UNITED REPUBLIC OF TANZANIA

MINISTRY OF WATER

WATER SECTOR DEVELOPMENT PROGRAMME PHASE III
ANNUAL WATER SECTOR STATUS REPORT 2025

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ACRONYMS AND ABBREVIATIONS

BWBs	Basin Water Boards
CBWSOs	Community Based Water Supply and Sanitation Organizations
CD Plan	Capacity Development Plan
DAWASA	Dar es Salaam Water Supply and Sewerage Authority
DfID	Department for International Development
DMAs	District Metered Areas
EAC	East African Community
EAR	Environmental Audit Reports
eGA	e-Government Agency
EMA	Environmental Management Act
ESIA	Environmental and Social Impact Assessment
ESM	Environmental and Social Management
ESMF	Environmental and Social Management Framework
EWURA	Energy and Water Utilities Regulatory Authority
FY	Financial Year
GoT	Government of Tanzania
IAs	Implementing Agencies
ICT	Information Communication Technology
IPF	Investment Project Financing
IWRM	Integrated Water Resources Management
IWRMD	Integrated Water Resources Management and Development
KfW	German Bank for International Development
KPIs	Key Performance Indicators
LGAs	Local Government Authorities
m^3	Cubic Metres
MIS	Management Information System
MoEVT	Ministry of Education and Vocational Training
MoF	Ministry of Finance
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MoU	Memorandum of Understanding
MoW	Ministry of Water
MTB	Ministerial Tender Board
NAWAPO	National Water Policy
NBI	Nile Basin Initiative
NRW	Non-Revenue Water
NSC	National Sanitation Campaign
NWF	National Water Fund
PCU	Programme Coordination Unit
PforR	Program for Results
PMO-RALG	Prime Minister's Office, Regional Administration and Local Government
RAP	Resettlement Action Plan
RPF	Resettlements Policy Framework
RUWASA	Rural Water Supply and Sanitation Agency

SC	Steering Committee
SESA	Strategic Environmental and Social Assessment
TWG	Thematic Working Groups
TZS	Tanzanian Shillings
USD	United States Dollar
WASH	Water, Sanitation and Hygiene
WASSA	Water Supply and Sanitation Act
WB	World Bank
WRMA	Water Resources Management Act
WSDP	Water Sector Development Programme
WSSAs	Water Supply and Sanitation Authorities
WUAs	Water User Associations
MCM	Million Cubic Metres

PREFACE

Water is the most precious resource and abundant compound on earth's surface covering more than 70% of the planet. In nature, water exists in three states of liquid, solid, and gas. It makes up 55% to 78% of the human body hence vital for human existence and useful in every aspect of our lives. Water is an essential element and strategic in social economic development. Inadequate access to sufficient quantities of quality water can significantly hinder growth and human development whereas improved water management, development and supply can generate huge benefits in health, agriculture, transport, energy, tourism and industrial production unlocking opportunities for economic growth in any country of the world.

The available annual renewable water resources in Tanzania are estimated at **125,763 MCM** per year which includes **104,568 MCM** of surface water and **21,195 MCM** of groundwater. The estimate is equivalent to an average of **2,105m^3/cap/yr** which is above the global agreed Water Stress Indicator of **1,700m^3/cap/yr**. However, the amount of renewable water resources decreases with time hence a reduced available annual average per capita and this is due to different reasons including climate change effects, inadequate water security infrastructures, increased population growth, social economic activities and catchment degradation.

The decrease of annual renewable water resources due to various factors demands continued and deliberate interventions for sustainable water resources management and development and water supply and sanitation services. The interventions implemented by the Ministry with support of Stakeholders to tackle the different challenges include expansion, rehabilitation and construction of new water supply and sanitation projects; water quality management; water source conservation and protection; implementation of Integrated Water Resources Management and Development Plans; and implementation of the Integrated Water Sector Monitoring and Evaluation System.

Considering the good performance and prevailing demands of the Water Sector, I take this opportunity to urge the people of Tanzania and Stakeholders to continue supporting the sector which is crucial in sustaining and driving the socio-economic development of the country. The Government of Tanzania shall continue to collaborate with our esteemed Development Partners, Private Sector and Civil Society Organizations to increase commitments in Water Sector investments. It's our great hope that the implementation status and challenges outlined in this Water Sector Status Report attracts collaborative efforts of Water Users, Policy Makers, Civil Society Organizations and Development Partners in providing comprehensive support and sustainable solutions to the water sector.

Eng. Mwajuma Waziri
PERMANENT SECRETARