfer stations provided by June 2026
			22 faecal sludge treatment plants (FSTPs) with capacity of 131,000m^3/day constructed by June 2026
			100 disposal/end use or recycling facilities constructed by June 2026
		Protection of faecal sludge infrastructure	All faecal sludge infrastructures protected by June 2026
			100 disposal sites acquired in all urban centres and emerging townships by June 2026
	Regulation of non sewered service	Comply to minimum quality standards	Quality standards for non-sewered sanitation services improved by June 2026

S/N	Intervention Area	Strategies	Target / Expected Output
	Non Sewered Service Delivery	Comply with non-sewered sanitation service delivery standards	To improve non-sewered sanitation services by June 2026
		Promote appropriate technologies	Appropriate technologies for non-sewered sanitation chain promoted by June 2026

3.4.3. Sanitation and Hygiene in Institutions and Public Areas Subcomponent

This subcomponent intends to address sanitation and hygiene in institutions including schools, health care facilities and public places (markets, play grounds, and highways). The aim is to ensure institutions are provided with improved sanitation and hygiene facilities that provide optimal public health wellbeing. The sanitation facilities constructed in these areas need to be durable, address the universal needs, and provide ideal containment and onsite treatment prior to transportation or disposal or connected to public

sewer whenever available. WSDP III emphasises on construction of new WASH facilities and rehabilitation of old as well as enforcement of existing public health laws and regulations related to sanitation and hygiene. The intervention areas, strategies, targets and line of actions to be employed are detailed below.

3.4.3.1. WASH in Health Care Facilities

Adequate WASH services in healthcare facilities are essential for maintaining healthy working environment for HCWs and prevention of Health Care Acquired Infections (HCAIs). It includes provision of water from improved sources, adequate toilets for staff and clients, hand washing facilities at all point of care, management of health care waste and environmental cleansing. An ideal toilets requirement for HCFs includes; one sex-separated toilet for staff, at least one stance for visitors for each sex, and a separate stance for persons with disabilities. Also, toilet sub-structures must support pit emptying if the toilet is not connected to a sewer or septic tank. Hand washing with soap, alcohol hand rubs for staff and clients are necessary in health facilities for infection prevention and control. The following strategies, targets and line of actions are employed:

Strategy 1: Capacitate Health Care Workers on WASH

The strategy focuses building capacity of Health Care Workers (HCWs), creating awareness and contributing to sustainability of the WASH infrastructures in the HCFs. The target is at least 80% of HCWs are trained on WASH guidelines and tools by June 2026. The line of actions include: review of guidelines and tools; dissemination of guidelines and tools; and training of HCWs on WASH Guidelines and Infection Prevention and Control (IPC).

Strategy 2: Rehabilitate existing WASH facilities

Target 1: Basic water supply infrastructures in 1,500 HCFs rehabilitated by June 2026. The line of actions include: conducting needs assessment on water supply for HCFs; develop HCFs costed plan from the identified needs; training of local masons; rehabilitation of water supply infrastructure; and develop and implement O&M plan.

Target 2: Basic sanitation infrastructures in 1,500 HCFs rehabilitated by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local masons; rehabilitation of sanitation facilities; and develop and implement O&M plan.

Target 3: Basic hand washing infrastructures in 1,500 HCFs rehabilitated by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local mason; rehabilitation of hand washing infrastructures; and develop and implement O&M plan.

Target 4: Basic waste management infrastructure in 1,500 HCFs rehabilitated by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local mason; rehabilitation of waste management facilities; training of HCWs and Health Care Governing Board/Committees; and develop and implement O&M plan.

Strategy 3: Construct WASH facilities

Target 1: New basic water supply infrastructure constructed in 2,000 HCFs by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local mason; construction of water supply infrastructure; training of HCWs and Health Care Governing Board/Committees; and develop and implement O&M plan.

Target 2: New basic sanitation infrastructure constructed in 2,000 HCFs by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local mason; construction of sanitation infrastructure; training of HCWs and Health Care Governing Board/Committees; and develop and implement O&M plan.

Target 3: New basic hand washing infrastructure constructed in 2,000 HCFs by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local mason; construction of water infrastructure; training of HCWs and Health Care Governing Board/Committees; and develop and implement O&M plan.

Target 4: New basic waste management infrastructure constructed in 2,000 HCFs by June 2026. The line of actions include: conducting needs assessment for HCFs; training of local mason; construction of waste management infrastructure; training of HCWs and Health Care Governing Board/Committees; and develop and implement O&M plan.

Strategy 4: Provide adequate cleansing equipment and materials

The strategy sustains the provision of WASH services in HCFs, the supply of equipment and cleansing materials (soap, detergent, and disinfectants). The target is all HCFs are provided with cleansing materials and equipment by

June 2026. The line of actions include: conduct needs assessment for cleansing materials and equipment, develop/review SOPs on use of cleaning materials/equipment, develop PPM plan for cleaning equipment and strengthen monitoring and supervision.

Strategy 5: Hygiene promotion

Hygiene promotion in health care setting is essential for sustained use of WASH facilities particularly toilets which quite often are being misused due to lack of know how or exposure. Display materials and visual aid will be developed to communicate messages to clients regarding the proper use of WASH facilities. The target is Hygiene promotion materials developed and disseminated to 80% of HCFs by June 2026. The line of actions include: designing of messages for hygiene promotion; production of messages and communication; training of health workers; and develop plans for hygiene promotion in HCFs.

3.4.3.2. WASH in Schools

School WASH entails the provision of water supply, sanitation, and hygiene services in school environment. The provision of adequate WASH services creates conducive learning and teaching environment and contribute to reduction of absenteeism, illness and ineffective years of learning amongst school children. The current status shows that about two-third (67%) of schools have access to basic drinking water, 88% have improved sanitation, 32% have functional hand washing points and 8% have active school sanitation clubs. In addition, only 12% of the schools (primary and secondary) have at least one useable toilet for pupils with a physical disability or limited vision. Overall, only 28% of schools meet the minimum standard for the number of pupils per drop hole (20 girls and 25 boys per drop hole). The WSDP III puts emphasis on improving WASH services in public schools by implementing the following strategies, targets and line of actions: -

Strategy 1: Construct new WASH facilities

***Target 1*:** 2,800 primary and 1,400 secondary schools with access to basic drinking water by June 2026. The line of actions include: conducting needs assessment; review designs of water supply infrastructure; and construction of drinking water infrastructure.

***Target 2*:** 2,400 primary and 1,500 secondary schools with access to adequate improved sanitation by June 2026. The line of actions include: conducting needs assessment; review designs of sanitation infrastructure; construction of adequate improved toilets[4]; and develop plans for O&M.

***Target 3*:** 2,800 primary and 1,500 secondary schools with access to basic hand washing facilities by June 2026. The line of actions include: conduct needs assessment; review designs of hand washing infrastructure; construction of functional hand washing facilities; and develop plans for O&M.

Strategy 2: Rehabilitate existing WASH facilities

***Target 1*:** 1,500 primary and 1,000 secondary schools with rehabilitated infrastructures for basic drinking water by June 2026. The line of actions include: conducting needs assessment; review designs of water supply infrastructure; and rehabilitation of drinking water infrastructure.

***Target 2*:** 1,500 primary and 1000 secondary schools with rehabilitated sanitation infrastructures by June 2026. The line of actions include:

[4]include toilet for staff and pupils with special needs

conducting needs assessment; review designs of sanitation infrastructure; rehabilitation of adequate improved toilets; and develop plans for O&M.

***Target 3*:** 1,500 primary and 1,000 secondary schools with rehabilitated basic hand washing facilities by June 2026. The line of actions include: conduct needs assessment; review designs of hand washing infrastructure; rehabilitation of hand washing facilities; and develop plans for O&M.

Strategy 3: Compliance to the national school WASH standards.

The strategy enhances compliance to school WASH guidelines and standards through supervision and inspection for both primary and secondary schools. The aim is to ensure schools comply with standards and observe or sustain the WASH services. The target is 4,300 primary and 2,500 secondary schools comply with WASH standard by June 2026. The line of actions include: review of school WASH toolkit, develop inspection checklist, conduct training to teachers and school quality assurance officers, conduct cleanliness competition and rewarding.

Strategy 4: Establish school WASH clubs

School WASH clubs play a key role in ensuring the water supply, sanitation and hygiene facilities are maintained. It helps to engage pupils and teachers in managing WASH services within the school compound and substantially contribute to the sustainability of the services. The target is 8,000 primary and 1,500 secondary schools with functional sanitation club by June 2026. The line of actions include: review of school WASH toolkits; printing and dissemination of toolkits; training of Regional, Council, Ward and School levels; and establish sanitation clubs.

3.4.3.3. WASH in Public Places

Public WASH facilities are meant to offer services to individuals who visit public places on short or long-term basis. Such places include: recreational areas (such as festival venues, beaches, playgrounds, sports grounds, bars etc), as well as in markets (especially seasonal markets - *gulio*). The aim is to improve WASH services in public places/areas. Well-placed public toilets should be designed, constructed and maintained in ways that offer availability, affordability, safety/quality, acceptability, privacy and dignity.

Strategy 1: Engagement of Private Sector

The strategy aims to involve private sector to provide WASH services in public areas. The mode can either be through operation of facilities or both

construction and operation. The target is 300 private individuals or companies engaged in the provision of WASH services in public places by June 2026. The line of actions include: develop private sector engagement protocol; disseminate the protocol; promote investment; and regulate the service provision.

Strategy 2: Construct or rehabilitate WASH facilities in public places

***Target 1*:** 300 new toilets constructed in public places by June 2026. The line of actions include: development of designs; dissemination of the designs; training of masons; construction of improved WASH facilities; conduct compliance inspection.

***Target 2*:** 150 existing public toilets rehabilitated by June 2026. The line of actions include: conduct needs assessment; review of designs; training of masons; rehabilitation of WASH facilities; and conduct compliance inspection.

3.4.3.4. WASH in Transport hubs

Availability of adequate WASH services in bus stops, highways and railway stations is essential in the fight against open defecation which is common whenever these services are not adequately provided. The intervention aims to ensure availability of adequate WASH facilities for all users at transport interchanges and along main roads.

Strategy 1: Construct WASH service in transport hubs

WSDP III aims to construct WASH service facilities and also promote engagement of the private sector to commercialize services. The target is 60 WASH facilities constructed in transport hubs by June 2026. The line of actions include: develop guidelines and designs for WASH in transport hubs; disseminate the guidelines and designs; training; construct the infrastructures; promote investment; regulate the service provision; and develop and implement the O&M plan.

Table 9: Summary for WASH in Institutions and Public Areas Subcomponent

S/N	Intervention Area	Strategies	Target / Expected Output
1	WASH in HCFs	Capacitate Health Care Workers on WASH	At least 80% of HCWs are trained on WASH guidelines and tools by June 2026.
		Rehabilitate existing WASH facilities	Basic water supply infrastructures in 1,500 HCFs rehabilitated by June 2026.
			Basic sanitation infrastructures in 1,500 HCFs rehabilitated by June 2026.
			Basic hand washing infrastructures in 1,500 HCFs rehabilitated by June 2026.
			Basic waste management infrastructure in 1,500 HCFs rehabilitated by June 2026.
		Construct WASH facilities	New Basic water supply infrastructure constructed in 2,000 HCFs by June 2026
			New Basic sanitation infrastructure constructed in 2,000 HCFs by June 2026
			New Basic hand washing infrastructure constructed in 2,000 HCFs by June 2026.
			New Basic waste management infrastructure constructed in 2,000 HCFs by June 2026
		Provide adequate cleansing equipment and materials	All HCFs are provided with cleansing materials and equipment by June

S/N	Intervention Area	Strategies	Target / Expected Output
			2026
		Hygiene promotion	Hygiene promotion materials developed and disseminated into 80% of HCFs by June 2026
2	WASH in Schools	Construct new WASH facilities	2,800 primary and 1,400 secondary schools with access to basic drinking water by June 2026
			2,400 primary and 1,500 secondary schools with access to adequate improved sanitation by June 2026
			2,800 primary and 1,500 secondary schools with access to basic hand washing facilities by June 2026
		Rehabilitate existing WASH facilities	1,500 primary and 1,000 secondary schools with rehabilitated infrastructures for basic drinking water by June 2026
			1,500 primary and 1000 secondary schools with rehabilitated sanitation infrastructures by June 2026
			1,500 primary and 1,000 secondary schools with rehabilitated basic hand washing facilities by June 2026
		Compliance to the national school WASH standards	4,300 primary and 2,500 secondary schools comply with WASH standard by June 2026
		Establish school WASH clubs	8,000 primary and 1,500 secondary schools with functional sanitation club by June 2026

S/N	Intervention Area	Strategies	Target / Expected Output
3	WASH in Public Places	Engagement of private sector	300 Private individuals or companies engaged in the provision of WASH services in public places by June 2026
		Construct or rehabilitate WASH facilities in public places	300 new toilets constructed in public places by June 2026
			150 existing public toilets rehabilitated by June 2026
4	WASH in Transport hubs	Construct WASH service in transport hubs	60 WASH facilities constructed in transport hubs by June 2026

3.4.4. Social Behaviour Change Communication Campaign and Hygiene Promotion subcomponent

The subcomponent deals with interventions around behaviour change and hygiene promotion. The essence is to sustain changes that occurred as a result of previous intervention in WSDP II while also engaging new people in observing hygienic practices and use of improved sanitation facilities. The planned intervention areas, strategies, targets and line of actions to be employed are detailed below.

3.4.4.1. Social Behaviour Change Communication Campaign

Tanzania has used a combination of approaches including Community-Led Total Sanitation (CLTS), market-based approaches and Social Behavioural Change Communication (SBCC) to trigger sanitation demand and supply chain development to facilitate the uptake of improved latrines. The aim of intervention is to eliminate open defecation and increase access to improved sanitation and hygiene services. The strategies, targets and line of actions for this intervention are as follows.

Strategy 1: Triggering behaviour change to the community

***Target 1*:** 95% of the target population is reached by messages regarding use of basic sanitation facilities and elimination of all forms of open defecation, hand washing and MHH by June 2026. The line of actions include: design and implementation of campaigns; promote research on behaviour change; production of messages; dissemination of messages; and monitoring and evaluation.

***Target 2*:** All regions are reached by ground activation events by June 2026. The line of actions include: development of ground activation plan; mobilization of leaders and communities; conduct the activations; and conduct monitoring and evaluation.

Strategy 2: Enforcement of Public Health Laws

***Target 1*:** Open defecation eliminated by June 2026. The line of actions include: review of the existing Public Health Act, 2019 and its Regulations; Dissemination of the reviewed PHA and Regulations; conduct public awareness regarding the reviewed PHA and Regulations; and enforce the PHA and Regulations.

***Target 2*:** 6000 villages/mitaa achieves Community Wide Sanitation (CWS) status by June 2026. The line of actions include: assess mitaa/villages with CWS status; facilitate the mitaa/villages to formulate and enforce bylaws.

3.4.4.2. Baby WASH

Baby WASH refers to behaviour and practices that affect children under five years of age such as on WASH-safe births and safe management and disposal of human and animal faeces. It also includes preventing babies from putting dirt and animal faeces into their mouth, protected infant play and eating spaces as well as attention to the supply chain for products such as nappies and potties. Baby WASH in public places includes parent/caretakers and child facilities containing baby-changing amenities and free private breastfeeding areas.

This intervention aims to break the transmission route of faecal oral diseases to children below the age of five who suffer the most on diarrhoea, soil transmitted helminths (STH), dysentery etc. Implementation will be through the following strategies, targets and line of actions.

Strategy 1: Capacitate baby WASH

Target 1: 25% of Community Health Workers, Nurses and Health Officers are oriented on Baby WASH by June 2026. The line actions include: develop guidelines and tools; build capacity of the community health workers, Nurses and Health officers at the grassroot level. Also, carry out sessions to disseminate messages to mothers and care givers while visiting clinics.

***Target 2*:** 5% annual increase of the target population practice baby WASH package by June 2026. The line of actions include: develop and implement

baby WASH guidelines and toolkits; dissemination of the guidelines and toolkits; assess baby WASH status; supervision and monitoring.

3.4.4.3. Menstrual Health and Hygiene Management

The intervention aims to facilitate women and girls at getting adequate facilities for management of menses at household, schools, and other public places. The recommended strategic approaches for achieving this intervention are discussed below:

Strategy 1: Provide targeted support for adolescent girls in school

Primary schools will be supported with menstrual management materials for addressing the emergences that may occur to adolescent girls. Also, as part of capacity building and intensification of MHH activities in school, the WSDP III will train matrons and patrons for each school to enable the transfer of right knowledge to pupils including boys. The target is all primary schools supported with emergence sanitary material by June 2026. The line of actions include: build capacity to matrons; develop MHH promotional materials; conduct needs assessment; provide emergency kits (pads, soap, skirt and pants).

Strategy 2: Provide MHH facilities in school and public places

***Target 1*:** At least 50% of schools with girls are provided with MHH facilities by June 2026. The line of actions include: Develop MHH guidelines and toolkits; provision of collection and disposal facilities for used sanitary pads; develop and implement O&M plan for MHH facilities.

***Target 2*:** At least 50% of schools with girls have trained matrons on MHH by June 2026. The line of actions include: Conduct needs assessment; train ToTs; train school matrons and patrons.

Table 10: Summary for Social Behaviour Change Communication Campaign and Hygiene Promotion Subcomponent

S/N	Intervention Area	Strategies	Target / Expected Output
1	Social Behaviour Change Communication campaign	Triggering behaviour change to the community	95% of the target population is reached by messages regarding use of basic sanitation facilities and elimination of all forms of open defecation, hand

S/N	Intervention Area	Strategies	Target / Expected Output
			washing and MHH by June 2026
			All regions are reached by ground activation events by June 2026
		Enforcement of Public Health Laws	Open defecation eliminated by June 2026
			6,000 villages/mitaa achieve Community Wide Sanitation (CWS) status by June 2026
2	Baby WASH	Capacitate baby WASH	25% of Community Health Workers, Nurses and Health Officers are oriented on Baby WASH by June 2026
			5% annual increase of the target population practice baby WASH package by June 2026
3	Menstrual Health and Hygiene Management	Provide targeted support for adolescent girls who are still in school	All primary schools supported with emergency sanitary material by June 2026
		Provide MHH facilities in school and public places	At least 50% of schools with girls are provided with MHH facilities by June 2026
			At least 50% of schools with girls have trained matron on MHH by June 2026

3.5. Component V- Programme Coordination and Delivery Support

The objectives of the component are to enhance planning, coordination, monitoring and evaluation; and institutional strengthening and working environment. The component encompasses four subcomponents namely Policy, Planning and Fiduciary Management; Coordination, Monitoring and Evaluation; Institutional Strengthening and Capacity Building; and Crosscutting Issues. The subcomponents with their respective intervention areas are as follows:

3.5.1. Policy, Planning and Fiduciary Management Subcomponent

This subcomponent has three intervention areas namely policy and legal framework; planning and budgeting; and fiduciary management. The areas of intervention, targets and line of actions for policy, planning and fiduciary management are as follows: -

3.5.1.1. Policy and Legal Framework

Water sector legal and policy framework has been changing over time since initiation of Water Sector Development Programme in 2006 due to various changes in political, economic, national and international environment. Recognizing these dynamics, this intervention is geared towards facilitating review and harmonization of water sector related policies, strategies and legal frameworks for improved sector and programme performance. This can be achieved by implementing the following strategies, targets and line of actions:

Strategy 1: Harmonization of water sector policy and legal frameworks

Target 1: Policy, strategy and legal tools for water sector reviewed by June 2026. The line of actions include: conduct assessment of policy and legal frameworks implementation; promote stakeholders' engagement on policy and legal frameworks harmonisation; finalize the review of water policy and strategy; conduct training on formulation of policy and legal frameworks; and review and prepare sector regulations and MoU.

Target 2: Water sector policy and legal tools disseminated and enforced by June 2026. The line of actions include: awareness creation on policy and legal frameworks; publish policy and legal tools; translate and disseminate policy and legal tools into simple language; and facilitate the provision of legal support to stakeholders.

3.5.1.2. Planning and Budgeting

Sector Wide Approach to Planning (SWAP) intended to eliminate overlaps and duplication of efforts in programme implementation has been practiced since WSDP initiation in 2006. However, overtime divergence has been observed whereby some Development Partners preferred earmarked undertakings instead of basket which made integrated planning and budgeting to be challenging. Therefore, this intervention ensures coherence, integrated and participatory sector plans and budgets. This can be achieved by implementing the following strategies, targets and line of actions.

Strategy 1: Capacitate sector in planning and budgeting

Target 1: Sector capacity in planning and budgeting improved by June 2026. The line of actions include: preparation of training materials, conducting of trainings on planning and budgeting; develop and implement guidelines for project preparation and implementation; and training on project cycle management, proposal writing and business plans development.

Target 2: Water sector plans and budgets prepared annually by June 2026. The line of actions include: financial mobilization; preparations of projects and programs; preparation of Medium-Term Expenditure Framework and Medium-Term Strategic plans; conduct public expenditure reviews; preparation and review of WSSAs and BWBs business plans; prepare water sector financing and investment plan; and prepare sector budget and action plan.

Target 3: One (1) non-traditional source mobilized by each BWBs; Water Institute; RUWASA; 20 WSSAs; two (2) by NWF and three (3) by MoW by June 2026. The line of actions include: prepare project concept notes; identify and engage potential financiers; prepare project proposals; conduct pre-feasibility studies; conduct training to Implementing Agencies on project cycle management, proposal writing and business plans development; prepare/review Resource Mobilization Strategy; and conduct training on resource mobilization.

3.5.1.3. Fiduciary Management

Fiduciary management involves financial management, audits and procurement management of public financial resources. The aim of this intervention is to improve financial transparency, management and accountability in the sector. This can be achieved by implementing the following strategies, targets and line of actions.

Strategy 1: Provide financial management and controls in the sector

Target 1: All water sector Implementing Agencies obtain unqualified audit opinion annually. The line of actions include: conducting training in financial management and controls, installation and updating financial management systems; prepare responses to external audit recommendations; prepare annual financial reports; prepare and implement annual procurement plans; prepare and update inventory of assets; and develop and review audit procedures and systems for safeguarding sector assets.

Target 2: One (1) technical and four (4) financial audits carried out by June 2026. The line of actions include: prepare and implement strategic audit plans; conduct performance audit; facilitate preparation of financial and technical audit reports; prepare/review financial risk management frameworks; build capacity on financial and audits report writing; and conduct training on audit procedures.

3.5.2. Coordination, Monitoring and Evaluation Subcomponent

Coordination is designed to provide a clear mechanism that facilitates efficiency in implementation of the programme through resource optimization and reduction of project fragmentation, overcrowding and overlaps. Monitoring and Evaluation is designed to generate information for evidence-based decisions, improve performance and accountability. This can be achieved by implementing the following strategies, targets and line of actions.

Strategy 1: Conduct coordination, monitoring and evaluations

Target 1: Four (4) TWGs, one (1) steering committee, two (2) JSM, one (1) JWSR, and one (1) Maji Week event conducted annually. The line of actions include: review and implement water sector dialogue mechanism; review/prepare coordination frameworks for all water sector projects; prepare and implement stakeholder engagement strategy; conduct Joint Water Sector Missions and Reviews; facilitate Maji Week commemoration; prepare and disseminate Annual Water Sector Status Reports; and prepare/review private sector engagement strategy.

Target 2: Monitoring and Evaluation (M&E) systems prepared and implemented by June 2026. The line of actions include: reviewing and implementing Integrated Water Sector M&E System; develop and implement sector M&E sub systems; conduct programme and projects monitoring;

conduct programme and projects mid-term reviews and evaluation; and prepare and disseminate annual water sector performance reports.

Table 11: Summary for Policy, Planning and Fiduciary Management Subcomponent

S/N	Intervention Area	Strategies	Target / Expected Output
1	Policy and Legal Framework	Harmonization of water sector policy and legal frameworks	Policy, strategy and legal tools for water sector reviewed by June 2026.
			Water sector policy and legal tools disseminated and enforced by June 2026.
2	Planning and Budgeting Intervention	Capacitate sector in planning and budgeting	Water sector plans and budgets prepared annually by June 2026.
			Sector capacity in planning and budgeting improved by June 2026.
			One (1) non-traditional source mobilized by each BWBs; Water Institute; RUWASA; 20 WSSAs; two (2) by NWF and three (3) by MoW by June 2026
3	Fiduciary Management	Provide financial management and controls in the sector	All water sector Implementing Agencies obtain unqualified audit opinion annually
			One (1) technical and four (4) financial audits carried out by June 2026
4	Coordination, Monitoring and Evaluation Subcomponent	Conduct coordination, monitoring and evaluations	Four (4) TWGs, one (1) steering committee, two (2) JSM and one (1) Maji Week event conducted annually
			M&E systems prepared and implemented by June 2026

3.5.3. Institutional Capacity Building Subcomponent


In order for the WSDP III to perform its core functions, the institutional capacity should be strengthened and working environment improved. This can be achieved by the following intervention areas, strategies, targets and line of actions.

3.5.3.1. Water Resources Management and Development Institutions

The aim of this intervention area is to ensure Water Resources Management institutions are capacitated to effectively perform their management roles and coordinate development activities across sectors. The strategies, targets and lines of actions under this intervention are as follows:

Strategy 1: Construct and furnish WRM Institutions and adequately equip with operational tools

Target 1: Complete construction of offices for Lake Rukwa Basin, Lake Nyasa Basin sub office and Pangani Basin and furnish them by June 2026. The line of actions include assessing remaining works; finalize construction through force account for Lake Rukwa and Lake Nyasa Basins; procurement of contractors for Pangani and Lake Nyasa construction; and procure and furnish offices.

Target 2: Nine (9) Offices for Catchment Water Committees constructed and furnished by June 2026. The line of actions include: procurement of

contractors; construction of offices through force account; and procure and furnish offices.

Target 3: 80 offices for Water Users Associations constructed and furnished by June 2026. The line of actions include: procurement of contractors; construction of offices through force account; and procure and furnish offices.

Target 4: Center of Excellence (CoE) building constructed and furnished by June 2026. The line of actions include: complete construction of CoE building; procure and furnish the offices; and to supervise construction.

Target 5: Center of Excellence operationalized by June 2026. The line of actions include: procurement/hiring of individual consultants for the CoE core team such as modelers, RS/GIS and other technical experts; facilitate trainings to CoE staff; facilitate attachment of staff to other applied research institutions; disseminate research findings; procurement and supply of motor vehicles and working tools; and create awareness on research findings of the CoE.

Strategy 2: Provide tailor made and long-term trainings on WRMD

***Target 1*:** Six (6) WRMD tailor-made trainings conducted to staff by June 2026. The line of actions include: identification of training needs; facilitate trainings; and organize/participate in seminars, workshops and conferences.

Target 2: Facilitate 30 staff to attend long-term and 300 staff to attend short-term trainings on WRMD by June 2026. The line of actions include: identification of training needs; and facilitate staff to attend short and long-term trainings.

Strategy 3: Capacitate Water Resources Management Institutions

Target 1: Three (3) Catchment water committees (CWCs), 3 Sub-catchment Water Committees (SCWCs) and 36 Water Users Associations (WUAs) established by June 2026. The line of actions include: identify areas requiring establishment of WUAs; demarcation and Gazettement of Sub-Catchments and Catchments; formation of CWCs, SCWCs and WUAs; and conduct training; and facilitate learning tours.

Target 2: Trainings and working tools provided to all BWBs, CWCs and WUAs by June 2026. The line of actions include: identification of requirements for training and working tools; procurement and supply of

motor vehicles and working tools; conduct training; and facilitate learning tours; and attachment of trainees to projects and research works.

3.5.3.2. Water Quality Management Institutions

The sustainability of water quality management influenced by institutional strengthening and capacity building by creating good working environment and improving the capacity of water quality management institutions. The strategies, targets and lines of actions under this intervention are as follows:-

Strategy 1: Capacitate water quality management institutions

Target 1: Five (5) water quality laboratories building constructed and for (4) mobile laboratories procured by June 2026. The line of actions include: prepare/review detail design for water laboratory buildings and office; procurement of mobile laboratories; construct and rehabilitate the water laboratories, procure operational equipment, chemicals, motor vehicle for water laboratories.

Target 2: Five (5) water quality laboratories accredited by June 2026. The line of actions include: implement field and laboratory quality assurance and quality control programs; preparation of laboratory quality manuals; develop laboratory risk management plan; develop water laboratory safety guidelines; prepare field and laboratory protocols; implement field and laboratory safety management programs; equip the laboratories with modern equipment, appropriate chemicals and installations; and facilitate Annual Surveillance assessment of Accredited Water Quality Laboratories

Target 3: 17 water quality laboratories capacitated by June 2026. The line of actions include: staff recruitment; calibrate analytical instruments in 17 water laboratories; procure laboratories equipment, Chemicals and scientific tools; and conduct audit for 17 water quality laboratories on compliance to ISO/ICE 17025:2017 requirements; undertake inter and intra laboratory proficiency test for chemicals and microbiological analysis performance for 17 Laboratories.

Strategy 2: Provide short and long-term trainings on water quality management.

Target 1: Four (4) Water Quality Management tailor-made trainings conducted to staff by June 2026. The line of actions include: conduct training needs assessment; develop and implement training plan; facilitate on-job trainings; and participate in water quality related seminars, workshops and conferences.

Target 2: 15 staff attended long term and 120 staff attended short-term trainings on Water Quality Management facilitated by June 2026. The line of actions include: conduct training need assessment; facilitate staff to attend short and long-term trainings in and out of the country.

3.5.3.3. Rural Water Supply and Sanitation Institutions

This intervention provides support to strengthen institutions including Ministry of Water, RUWASA, Regional Secretariats, Local Government Authorities (LGAs) and CBWSOs. The aim of this intervention is institutional capacity and working environment improved. Under WSDP III focus areas are management support and capacity building whereby strategies, targets and line of actions are as follows:-

Strategy 1: Provide management support and capacity building

Target 1: All CBWSOs supported technically and financially in order to achieve self-sufficiency by June 2026. The line of actions include: create awareness and enforce compliance to laws and regulations; formulation of by-laws and guidelines; clustering of community entities; provide training on financial mobilisation and management, procurement procedures, planning and report writing; and conducting monitoring and evaluation.

Target 2: 153 offices buildings for RUWASA at national, regional and district level and 3,302 office buildings for CBWSOs constructed/rehabilitated and furnished by June 2026. The line of actions include: rehabilitation and construction of office buildings; purchasing of working tools and furniture; procurement of motor vehicles and motorcycles; develop management information systems; develop training need assessment; conduct trainings; and establish supply chain hub for spare parts and treatment chemicals.

3.5.3.4. Urban Water Supply and Sanitation Institutions

The institutional strengthening intervention is composed of management support and capacity building. Management support involves capacitating WSSAs, MoW and other key institutions in the implementation of policy, programmes and in compliance to the legal framework. Capacity building involves improving working environment, working tools and training of staff at all levels. The aim is to facilitate effective and sustainable provision of water supply services. The strategies, targets and line of actions include:

Strategy 1: Provide management capacity in service delivery.

The target is 16 WSSAs transformed to category “B” and eight **(8)** to category “A” by June 2026. The line of actions include: establish baseline for

the WSSAs that require management support; facilitate compliance to laws and regulations; provide technical and managerial assistance; facilitate audit services; provide technical and financial support; facilitate formulation of by-laws; conduct clustering of water utilities in urban area; facilitate training on procurement procedures, financial mobilisation and management, planning and report writing; and facilitate monitoring and evaluation.

Strategy 2: Capacitate WSSAs.

Target 1: Human resource development plans developed and implemented by June 2026. The line of actions include: develop training needs assessment; prepare and implement capacity development plans; conduct trainings; staff recruitment; and procurement of working tools; procurement of motor vehicles and motorcycles; and develop management information systems.

Target 2: 16 office buildings for WSSAs constructed/rehabilitated and furnished by June 2026. The line of actions include: design, rehabilitate and construct office buildings; and purchase of office furniture.

3.5.3.5. Ministry and Other Implementing Institutions

The effective implementation of WSDP III relies on adequate capacity of the Ministry of Water and other institutions such as Water Institute and the National Water Fund. The programme will build capacity by providing office working tools; staff recruitment; office building as well as provision of training to staff. The strategies, targets and lines of actions under this intervention are as follows:

Strategy: Strengthen Water Sector institutions and capacity building

Target 1: Office buildings for MoW, and NWF constructed/rehabilitated and furnished by June 2026. The line of actions include: construct/rehabilitate office buildings; procure working tools and equipment; furnish offices; procure transport facilities; and procurement and installation of ICT tools and systems.

Target 2**:** Building facilities for Water Institute constructed/rehabilitated and furnished by June 2026. The line of actions include: Staff recruitment; construct/rehabilitate hostel, classroom, laboratory and office buildings; procure working tools and equipment; furnish hostels, classrooms and offices; procure transport facilities; and procure and installation of ICT tools and systems.

Target 3: Water Sector Institutions capacitated by June 2026. The line of actions include: review of Training Needs Assessments; review and implement sector Capacity Development plans; develop and implement training plan; conducting short- and long-term trainings; and conduct HR audit.

Table 12: Summary for Institutional Capacity Building Subcomponent

S/N	Intervention Area	Strategies	Target/Expected Output
1	Water Resources Management and Development Institutions	Construct and furnish of WRM Institutions and adequately equipped with operational tools	Complete construction of offices for Lake Rukwa Basin, Lake Nyasa Basin sub office and Pangani Basin and furnish them by June 2026
			Nine (9) offices for Catchment Water Committees constructed and furnished by June 2026
			80 offices for Water Users Associations constructed and furnished by June 2026
			Center of Excellence (CoE) building constructed and furnished by June 2026
			Center of Excellence capacity strengthened by June 2026
		Provide Tailor made and long-term trainings on WRMD	Six (6) WRMD Tailor-made trainings conducted to staff by June 2026
			Facilitate 30 staff to attend long term 300 staff to attend short term trainings on WRMD by June 2026
		Capacitate Water Resources Management Institutions	Three (3) Catchment water committees (CWCs), 3 Sub-catchment Water Committees (SCWCs) and 36 Water Users Associations (WUAs) established and strengthened by June 2026
			Trainings and working tools provided to all BWBs, CWCs and WUAs by June 2026

S/N	Intervention Area	Strategies	Target/Expected Output
2	Water Quality Management Institutions	Capacitate Water Quality Management	Five (5) water laboratories building constructed and for (4) mobile laboratories procured by June 2026
			Accreditation of five (5) water laboratories facilitated by June 2026
			17 Water quality laboratories strengthened by June 2026
		Provide short and long-term trainings on water quality management are provided	Four (4) Water Quality Management Tailor-made trainings conducted to staff by June 2026
			15 staff attended long term and 120 staff attended short term trainings on Water Quality Management facilitated by June 2026
3	Rural Water Supply and Sanitation Institutions	Provide management support and capacity building	All CBWSOs supported technically and financially in order to achieve self-sufficient by June 2026
			153 offices buildings for RUWASA at national, regional and district level and 3,302 office buildings for CBWSOs constructed/rehabilitated and furnished by June 2026
4	Urban Water Supply and Sanitation Institutions	Provide management capacity in service delivery.	16 WSSAs transformed to category “B” and eight (8) to category “A” by June 2026
		Capacitate WSSAs	Human resource development plans developed and implemented by June 2026
			16 offices buildings for WSSAs constructed/rehabilitated and furnished by June 2026
5	Ministry and Other Implementing Institutions	Strengthen Water Sector institutions and	Office buildings for MoW, WI and NWF constructed/rehabilitated and

S/N	Intervention Area	Strategies	Target/Expected Output
		capacity building	furnished by June 2026
			Building facilities for Water Institute constructed / rehabilitated and furnished by June 2026
			Water Sector Institutions capacity enhanced by June 2026

3.5.4. Crosscutting Issues Subcomponent

The subcomponent focus on crosscutting issues that influence all aspects of the programme and integrates them throughout the programme implementation. The intervention areas are elaborated as follows:

3.5.4.1. Environmental and Social Management

The Environmental and Social Management is essential on enhancing community engagement, sustainability of the programme and biodiversity stewardship for sustainable development. The National Environmental Policy (*NEP 2021*) calls for sustainable management of water sources including public participation, awareness and enhanced collaboration. The Environmental Management Act No 20 of 2004 (EMA 2004) with its regulations require all projects to comply with Environmental and Social Safeguards prior the implementation.

The aim of the intervention is to enhance planning, coordination and monitoring for sustainable environmental and social management systems in the water sector. This can be achieved by implementing the following strategies, targets and line of actions.

Strategy 1: Provide technical support in enhancing compliance of water projects to environmental and safeguards guidelines

Target 1: Environmental and social management guidelines reviewed and implemented by June 2026. The lines of actions include: review of the Water Specific EIA and Environmental Audit Guidelines for effective project screening, preparation and review of Environmental Social Impact Assessment and Environmental Audit Guidelines; prepare/review and implement Stakeholder Engagement Plan for specific water projects; review, implement and monitor RMF and ESMF; monitor Environmental and Social Management Plans (ESMPs) compliance for water and sanitation projects;

and conduct training and dissemination of environmental and social safeguards instruments.

Target 2: Environmental and Social Impact Assessment (ESIA) of 90 water projects of type A and B1 (Water supply, Sanitation and dams) and 200 projects of type B2 coordinated and implemented by June 2026. The line of actions include: Undertake Environmental and Social Screening; environmental and social assessment; Prepare detailed Environmental and Social Management Plan (ESMP) for B2 projects; ESIA review; undertake and coordinate Environmental and Social Audits; undertake community sensitization, carryout sites verification and stakeholders' workshops.

Target 3: Land acquisition and resettlement for water projects and sources facilitated by June 2026. The line of actions include: coordinate land valuation; coordinate the review and implementation of Resettlement Action Plans; conduct site verification; coordinate compensation; and conduct stakeholders' engagement.

3.5.4.2. Gender Mainstreaming

Gender mainstreaming in the water sector is necessary in ensuring gender empowerment and equity for managing water resources and access to clean and safe water and sanitation services. The aim of the intervention is to promote and strengthen gender mainstreaming in the water sector. This can be achieved by implementing the following strategy, targets and line of actions.

Strategy 1: Ensure gender equity at all levels of the water sector.

Target 1: Women participation in decision-making promoted to at least 30% by June 2026. The line of actions include: conduct awareness seminars; undertake gender-mainstreaming trainings; and facilitate women participation in decision-making.

Target 2: Promote gender equity in water sector service delivery by June 2026. The line of actions include: conduct gender impact studies and assessments; prepare/review water sector gender strategy; disseminate gender strategy to stakeholders; train gender champions on the water sector; and sensitize and advocate on gender equity in water sector.

3.5.4.3. HIV/AIDS and Non Communicable Diseases

HIV/AIDS and non-communicable diseases have adverse effects on the provision of services to the communities by affecting human resources and the effective operation of the sector institutions. The aim is to mainstream prevention of HIV/AIDS and non-communicable diseases in the water sector. This can be achieved by implementing the following strategy, targets and line of actions.

Strategy 1: Promote preventive education on HIV/AIDS, non-communicable diseases and other pandemic diseases in the water sector.

Target 1: HIV/AIDS programme implemented in water sector by June 2026. The line of actions include: conduct trainings on HIV/AIDS; training of trainers on enhancing HIV/AIDS awareness; facilitate voluntary counselling and testing; conduct awareness on HIV/AIDS to water sector staff; conduct HIV/AIDS situation analysis; and provide support to HIV/AIDS affected staff.

Target 2: Non-communicable diseases programme implemented in water sector by June 2026. The line of actions include: conduct trainings on non-communicable diseases; training of trainers on non-communicable diseases awareness; facilitate voluntary counselling and testing; conduct awareness on non-communicable diseases and other pandemic diseases to water sector staff; develop and implement staff health and fitness programs; conduct non-communicable diseases situation analysis; and provision of nutritional and lifestyle education.

3.5.4.4. Governance and Corruption

Good governance and prevention of corruption is necessary in the water sector for fair and inclusive provision of water supply and sanitation services as well as the management and development of water resources. Therefore, promotion of good governance and prevention of corruption will be implemented throughout the programme with involvement of all stakeholders in the water sector. The aim of the intervention is to ensure good governance and prevention of corruption in the water sector. This can be achieved by implementing the following strategy, targets and line of actions.

Strategy 1: Ensure good governance and prevention of corruption at all levels in water sector

Target 1: Good governance in water sector institutions promoted by June 2026. The line of actions include: conducting training programs on ethics, leadership, accountability and good governance; formulate Integrity and ethics committee; and develop and implement sector good governance plan.

Target 2: National Anti-corruption Strategy implemented by June 2026. The line of actions include: prepare/review and implement code of ethics; review Client Service Charters (CSC); sensitize community on Client Service Charter (CSC); establish complaints receiving mechanisms; conduct oversight visit to all implementing institutions; train sector staff on regulations of code of ethics; conduct regular monitoring to staff to encourage conformity; and develop and implement action plan for preventing and combating corruption.

3.5.4.5. Private Sector Engagement

Strategy 1: Promote private sector participation in water sector

Target 1: nine (9) public and private sector cooperation arrangements in water sources conservation established and implemented by June 2026. The line of actions include: identify potential partners in conservation and protection programmes; create awareness on water resources protection and conservation; identify and apply best traditional practices for water resources protection and conservation; facilitate the integration of water source conservation matters in formal education curriculum; facilitate tree nurseries in schools, private owned premises and public institutions; and promote tree planting at water sources.

Target 2: to have 25 private investors participated in provision of water supply services by June 2026. The line of actions include: develop PPP guidelines for water sector; identify viable water supply projects /areas for private sector engagement; conduct private sector engagement meetings on provision of water supply services; and review guidelines of informal service providers (water tankers, private borehole and water vendors).

Target 3: to have five (5) investors from the private sector in the provision of sewered sanitation services by June 2026. The line of actions include: identify investment opportunities in the provision of sewered sanitation services; conduct assessment on private sector engaged in sanitation

services; develop a strategy for private sector participation; conduct investors' forums; and promote public private partnership on provision of sewered sanitation services.

Target 4: to engage private sector for investing in three (3) water supply projects by June 2026. The line of actions include: review and implement private sector engagement action plan; and prepare viable water supply projects for private sector investments.

Target 5: to increase private sector participation in provision of non-sewered sanitation services by June 2026. The line of actions include: review of investment opportunities and privileges to attract more investors in provision of non-sewered sanitation; develop strategy for private sector participation in provision of non sewered sanitation services; promote PPP on provision of non sewered sanitation services; and establish web-based database for non sewered sanitation services.

Table 13: Summary for Crosscutting Issues Subcomponent

S/N	Intervention Area	Strategies	Target / Expected Output
1	Environmental and Social Management	Ensure provision of technical support in enhancing compliance of water projects to environmental and safeguards guidelines	Environmental and social management guidelines reviewed and implemented by June 2026
			Environmental and Social Impact Assessment (ESIA) of 90 water projects of type A and B1 (Water supply, Sanitation and dams) and 200 projects of type B2 coordinated and implemented by June 2026
			Land acquisition and resettlement for water projects and sources facilitated by June 2026
2	Gender Mainstreaming	Ensure gender equity at all levels of the water sector	Women participation in decision-making promoted to at least 30% by June 2026
			Promote gender equity in water sector service

S/N	Intervention Area	Strategies	Target / Expected Output
			delivery by June 2026
3	HIV/AIDS and None Communicable Diseases	Promote preventive education on HIV/AIDS, and non-communicable diseases and other pandemic diseases in the water sector	HIV/AIDS programme implemented in water sector by June 2026
			Non-communicable diseases programme implemented in water sector by June 2026
4	Governance and Corruption Intervention	Ensure good governance and prevention of corruption at all levels in water sector	Good governance in water sector institutions promoted by June 2026
			National anticorruption strategy implemented by June 2026
5	Private Sector Engagement	Promote private sector participation in water sector	Nine (9) public and private sector cooperation arrangements in water sources conservation established and implemented by June 2026
			25 private investors participated in provision of water supply services by June 2026
			Five (5) investors from the private sector in the provision of sewered sanitation services by June 2026
			Engage private sector for investing in three (3) water supply projects by June 2026
			Private sector participation in provision of non-sewered sanitation services increased by June 2026

CHAPTER FOUR

4.0. PROGRAMME FINANCING

One of the key pre-requisites for successful and sustainable implementation of the WSDP III is availability of reliable, predictable and steady financial resources. Thus, the capacity to sustainably mobilize both public and private resources is critical for effective implementation of WSDP III. This chapter sets out financial requirements, financial resources to be mobilized and financing modalities from various sources for the implementation of the programme. The chapter is further expounded as follows:

4.1. Financial Requirement

The overall financial requirements of WSDP III are derived by combining the budgets of programme components and are estimated to be USD 6,465,486,807.44. The requirements emanate from the cost for implementation of Water Resources Management and Development Projects 2,102,352,173.91 USD; Water Quality Management projects 45,700,317.39 USD; Water Supply Projects 2,601,417,108.00 USD; Sanitation and Hygiene Projects 1,226,935,985.43 USD; and Programme Coordination and Delivery Support 489,081,222.71 USD. Detailed financing requirement for each programme component is provided in the following section: -

4.1.1. Financial Requirement by Component

The detailed financial requirement for each component is provided by **Tables 14 - 18**.

a) Water Resources Management and Development

Table 14: Financial Resources Requirement for Water Resources Management and Development

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
Water Resources Management	Monitoring and assessment	1,497,565.22	4,193,182.61	4,792,208.69	4,492,695.65	14,975,652.17
	Water resources planning	2,605,652.17	7,295,826.09	8,338,086.96	7,816,956.52	26,056,521.74
	Water allocation	1,828,260.87	5,119,130.44	5,850,434.78	5,484,782.61	18,282,608.70
	Protection and conservation of water sources	5,231,608.70	14,648,504.35	16,741,147.83	15,694,826.09	52,316,086.96
	Water use and demand management	625,652.17	1,751,826.09	2,002,086.96	1,876,956.52	6,256,521.74
	Dam safety management	150,869.57	422,434.78	482,782.61	452,608.70	1,508,695.65
	Transboundary water resources	945,652.17	2,647,826.09	3,026,086.96	2,836,956.52	9,456,521.74
	Flood, drought, storm water and other related disaster management	345,217.39	966,608.69	1,104,695.65	1,035,652.17	3,452,173.91

	Climate change and variability in relation to water resources, water quality, water supply and sanitation	203,478.26	569,739.13	651,130.44	610,434.78	2,034,782.61
Total Subcomponent		**13,433,956.52**	**37,615,078.26**	**42,988,660.87**	**40,301,869.57**	**134,339,565.22**
Water Resources Development	Inter and Intra Basin Water Transfers	142,180,434.78	398,105,217.39	454,977,391.31	426,541,304.35	1,421,804,347.83
	Water Sources Development	54,620,826.09	152,938,313.04	174,786,643.48	163,862,478.26	546,208,260.87
Total Subcomponent		**196,801,260.87**	**551,043,530.44**	**629,764,034.78**	**590,403,782.61**	**1,968,012,608.70**
Total Component Cost		**210,235,217.39**	**588,658,608.70**	**672,752,695.65**	**630,705,652.18**	**2,102,352,173.91**

b) Water Quality Management

Table 15: Financial Resources Requirement for Water Quality Management

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
Water Quality Assessment and Monitoring	Ambient water quality assessment and monitoring	2,111,147.83	5,911,213.91	6,755,673.04	6,333,443.48	21,111,478.26
	Drinking water quality assessment and monitoring	1,725,876.09	4,832,453.04	5,522,803.48	5,177,628.26	17,258,760.87
	Wastewater quality assessment and monitoring	271,058.70	758,964.35	867,387.83	813,176.09	2,710,586.96

Total Subcomponent		**4,108,082.61**	**11,502,631.31**	**13,145,864.35**	**12,324,247.83**	**41,080,826.09**
Water Quality Technical Support and Development	Management support	370,429.57	1,037,202.78	1,185,374.61	1,111,288.70	3,704,295.65
	Water Quality Research and Development	91,519.57	256,254.78	292,862.61	274,558.70	915,195.65
Total Subcomponent		**461,949.13**	**1,293,457.56**	**1,478,237.22**	**1,385,847.39**	**915,195.65**
Total Component Cost		**4,570,031.74**	**12,796,088.87**	**14,624,101.56**	**13,710,095.22**	**45,700,317.39**

c) Water Supply

Table 16: Financial Resources Requirement for Water Supply

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
Rural Water Supply	Water supply infrastructure in rural areas	100,715,376.81	282,003,055.07	322,289,205.80	302,146,130.44	1,007,153,768.12
	Service Delivery, Demand Management and Regulation	9,912,347.83	27,754,573.91	31,719,513.04	29,737,043.48	99,123,478.26
Total Subcomponent		**241,664,537.97**	**110,627,724.64**	**309,757,628.99**	**354,008,718.84**	**331,883,173.91**
Urban Water Supply	Water supply infrastructure in urban areas	148,077,522.39	414,617,062.70	473,848,071.65	444,232,567.18	1,480,775,223.92
	Water Supply Service delivery in urban areas	332,608.70	931,304.35	1,064,347.83	997,826.09	3,326,086.96
	Water Services Demand Management	717,768.12	2,009,750.73	2,296,857.98	2,153,304.35	7,177,681.18
	Regulation of Water Supply Services in urban areas	386,086.96	1,081,043.48	1,235,478.26	1,158,260.87	3,860,869.57
Total Subcomponent		**149,513,986.16**	**418,639,161.26**	**478,444,755.72**	**448,541,958.49**	**1,495,139,861.62**
Total Component Cost		**520,283,421.60**	**780,425,132.40**	**780,425,132.40**	**520,283,421.60**	**2,601,417,108.00**

d) Sanitation and Hygiene

Table 17: Financial Resources Requirement for Sanitation and Hygiene

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
Sewered Sanitation	Sewered infrastructure	69,066,228.33	193,385,439.31	221,011,930.64	207,198,684.98	690,662,283.26
	Sewered service delivery and regulation	290,276.91	812,775.36	928,886.12	870,830.74	2,902,769.13
Total Subcomponent		**69,356,505.24**	**194,198,214.67**	**221,940,816.76**	**208,069,515.72**	**693,565,052.39**
Non Sewered Sanitation	Non sewered infrastructure and equipment	26,006,082.87	72,817,032.03	83,219,465.18	78,018,248.61	260,060,828.69
	Non sewered service delivery	691,304.35	1,935,652.17	2,212,173.91	2,073,913.04	6,913,043.48
Total Subcomponent		**26,697,387.22**	**74,752,684.21**	**85,431,639.09**	**80,092,161.65**	**266,973,872.17**
Sanitation and Hygiene in Institutions and Public Areas	WASH in health care facilities	4,911,739.13	13,752,869.56	15,717,565.22	14,735,217.39	49,117,391.30
	WASH in schools	19,430,410.44	54,405,149.22	62,177,313.39	58,291,231.31	194,304,104.35
	WASH in public places	470,652.17	1,317,826.09	1,506,086.96	1,411,956.52	4,706,521.74
	WASH in transport hubs	283,478.26	793,739.13	907,130.44	850,434.78	2,834,782.61
Total Subcomponent		**25,096,280.00**	**70,269,584.00**	**80,308,096.00**	**75,288,840.00**	**250,962,800.00**
Social Behaviour Change Community Campaign and Hygiene Promotion	Social behavior change communication campaign	268,252.17	751,106.09	858,406.96	804,756.52	2,682,521.74
	Baby WASH	39,130.44	109,565.22	125,217.39	117,391.31	391,304.35
	Menstrual health and hygiene	1,236,043.48	3,460,921.74	3,955,339.13	3,708,130.43	12,360,434.78

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
	management					
Total Subcomponent		**1,543,426.09**	**4,321,593.04**	**4,938,963.48**	**4,630,278.26**	**15,434,260.87**
Total Component Cost		**122,693,598.54**	**343,542,075.92**	**392,619,515.34**	**368,080,795.63**	**1,226,935,985.43**

e) Programme Coordination and Delivery Support

Table 18: Financial Resources Requirement for Programme Coordination and Delivery Support

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
Policy, Planning and Fiduciary Management	Policy and legal framework	95,217.40	266,608.72	304,695.68	285,652.20	952,174.00
	Planning and budgeting	229,565.22	642,782.61	734,608.69	688,695.65	2,295,652.17
	Fiduciary management	154,260.87	431,930.44	493,634.78	462,782.61	1,542,608.70
Total Subcomponent		**958,086.97**	**479,043.49**	**1,341,321.76**	**1,532,939.16**	**1,437,130.46**
Coordination, Monitoring and Evaluation	Coordination, Monitoring and Evaluation	461,304.35	1,291,652.17	1,476,173.91	1,383,913.04	4,613,043.48
Total Subcomponent		**461,304.35**	**1,291,652.17**	**1,476,173.91**	**1,383,913.04**	**4,613,043.48**
Institutional Strengthening and Capacity Building	Water resources management and development institutions	18,501,521.74	51,804,260.87	59,204,869.56	55,504,565.22	185,015,217.39
	Water quality management institutions	938,804.35	2,628,652.17	3,004,173.91	2,816,413.04	9,388,043.48

Sub-Component	Intervention Area	Financial Resource Requirement (USD)				
		2022/23	2023/24	2024/25	2025/26	Total
	Rural water supply and sanitation institutions	15,751,304.35	44,103,652.17	50,404,173.91	47,253,913.04	157,513,043.48
	Urban water supply and sanitation institutions	23,466,871.83	65,707,241.11	75,093,989.84	70,400,615.48	234,668,718.26
	Ministry and other implementing institutions	6,262,608.70	17,535,304.35	20,040,347.83	18,787,826.09	62,626,086.96
Total Subcomponent		**46,419,589.22**	**129,974,849.81**	**148,542,685.50**	**139,258,767.65**	**464,195,892.18**
Crosscutting Issues	Environment and social management	428,695.65	1,200,347.83	1,371,826.09	1,286,086.96	4,286,956.52
	Gender mainstreaming	84,956.52	237,878.26	271,860.87	254,869.57	849,565.22
	HIV/AIDS and non-communicable diseases	81,304.35	227,652.17	260,173.91	243,913.04	813,043.48
	Governance and corruption	94,347.83	264,173.91	301,913.04	283,043.48	943,478.26
	Private sector engagement	858,880.87	2,404,866.44	2,748,418.78	2,576,642.61	8,588,808.70
Total Subcomponent		**1,548,185.22**	**4,334,918.61**	**4,954,192.70**	**4,644,555.65**	**15,481,852.18**
Total Component Cost		**48,908,122.27**	**136,942,742.36**	**156,505,991.27**	**146,724,366.81**	**489,081,222.71**

4.2. Financial Resource Mobilization

Financial Resource Mobilization (FRM) is often considered as building a network from a wide range of financial resource providers and acquisition of their financial commitments to implement the programme. In order to meet the desired programme targets, the sum of financial resources mobilized should be sufficient to cover the costs of meeting the desired targets through concrete actions. It also involves making better use of and maximizing existing financial resources. Financial resource mobilization in the Water Sector is critical because it ensures the sustainability of water supply and sanitation services provision; management and development of water resources; and sustainability of water related institutions.

For improved mobilization of financial resources for investment in the water sector, innovative and market-oriented solutions such as blended financing, Municipal Bonds and public–private partnerships will be promoted during WSDP III implementation. The aims is to balance the dimensions of sustainable development; economic viability, social inclusion and environmental sustainability. Also, to provide a shared vision and shape collective action in support of a development path that incorporates these dimensions. Financial resource mobilization will ensure a clear, systematic, predictable and well-coordinated approach for soliciting, acquiring, utilizing, management, reporting, monitoring and evaluation of the programme funds.

4.3. Financing Sources and Modalities

The WSDP III will continue to use Government, Development Partners, Private Sector and other sources such as NGOs to mobilize finances for implementation of the programme. The programme will enhance financing modalities although they are likely not to deviate much from the existing financing modalities and frameworks within the general ongoing programmes and projects. The financing modalities employed under WSDP III are as follows:

4.3.1. Government Funding

This is the financing modality where funds are allocated through Central Government budget to the sector activities. It is among the dominant source of finance to the programme implementation and is mainly from domestic revenues. Traditional sources of domestic revenue are taxes and non-taxes including LGA own sources. Taxes on imports and domestic income and consumption are the most important and big sources of tax

revenues. The proportion of taxes on local goods (mostly in the form of value-added tax – VAT) and non-tax revenues collected by TRA is expected to grow hence the possibility of increased government share of allocation in water sector.

4.3.2. Basket Funding

This is the mechanism for pooling funds from various sources, typically governments, donors and the private sector to support priorities and ensure adequate resource allocation for agreed programme areas. Basket funds are characterized by common project documents, funding contracts and reporting/audit procedures with all donors. The modality ensures effective allocation of resources through participation of stakeholders in planning, execution and monitoring and evaluation. The mechanism also avoids fragmented system of financing with separate projects being funded by a range of different development partners as well as reduces transaction costs. In this regard, during phase III the Government preference is to continue with the Basket Fund Arrangement.

4.3.3. Earmarked Funding

In the circumstances where DPs country policies are strictly not in favour of using the basket funding, the Government allows flexibility for earmarked funding and standalone projects. The earmarked funding is a mechanism where funds are channelled to implement a specific predefined project and set of activities over an agreed period of time. The implementation of WSDP II, to some extent, adopted this financing mechanism. This was the preferred mechanism for some DPs as it acknowledges the identity of the funders. But due to the nature and multitude of water sector projects, the modality is cumbersome as different donors have different implementation requirements and reporting arrangements and leads into duplication of efforts. Also, it does not support SWAP and a single-expenditure program controlled by the GoT through government procedures for disbursement and accounting. As opposed to basket funding, earmarked funding does not serve as a motivation for sector dialogue, coordination, reporting, and joint supervision and monitoring among all stakeholders.

4.3.4. Innovative Financing Windows

These are financing mechanisms where alternative sources are harnessed to finance the programme/project activities. Currently, the innovative financing modalities employed include Investment Financing Facility (IFF) based on Output Base Aid (OBA) – (IFF – OBA), the result-based financing

approach through the World Bank's Programme for Results (PforR) and UKAID's Payment by Results (PbR). These innovative funding mechanisms will be employed during WSDP III.

4.3.5. Loans to BWBs and WSSAs

Loans are another financing mechanism where funds are obtained from lending institutions on agreed terms from domestic and international financing institutions. They can be in form of concessional, soft, sovereign and non-sovereign loans. Water sector institutions shall utilize loan facilities offered by commercial banks and other institutions and use their cash flows to guarantee loan repayment. WSDP III will sustain existing frameworks, promote confidence building, explore new opportunities, enhance coordination mechanisms for accessing loans and build capacity on negotiation skills and preparation of bankable projects. These efforts will widen project loans and win-win scenario for BWBs and WSSAs, thus enhancing prudent borrowing.

4.3.6. National Water Fund Window

The National Water Fund (NWF) was initially established under the Water Supply and Sanitation Act No. 12 of 2009 (currently Water Supply and Sanitation Act No. 05 of 2019) and commenced operations in the financial year 2015/16. The NWF is a dedicated institution in the water sector deliberately designed to undertake mobilization of financial resources and issuance of investment support in water resources management and development and water supply and sanitation service provision especially in the rural areas.

The NWF enjoys a comparative advantage over other institutions within the water sector with respect to resource mobilization on the following grounds:

(a) Financial resource mobilization is a core business whereas other institutions perform resource mobilization activities as a non-core business;
(b) Section 57(3) of the Water Supply and Sanitation Act ring fences the NWF funds for implementation of water projects as required;
(c) Statutorily NWF is required to undertake monitoring and evaluation of funds utilization by implementing agencies, which fosters accountability of monies deposited in the Fund; and
(d) Unlike other funding channels, NWF has two windows (grants and loan) of providing resources to implementing agencies, thus providing room for optimum allocation and utilization of financial

resources by offering grants or loans to eligible implementing agencies.

Under WSDP III, funds from resource partners will be one of the most significant portions of resources to be mobilized by the NWF. Financial resources anticipated to be mobilized will include grants which may be in various forms such as output based aid (OBA), co-financing or donor's donations and loans (concessional, soft, sovereign and non-sovereign).

The NWF has two windows of financing water projects which are subject of this strategy namely, the loan window and grants window. A portion of financial resources to be mobilized will be applied as seed money for loan window which is a revolving fund dedicated to offer loans on favourable terms to Implementing Agencies for undertaking water supply and sanitation projects in their service areas. The other portion of resources will be allocated as direct grants to implementing agencies for executing water supply projects in areas with inadequate water supply service as well as projects for conservation of water catchments.

4.3.7. Private Sector and PPP

The government through its National plans and policies including the FYDP III and National Water Policy of 2002, recognizes the contribution of the private sector investments and service provision in the country and in the water sector. The PPP Act, 2010 and its 2018 amendments provide sound legal framework for establishment of Public Private Partnership in various sectors with potential to generate capital investments. The aim is to promote private sector participation in the provision of public services through public private partnership projects in terms of capital investment, technology, managerial and operational skills. Furthermore, Public Procurement Act, 2011 and its Regulations of 2013 provide opportunity to engage PSP/PPP in procurement of works, goods, and consultancy or non-consultancy services. Thus, shall also be utilized during programme implementation.

The WSDP views the private sector as an overarching partner in realizing its objectives of management and development of water resources; provision of water supply and sanitation services; as well as institutional strengthening and capacity building. Therefore, WSDP III promotes private sector participation throughout programme implementation so as to accelerate the achievement of programme objectives. Among others,

promotion of engaging PSP/PPP will be in form of identifying water projects potential for PSP/PPP; marketing of water sector projects to attract private sector; creating a conducive environment for PSP/PPP in investing and operation of water sector projects; improvement of business environment; strengthening of relationship between private sector and water sector; promoting effective regulations of private sector participation in water sector; and promoting local and international consultants, contractors, manufacturers and suppliers to participate effectively in investing and implementation of water sector projects.

4.4. Financing Modality for Programme Coordination and M&E

Experiences from WSDP I and II showed limited funding to Programme Coordination and Delivery Support Component thus contributed to ineffective programme implementation at national, regional and local levels. During the Roundtable Meeting of 2019, the GoT and DPs agreed that all partners active in the sector should contribute 0.5% of the total project costs for programme coordination and management and that this contribution, in cash or in kind, was to be ring-fenced.

In order to have an effective Programme Coordination and Delivery Support, WSDP III ensures reliable funding of core elements such as Programme Coordination and Management; Planning and Budgeting; Procurement and Auditing; Environmental and Social Safeguards Management; Supervision, Monitoring and Evaluation at both national and project levels. Implementation of these activities/elements in WSDP III shall be financed directly and or through a contribution of an agreed percent of the total project costs from all projects financed through basket and earmarked financing modalities.

CHAPTER FIVE

5.0. INSTITUTIONAL ARRANGEMENT

The implementation of WSDP III will be undertaken using the existing Government structures and other stakeholders of the programme. The institutional arrangement complements the Programme Development Objective (PDO), which is to strengthen sector institutions for integrated water resources management and improve access to water supply and sanitation services.

The institutional framework prescribes the roles and responsibilities of different players in the programme implementation. In addition, it ensures an effective institutional management with strong linkages and co-ordination among key stakeholders including government ministries and agencies, development partners, private sector and other stakeholders for sustainable development of the water sector. The role of the Ministry responsible for Water will be co-ordination; support and capacity building; monitoring and quality assurance; policy and legal frameworks formulation; and regulation. Unlike the previous phases, the private sector is expected to participate more and play the role in implementing and financing the programme. This section outlines the roles and responsibilities for the various key stakeholders as shown in Table 19.

Table 19: Function and Responsibilities of Stakeholders

Stakeholder / Institution	Functions and Responsibilities
Ministry responsible for Water	i.) Formulate and monitor implementation of policies on Water Resources; Rural and Urban Water; Central Water Laboratory; River Basins Development; Water Quality and Pollution Control; Drilling, Rain Water Harvesting and Dam Construction; Water Sources Protection; Sewage and Drainage Development; Performance Improvement and Development of Human Resources under this Ministry; and Extra-Ministerial Departments, Agencies, Programs and Projects under this Ministry; ii.) Supervise performance of the Implementing Agencies; iii.) Facilitate sectoral coordination and coordinate planning on aspects that may impact on water sector; iv.) Oversee the sustainable management, utilization, conservation and development of water resources; v.) Oversee the development and provision of water supply and sanitation services; vi.) Oversee the quality of water sources, supply and sanitation systems; vii.) Establish technical guidelines, standards, rules and codes of conduct on water resources management; and viii.) Provide guidelines and standards related to water resources management, water quality management and water supply and sanitation services.
Ministry responsible for Finance and Planning	i.) Collaborate, manage, monitor and regulate the finances of all public bodies; ii.) Manage fiscal activities on national economic policies, common areas with the ministry of responsible for water affairs in the mobilization of sufficient funds for the water and sanitation sector and the constant improvement of the use of such funds; iii.) Facilitate dialogue and engagement between investors and sector Ministries and/or thematic agency to address issue at hand; iv.) Mobilize financial resources and allocate resources to selected priorities and other government operations; v.) Ensure prudent use of financial resources by undertaking project monitoring missions, expenditure tracking and reviews; vi.) Monitor and evaluate the implementation of plans; and vii.) Coordinate preparation and implementation of PPP projects.
Ministry responsible for Health	i.) Develop policy, guidelines, standards and strategies for sanitation and hygiene; ii.) Provide technical assistance to councils for sanitation capture and containment; iii.) Monitor, regulate and provide support and advice to

Stakeholder / Institution	Functions and Responsibilities
	councils and other stakeholders on sanitation capture and containment issues; iv.) Enforce construction of sanitation and hygiene capture and containment facilities; and v.) Promote behaviour change regarding to sanitation and hygiene.
Ministry responsible for Education	i.) Coordinate policy guidelines development for School WASH in collaboration with Ministry responsible with Health; ii.) Set standards formulation for school water, hygiene and sanitation; iii.) Coordinate implementation of School WASH; iv.) Supervise monitor and report on School WASH through the inspectorate and school census forms; v.) Support capacity building of LGA and school staff and teachers pre-service and in-service on WASH in the curriculum and management of WASH in schools; and vi.) Coordinate development of materials for inclusion of WASH in school curriculum.
Ministry responsible for Transportation	i.) In collaboration with MOHSW, provide guidance on the provision of the rest points along highways; and ii.) Construct WASH facilities in transport hubs and highways.
President's Office - Regional Administration and Local Government.	i.) Creating a conducive environment for Community and private sector participation in development, operation and management of water supply and sanitation services; ii.) Creating a conducive environment for Water Authorities, RUWASA and community organizations in the execution of functions connected with provisions of water supply and sanitation services; iii.) Co-ordinate planning of projects from local government authorities; iv.) Co-ordinate capacity building for local government authorities in Sanitation and Hygiene; v.) Compile quarterly performance report for all LGAs on Sanitation and hygiene; and vi.) Carry out an independent annual performance assessment for all LGAs.
Regional Secretariat	i.) Coordinate and follow up status of planning and implementation of water supply and sanitation services in the Region; and ii.) Create a conducive environment for water authorities, RUWASA and Community Organizations in the execution of functions connected with provisions of water supply and sanitation services in the Region iii.) Representation on WSSA Boards. iv.) Provides technical advice and support to local

Stakeholder / Institution	Functions and Responsibilities
	government authorities. v.) Supervises and monitors local government authorities. vi.) Assist LGAs to mobilize/coordinate S&H partners/stakeholders in the districts vii.) Carry out monitoring and supportive supervision to councils. viii.) Provide technical backstopping to councils.
LGAs	i.) Coordinate physical planning with the water authorities and community organizations; ii.) Set aside funds from own sources for water supply and sanitation projects; iii.) Facilitate the acquisition by communities desirous of owning and managing their water schemes of certificates of title prior to the communities taking over responsibility; iv.) Mobilize rural communities and provide technical and financial support in the implementation of water development programmes; v.) Approve by-laws for protection of water sources, operations of community organizations and other service providers; vi.) Promote provision of sanitation facilities in the areas of community-based water supply schemes; vii.) Implement defined regulatory roles with respect to protection of water sources, community organisations and service providers; viii.) Mobilize revenue for the purpose of supporting the development, operation and maintenance of water schemes; ix.) Facilitate and encourage communities to construct, maintain and control of water points, and sanitation facilities in any household or within the community organisation's area; x.) Promote efficient water use, pollution control and take measures for the conservation and the protection of water sources, waterworks, streams, rivers, springs and other water sources within its area; xi.) Promote registration of community organisations in order to facilitate ownership of water schemes to them; xii.) Coordinate the implementation of WASH development activities across all the departments according to guidelines provided. xiii.) Allocate Health Basket/Council funds for Sanitation & Hygiene activities in the district e.g. WTD/SanWeek/Global Hand-washing day/World Environmental Day, construction/rehabilitation of WASH facilities at Health Facilities, Follow up and supervision matrix;

Stakeholder / Institution	Functions and Responsibilities
	xiv.) Implement sanitation and hygiene activities according to the Water and Sanitation Act and Public Health Act; xv.) Ensure WASH inspection is routinely undertaken as planned; xvi.) Coordinate monitoring of WASH; xvii.) Enforce bye-laws on sanitation and hygiene; xviii.) Construct/rehabilitate sanitation facilities in the community; xix.) Participate in community development work within their communities (NSHC); xx.) Establish school sanitation club; xxi.) Organise events for promotion of WASH; xxii.) Supply goods and services on sanitation and hygiene; and xxiii.) Operate sanitation and hygiene facilities (Cess Pit Emptiers, Public latrines, Solid waste collection etc).
Development Partners	i.) Provide financial and technical support in the implementation of the programme; ii.) Facilitate advocacy and high-level cross-sectoral dialogue; and iii.) Support government in capacity building during programme implementation.
Private Sector	i.) Design and construction of water supply and sanitation infrastructures; ii.) Supplier of water related materials and services; iii.) Provide water supply services in urban and rural areas; and iv.) Invest, manage and operate water supply and sanitation infrastructure.
Water Institute, Academic and Research Institutions	i.) Provide academic training courses, which respond to academic, and skills requirements in the market; ii.) Conduct and coordinate research works with water sector implementing agencies in the choice of research areas and research works; and iii.) Link research findings with the sector implementing agencies.
National Water Board	i.) Review business plans of Basin Water Boards; ii.) Co-ordinates technical trans-boundary water resources management issues of national interest; iii.) Collect data and information and publish hydrological book annually and water resources status; iv.) Promote investments and financing of water resources development; v.) Facilitate integration of inter - sectoral water resources assessment and planning; vi.) Co-ordinate basin planning and management; vii.) Resolve inter-sectoral or inter-basin conflicts; viii.) Coordinates inter basin water transfer;

Stakeholder / Institution	Functions and Responsibilities
	ix.) Advise on trans-boundary water resources management; x.) Prepare annual sector performance report on the state of the water resources; xi.) Monitor the performance of basin water boards on matters relating to development and management of water resources; xii.) Develop national IWRMD plans; xiii.) Regulate activities of Basin Water Boards; xiv.) Review and approve water user charges proposed by Basin Water Boards; and xv.) Provide policy advise on matter related to water resources management.
Basin Water Boards	i.) Monitor (Collect, process and analyze data) and assess quantity and quality of water resources; ii.) Approve issue and revoke water use and discharge permits and maintain a Water Register; iii.) Resolve intra-basin conflicts; iv.) Prepare / review basin Integrated Water Resources Management and Development plan; v.) Implement water resources management projects and programmes in the basin; vi.) Monitor and enforce water use and discharge permits and pollution prevention measures; vii.) Assess the availability and potential demand for water resources; viii.) Co-ordinate the inter-sectoral water resources management and serve as a channel of communication between these sectors and water users in general; ix.) Co-ordinate planning and implementation of trans-boundary issues in the basin; x.) Monitor and evaluate performance of catchment / Sub-catchment Water Committees; xi.) Monitor, evaluate and approve construction and maintenance of water source structures; xii.) Develop and manage water infrastructure for flood management and water storage; xiii.) Propose tariff, charges and fees structure for water use and effluent permits to recover costs; xiv.) Collect revenue from basin water board services; xv.) Integrate district plans into basin water resources management plans; and xvi.) Provide guidelines and standards for construction and maintenance of water source structures.
Catchment / Sub-catchment committee	i.) Co-ordinate preparation and implementation of catchment/sub-catchment integrated water resources management plans; ii.) Resolve water resources conflicts in the catchment or sub catchment;

Stakeholder / Institution	Functions and Responsibilities
	iii.) Promote efficient water utilization; iv.) Perform other functions as delegated by the BWBs; and v.) Manage, distribute and conserve water from a source used jointly by the members of the water users association.
Water Users Associations	i.) Acquire and operate water use permit. ii.) Resolve conflicts among members of the association related to the joint use of a water resource. iii.) Collect water user fees on behalf of the Basin Water Board.
Water Laboratories Institution	i.) Manage and develop water quality laboratory facilities in the country; ii.) Prepare business plans to provide water quality services; iii.) Provide water quality services for different uses; iv.) Collect revenues for water quality services; v.) Provide consultancy services; supply goods; and conducting trainings on water quality services; vi.) Conduct regular monitoring and assessment of quality of water in sources and in the supply system; vii.) Provide water quality testing for other beneficial uses such as irrigation, industry, construction, aquaculture and researches; viii.) Analyse wastewater to ascertain compliance to standards and efficiency of treatment facilities; ix.) Assess quality and efficiency of water treatment chemicals; x.) Provide technical support on design and operation of water treatment plants; xi.) Conduct water quality research; xii.) Support development and implementation of Climate Resilient Water Safety Plan; xiii.) Participate on inter laboratory performance evaluation annually; xiv.) Prepare and maintain water quality database; and xv.) Implement drinking water surveillance plan.
Water Supply and Sanitation Authorities.	i.) Develop, own and manage water supply and sanitation facilities; ii.) Prepare business plans to provide water supply and sanitation services; iii.) In consultation with respective LGAs, ensure water supply and sanitation requirements are included in citywide plans; iv.) Secure finance for capital investment, and relevant subsidies; v.) Provide water supply and sanitation services; vi.) Support relevant authorities in the protection and maintain of water sources; vii.) Provide advice on policies and guidelines relating to

Stakeholder / Institution	Functions and Responsibilities
	provision of water supply and sanitation services; viii.) Plan and execute new projects for the provision of water supply and sanitation services. ix.) Propose water supply and sanitation tariff structures; x.) Collect fees and levies including any regulatory levy for water supply and sanitation services supplied to consumers by the water authority; xi.) Educate and provide information to public on health aspects of water supply, sanitation, water conservation, and similar issues; xii.) Contract out and manage Service Providers to ensure compliance to minimum standards of water supply and sanitation services; and xiii.) In consultation with respective LGA, prepare technology options for capture and containment facilities.
Rural Water Supply and Sanitation Agency (RUWASA)	i.) Plan, design, construct and supervise rural water supply projects; ii.) Conduct ground water survey including prospecting and explorations, and undertake drilling operations including water well flushing and pumping test, and rehabilitation of water wells; iii.) Design and construct dams of different types and carry out geotechnical and soil investigation for dam construction and other civil engineering structures; iv.) Monitor and evaluate performance of community organisations in relation to rural water supply and sanitation services; v.) Promote and sensitize rural communities on sanitation, hygiene education and practice as well as protection and conservation of rural water sources; vi.) Provide financial and technical support to community organisations for major maintenance of rural water schemes; vii.) Provide support to community organisations in relation to management, operation and maintenance of rural water supply schemes; viii.) Facilitate participation of communities in the identification, planning, construction and management of rural water and sanitation projects; ix.) Facilitate private sector engagement in the provision of the rural water supply and sanitation services. x.) Facilitate training and capacity building to community organisations in financial, technical and management of rural water supply schemes. xi.) Register and regulate the performance of community organisations according to this Act and Regulations made by the Minister. xii.) Advise the Minister on issues related to rural water

Stakeholder / Institution	Functions and Responsibilities
	supply and sanitation.
Community Based Water Supply Organisations	i.) Own movable and immovable properties including public taps and waterworks. ii.) Manage, operate and maintain public taps and waterworks and provide an adequate and safe supply of water to its consumers; iii.) Determine rules for the use of public taps and or waterworks by consumers; iv.) Install water meters for the purpose of measuring the amount of water supplied to a public tap or a consumer; v.) Charge consumers for the water supplied from public taps and or waterworks; vi.) Consult and cooperate with the village council to plan and control the use of land in the vicinity of the water points and or waterworks; vii.) Promote rural sanitation services; and viii.) Sensitize rural communities on sanitation, hygiene education and practice as well as protection and conservation of rural water sources.
Water Resources Centre of Excellence	i.) Enhance the Water Resources Management (WRM) knowledge base and its utilization across relevant sectors - through synthesizing, packaging and continuously updating the existing knowledge, data and information from various sources thereby creating an updated database on water resources management and development; ii.) Conduct research on water resources management and development; iii.) Build a pool of community of practice in relevant aspects of Integrated Water Resources Management and Development (IWRMD) through enhanced national and river basin capacity building and entrench the analytic function of WRM and development for informed investment decision making in other sectors; iv.) Promote data usage, open data sharing across sectors and the general public, including formulation of cross-sectoral functional groups of expertise from all levels for effective delivery of water resources programs; v.) Facilitate technical exchange and data harmonization across sectors to support joint decision making and development of relevant decision support tools; vi.) Provide guidance for the use of adequate hydrogeological and hydro-meteorological measuring equipment and supervise the calibration, testing and instrumentation of crucial monitoring tools; vii.) Carry out and promote water resources assessment of sector strategies/projects and aligning them with IWRMD plans;

Stakeholder / Institution	Functions and Responsibilities
	viii.) Promote and conduct action-oriented and demand driven applied research in water resources planning and management; ix.) Provide just-in-time (and on-demand) advice in water-related activities to all stakeholders on strategic, urgent regional and national priority investment or management decisions that have a bearing on water resources; and ix.) Disseminate knowledge and information to organizations, government departments, regulators, policy makers and wider public in order to create the much-needed critical mass of expertise knowledgeable in WRM and development processes for the successful delivery of projects and programs.
Energy and Water Utilities Regulatory Authority	i.) Exercise licensing for provision of water supply and sanitation services; ii.) Approve business plans of WSSAs; iii.) Establish technical guidelines, standards, rules, and codes of conduct in respect of licensees; consumers; and public safety; iv.) Monitor compliance to water quality standards and performance of WSSAs; v.) Collect, analyse and publish comparative performance data and information; vi.) Approve tariffs chargeable for the provision of water supply and sanitation services; vii.) Advise Ministry on impact of major capital works on customer tariffs; viii.) Initiate and conduct investigations in relation to the quality of water and standards of service given to consumers; ix.) Promote development of water supply and sanitation services; and x.) Conduct studies necessary for administrative or management purposes.
Water Supply and Sanitation Licensing Board.	i.) Issue license to water and sanitation engineers, technicians and craftsmen; ii.) Keep and maintain a register of all licensed engineers, technicians and craftsmen; iii.) Regulate activities of water and sanitation engineers, technicians and craftsmen; iv.) Organize training courses; v.) Promote and maintain professional conduct and integrity of licensed engineers, technicians and craftsmen; vi.) Publish and dissemination of materials produced in connection with the activities of the Board; vii.) Collaborate with both local and international professional boards and associations involved in and with the waterworks and sanitation works;

Stakeholder / Institution	Functions and Responsibilities
	viii.) Ensure compliance of the criteria set to different classes of licensee; propose review of the licensing criteria; and ix.) Carry out any other functions which are in the public interest and which the Minister may direct.
Village Councils	i.) Promote the establishment of community organisations; ii.) Co-ordinate community organisation budgets with village council budgets; iii.) Resolve conflicts within community organisations; and iv.) Plan and control the use of land in the immediate vicinity of the water points, waterworks and water sources.
Households	i.) Construct/Upgrade sanitation facilities at household level; and ii.) Implement good sanitation and hygiene practices at household level.
Non-Government Organizations (NGOs), Community Based Organizations (CBOs) and Faith Based Organizations (FBOs)	i.) Building capacity of communities in protection of water sources and management of water supply and sanitation infrastructure. ii.) Sensitize community in water, sanitation, catchment management and conservation; iii.) Conduct water related researches for policy and planning in water sector; and iv.) Support investments and management in water sector.
Other Service Providers	i.) Disseminate information and public education awareness on water related policies and legislations; ii.) Provide legal services in litigation including drawing up and overseeing enforcement of water rights and contracts; and iii.) Provide services related to water sector.

CHAPTER SIX

6.0. PROGRAMME RISKS AND MITIGATION MEASURES

The design and implementation of WSDP III follows a SWAP approach which is multi-sectoral and involves a number of stakeholders in planning, implementation and financing of investments from different sources including government, development partners and private sector. The multitude of projects and stakeholders' involved as well as environmental degradation and climate change may pose several risks that may have impact on achievement of the objectives. With respect to WSDP III, the risks may emanate from economic risks, financial, operational performance, environment, political change and social pressure.

In this regard, under WSDP III, risk assessment will be conducted periodically to enable early identification of emerging issues and threats to support the development of plan for the possible control measures to minimise, eliminate or avoid the identified risks. This chapter presents possible risks and mitigation measures anticipated during the implementation of WSDP III. Details of programme risk ranking and mitigation measures are presented in Table 20 and Table 21 respectively.

Table 20: Risk Ranking

SN	Risk Area and Description	Scale of Risk		
		High	Medium	Low
1.	**Economic crisis:** These are risks emanates from macroeconomic changes or crisis that might impede the capacity of stakeholders to mobilize the programme resources and thus affect the implementation of interventions.	√		
2.	**Financial risk:** Changes in local and international financial policies and regulations may lead to shortage in mobilizing the required programme financial resources and thus jeopardise the programme execution.	√		
3.	**Operational performance:** Technological change, disruption of supply chains as well as inadequate or failure of internal processes including regulations may potentially affect the	√		

SN	Risk Area and Description	Scale of Risk		
		High	Medium	Low
	programme implementation.			
4.	**Environmental risk:** Water sources depletion, contamination, climate change and natural disasters tend to impede the water availability, floods and water pollution thus affecting the programme interventions.	√		
5.	**Political risk:** Change of government policies and priorities and low willingness of some riparian states on implementation of joint projects in shared water source tend to influence or affect the programme execution.	√		
6.	**Social pressure**: Community perceptions, forced migration and economic migration tend to create tensions among community members and thus affecting community ownership and initiatives sustainability.		√	

Table 21: Risk Category and Mitigation Measures

SN	Risk Category	Specific Risks	Mitigation Measures
1.	Economic crisis	Inflation, high interest rates, recession, rise in world fuel prices	i) The Government to set emergency strategies and policies. ii) The Government to establish conducive environment to facilitate mutual funds among stakeholders.
2.	Financial risk	Financial constrains	The Government will continue to mobilize funds from less stringent condition sources and enhance measures to increase domestic revenues to finance projects with multiplier effect.
		Low collection efficiency of revenue from the customers by	i) Develop and implement strategies for creating, broadening and sustaining the revenues bases. ii) Capacitate water sector

SN	Risk Category	Specific Risks	Mitigation Measures
		implementing agencies (BWB, Water supply utilities and Water Laboratories)	implementing agencies in writing bankable project proposals.
3.	Operational Performance	Technological changes and cyber security attacks	i) Secure end point users including employees and customers. ii) Reinforce network infrastructure. iii) Monitor and analyse security threats continuously.
		Commercial risk	To have contractual arrangements and contingency reserve during operational period.
		Supply disruptions	i) Diversify the supply base. ii) Develop back up suppliers. iii) Manage product demand. iv) Strengthen the supply chain.
		Compliance and Regulatory risk	Institute and strengthen water tariffs setting and service provision regulator.
			Establish and strengthen inter-sectoral linkage and coordination.
			Establish and operationalize integrated regulatory system
4.	Environmental risk	Water sources depletion and contamination	Strive at proper management of water resources, water and sanitation infrastructures including protection and conservation of water sources.
		Climate change and natural disasters	i) Plan and construct climate resilience infrastructures ii) Adopt and implement climate change and natural disasters monitoring systems. iii) Increase community knowledge about climate change and natural disasters risks.
5.	Political risk	Change in government policies	i) Review organizational responsibilities. ii) The Government will strengthen economic and political diplomacy

SN	Risk Category	Specific Risks	Mitigation Measures
			to mitigate the effects of domestic and foreign political change.
		Low willingness of some riparian states on implementation of joint programme/projects in shared water sources.	Advocate for hydro-diplomacy
6.	Social pressure	Community perceptions	i) Create awareness to the community on the programme including marginalize/vulnerable groups to create sense of community ownership. ii) Undertake bottom-up project planning and preparation. iii) Engage influential people in the water sector interventions.
		Influxes of people (forced migration and economic migration)	Establish and implement social dynamics management mechanisms including investing in both hard and soft community shelter management and disaster risk reduction measures.

CHAPTER SEVEN

7.0. MONITORING AND EVALUATION

This chapter consists of the M&E system for the WSDP III which takes into account the existing national frameworks for monitoring and evaluating progress in FYDP III, National Guideline on Monitoring and Evaluation of Development Projects and Programmes, Ministerial M&E systems and Integrated Water Sector M&E System. The following intervention areas are covered:

7.1. Monitoring and Evaluation System

The Ministry of Water approved the Integrated Water Sector M&E System designed to ensure that relationships between processes, inputs, outputs, outcomes and impacts are periodically monitored and reported. The System is cascaded down to water sector departments, divisions, units, as well as institutions falling under the sector. It aggregates data and information from all key players in the sector, links M&E Systems of water sector institutions and interfaces with the National M&E System. The programme will use this system to ensure regular feedback on performance of projects to different players.

7.2. Programme Monitoring and Evaluation

7.2.1. Performance Indicators

The Performance Indicators, Results Matrix and Monitoring and Evaluation Plan of the programme are as shown in Table 22 and 23.

Table 22: Programme Results Matrix

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
Objective 1: Ensure the nation's water resources are sustainably managed and developed.	*Component 1: Water Resources Management and Development*	Water Resources Management	Monitoring and Assessment	⁃ Availability of reliable and accurate statistics on water resources ⁃ Informed decisions on water uses and resource management	⁃ Average renewable water per capita ⁃ Number of water sources demarcated and gazetted. ⁃ Degree of implementation of a sound climate change adaptation initiatives and disasters management system
			Water Resources Planning	⁃ Improved water resources management	
			Water Allocation		
			Protection and Conservation of Water Sources	⁃ Reduced pollution level in water sources	
			Water Use and Demand Management	⁃ Improved efficiency in water use	
			Dam Safety Management	⁃ Improved dam safety	

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
			Trans-Boundary Water Resources	) Increased mutual benefit of shared transboundary water resources) Reduced multilateral, regional and bi-lateral conflicts) Improved management of transboundary water	
			Flood, Drought, Storm Water and Other Related Disaster Management	) Reduced water related disasters	
			Climate Change in relation to water resources, water quality, water supply and sanitation	) Improved resilience to climate change) Improved adaptation to	

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
				climate change	
		Water Resources Development	Inter and Intra Basin Water Transfers	) Improved access to water supply for socio-economic activities	) Number of strategic water infrastructure developed
			Water Sources Development	) Improved water security	
	Component 2: Water Quality Management	Water Quality Assessment and Monitoring	Ambient Water Quality Assessment and Monitoring	) Improved water quality data and information for informed decision	) Proportion of water bodies with good ambient water quality) Number of focused water quality monitoring stations
Objective 2: Universal access to adequate, clean, and	*Component 2: Water Quality Management*	Water Quality Assessment and Monitoring	Drinking Water Quality Assessment and Monitoring	) Enhanced quality of drinking water	) Number of water supply schemes in rural and urban areas implementing

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
safe water improved					water safety plan
	Component 3: Water Supply	Rural Water Supply	Water supply infrastructure in rural areas Service Delivery and Regulation in rural areas	) Improved access to safe and clean water in rural areas) Reduced rate of water related diseases in rural areas) Improved sustainability of water supply services in rural areas) Increased revenue of CBWSOs) Reduced NRW in rural areas	) Proportional of population with access to clean and safe water in rural areas) Percentage of NRW in rural areas
		Urban Water Supply	Water Supply Infrastructure in urban areas	) Increased access to clean	) Proportional of population with

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
			Water Supply Service delivery in urban areas	and safe water in urban areas Reduced rate of water related diseases in urban areas Increased revenue of WSSAs Reduced NRW in urban areas Improved sustainability of water supply services in urban areas	access to water in urban areas Percentage of NRW in urban areas
			Water Supply Services Demand Management in urban areas		
			Regulation of Water Supply Services in urban areas		
Objective 3: Universal access to adequate sanitation and hygiene services improved	*Component 2: Water Quality Management*	Water Quality Assessment and Monitoring	Wastewater Quality Assessment and Monitoring	Improved quality of effluent discharged to the environment	Proportion of household connected to conventional public sewerage system
	Component 4: Sanitation and	Sewered sanitation	Sewered infrastructure	Increased	

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
	Hygiene		Sewered service delivery and regulation	) population with access to sewered sanitation services) Reduced rate of water related diseases) Increased population with access to improved non-sewered sanitation services	) Proportional of population using adequate non-sewered sanitation services
		Non sewered sanitation	Non Sewered Infrastructure and equipment		
			Regulation of non sewered service		
			Non Sewered Service Delivery		
		Sanitation and Hygiene in Institutions and Public Areas	WASH in Health Care Facilities	) Increased number of HCFs with basic WASH facilities	) Number of HCFs, schools, public places and transport hubs with basic WASH facilities) Percentage of schools provided with emergence
			WASH in Schools	) Increased number of schools with basic WASH	

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
				facilities	sanitary material
			WASH in Public Places	• Increased number of public places with basic WASH facilities	• Percentage of population with basic toilets.
			WASH in Transport hubs	• Increased number of transport hubs with basic WASH facilities	
		Social Behaviour Change Communication Campaign and Hygiene Promotion	Social Behaviour Change Communication campaign	• Open defecation eliminated • Increased awareness on hygiene and baby WASH • All primary schools supported with emergence sanitary material	
			Baby WASH		
			Menstrual Health and Hygiene Management		

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
				) Menstrual health and hygiene management in schools improved	
Objective 4: Planning, coordination, monitoring and evaluation enhanced	*Component 5: Programme Coordination and Delivery Support*	Policy, Planning and Fiduciary Management	Policy and legal framework	) Increased Investment in water sector) Increased financial resources) Improved compliance to fiduciary requirement) Improved institutional performance	) Percentage of unqualified audit opinion) Number of thematic working groups meetings conducted
			Planning and budget		
			Fiduciary Management		
		Coordination, Monitoring and Evaluation	Coordination, Monitoring and Evaluation		
		Crosscutting Issues	Environmental and Social Management	Improved compliance to environmental and social	) Degree of compliance to environmental and social

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
				requirements	requirements
Objective 5: Institutional strengthening and working environment improved	*Component 2: Water Quality Management*	Water Quality Technical Support and Development	Management Support Water Quality Research and Development	) Improved water quality management) Increased water quality technology options and customized solutions	) Number of trained staff) Number of offices constructed / rehabilitated
	Component 5: Programme Coordination and Delivery Support	Institutional Capacity Building	Water Resources Management and Development Institutions Water Quality Management Institutions Rural Water Supply and Sanitation Institutions Urban Water Supply and Sanitation	) Improved working environment in the water sector) Increased staff morale and efficiency) Improved skills and knowledge of staff in the water sector) Improved staff	

Programme Objectives	Component	Subcomponent	Intervention Area	Intermediate Outcomes	Key Performance Indicators
			Institutions	welfare	
			Ministry and Other Implementing Institutions		
		Crosscutting Issues	Gender Mainstreaming	⁄ Improved gender equity	⁄ Number of staff trained on gender issues ⁄ Percentage decrease in corruption incidences
			HIV/AIDS and None Communicable Diseases	⁄ Increased number of staff attending voluntary tests	
			Governance and Corruption Intervention	⁄ Increased transparency in water sector business processes ⁄ Reduced corruption incidences	
			Private Sector	⁄ Increased Investment in water sector ⁄ Increased financial resources	⁄ Number of PPP projects implemented in the water sector

7.2.2. Performance Review and Reports

These consist of meetings and reviews as well as rapid appraisals. The Re-Enhanced Dialogue Mechanism dialogue shall be reviewed and used to suit the phase III arrangement. Meetings for review of the WSDP III implementation will be conducted and the revised dialogue mechanism will notify the types of reports to be prepared and discussed during the implementation of the programme.

7.2.3. Evaluations

Ex-post evaluation of WSDP (2006 – 2025) shall be implemented in order to inform lessons learnt during WSDP implementation. Moreover, this evaluation will inform the design of the next Water Sector Development Programme.

7.2.4. Data Systems

Data systems aim at improving management of data to facilitate decision making at all levels in the Water Sector. They also influence the quality of information generated during programme implementation. Phase III of the programme will use the existing data systems including Maji Information System (MajIs), Water Point Mapping, Water Point Data Manager (WPDM), Water Sector Management Information System (MIS), Nile Basin Decision Support System (NBDSS), Unified Billing System, Laboratory Information Management System (LIMS), Maji App, Water and Sanitation Sector Monitoring and Reporting System (WASSMO), RUWASA Service Delivery Management System (RSDMS) and Water Projects Information System. The Unified Water Sector Data Task System will be updated according to changes and development in the sector.

ANNEX

Table 23: Programme Monitoring Plan

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	Objective 1: Ensure the nation's water resources are sustainably managed and developed								
1	*Average renewable water per capita* Is the sum of the average annual flows of rivers and recharge of ground water generated from endogenous precipitation and the natural flows originated outside the country. It is calculated by dividing total annual renewable water to the population It measures the amount of naturally replenished water on the surface and ground water in the country divided by population	2,250	2,250	2,300	2,400	2,500	Yearly	Basin Performance Report	DWR
2	*Number of water sources demarcated and gazetted* This is the total number of water sources demarcated and gazzeted. The purpose of this indicator is to	18	62	116	166	200	Yearly	Basin Performance Report	DWR

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	track progress on protection and conservation of water resources and can be disaggregated into basins.								
3	*Degree of implementation of a sound climate change adaptation and disasters management system* This refers to a documented program prepared to address climate sensitive issues including floods, drought, and adaptation to climate change and disaster response systems. This KPI is measured by the degree of its implementation (D) in percentage D= (NCIA/NCII) x100. Where: NCIA is the number of cumulative climate change issues addressed, and NCII is the total number of climate change issues identified.	0	40	70	90	100	Yearly	Basin Performance Report	DWR
4	*Number of strategic water infrastructure developed.* This refers to large dams, which are constructed to save multipurpose uses.	0	0	1	3	4	Yearly	Basin Performance Report	DWR

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
5	*Proportion of water bodies with good ambient water quality* Is the proportion of strategic water bodies in the country that have good ambient water quality. Ambient water quality refers to natural, untreated water in rivers, lakes, dams and ground water and represents a combination of natural influences together with the impacts of all anthropogenic activities. It is calculated by determining the proportion of classified water bodies classified as having a good water quality status to the total number of classified water bodies expressed in percentage; WBGQ=(Ng/Nt)x100. Where WBGQ is the percentage of water bodies classified as having a good quality status and Nt is the total number of monitored and classified water bodies. Note: A threshold value of 80%	63	250	500	1,500	2,019	Yearly	Annual Water quality Assessment Report	DWQ

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	compliance is defined to classify water bodies as good quality. Thus a body of water is classified as having a good quality status at least 80% of all monitoring data from all monitoring stations within the water body are in compliance with the respective target.								
6	*Number of focused water quality monitoring stations*	0	50	100	150	175	Yearly	Annual Water quality Assessment Report	DWQ
Objective 2: Universal access to adequate, safe and clean water improved									
7	*Number of water supply schemes in rural areas implementing water safety plan*	2	100	300	750	1,000	Yearly	Annual Water quality Assessment Report	DWQ
	Number of water supply schemes in urban areas implementing water safety plan	8	30	60	80	94			
8	*Proportional of population with access to clean and safe water in rural areas* This indicator measures the rural	74.5	77	80	83	85	Yearly	Annual Reports	RUWASA

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	population that is supplied with water from an improved water source. The rural population supplied with water includes household connections and population living within 400m from public domestic points. It is calculated as follows: The total rural population served divided by the total rural population times 100.								
9	*Percentage of NRW in rural areas* This indicator measures water that has been produced but it is not billed. It is calculated as follows: The total amount of water produced minus the total amount sold to consumers divided by the total amount of water produced times 100.	NIL				20	Yearly	Annual Reports	RUWASA
11	*Proportional of population with access to water in urban areas* This indicator measures the urban population supplied with clean and safe water. The urban population supplied with water includes	86.5	88	90	93	95	Yearly	Performance Review Report	EWURA

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	household connections and public stand posts. It is calculated as follows: adding the following arrives at The urban population served: (i) Number of domestic connections multiplied by average members using the connection. (ii) The number of public stand posts and/or kiosks multiplied by average number of population served by public stand posts and/or kiosks (iii) Number of populations living in residential institutions, industrial and commercial complexes. It is arrived by taking total urban population served divided by the total urban population times 100. The indicators can be disaggregated by WSSAs.								
12	*Percentage of NRW in urban areas* This indicator measures water that has been produced but it is not billed. It is calculated as follows: The total amount of water produced minus the	36.6	33	27	24	20	Yearly	Performance Review Report	EWURA

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	total amount sold to consumers divided by the total amount of water produced times 100.								
Objective 3: Universal access to adequate sanitation and hygiene services improved									
13	*Proportion of household connected to conventional public sewerage system* This indicator measures the urban population with access to sewer connections. It is calculated as follows: The total urban households connected to public sewer divide by the total number of households times 100.	13	15	20	25	30	Yearly	Performance Review Report	EWURA
14	*Proportional of population using adequate non-sewered sanitation services* This indicator measures the use of improved sanitation facilities that is not shared with other households and where the excreta are safely disposed insitu or transported and treated	27.7	35	45	55	65	Yearly	Annual Performance Report	MoH

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	offsite. Improved sanitation facilities include Septic Tanks or pit latrines, Improved pit Latrines (Pit Latrines with a slab or Ventilated pit latrines) and composting toilets. It is calculated as follows: The total households with adequate sanitation facilities divided by the total households times 100.								
15	*Percent of population with basic hand washing facilities*. It refers to households with a designated point where water and soap for hand washing is available. It is calculated as follows; Total number of household with basic hand washing point divided by total number of household multiplied by 100	41.9	35	45	55	65	Quarterly	NSMIS	MoH, MoE& PO-
16	*Number of HCFs with basic WASH facilities*	3,328	4,000	5,500	6,000	6,828	Monthly	NSMIS	MoH & PO-RALG
	Number of primary schools with basic WASH facilities	52	65	75	85	100	Annually	EMIS	MoEST & PO-RALG
	Number of transport hubs with basic WASH facilities		10	25	45	60	Quarterly	NSMIS	MoH & PO-RALG

SN	PDO: Strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services								
	Indicator and Definition	Baseline (2020/21)	Indicator Target				Data Collection Methods		Responsible
			2022/23	2023/24	2024/25	2025/26	Frequency of Data Collection	Data source	
	Number of public places with basic WASH facilities		50	250	350	450	Quarterly	Quarterly	MoH & PO-RALG
17	*Percentage of schools provided with emergence sanitary material*	5	10	20	30	40	Annually	ESMIS	MoEST & PO-RALG
18	*Percentage of population with basic toilets.* It includes toilets with intact slab, which is not shared. It is calculated as follows; total number of households with basic toilets divided by total number of households multiplied by 100	55.8	50	45	41.3	37	Quarterly	NSMIS	MoH & PO-RALG
Objective 4: Planning, coordination, monitoring and evaluation enhanced									
19	*Number of thematic working group meetings conducted*	4	4	4	4	4	Annually	Water Sector Status Report	DPCEM
Objective 5: Institutional strengthening and working environment improved									
20	*Number of PPP projects implemented in the water sector*	0	1	2	3	5	Yearly	Water Sector Status Report	DPP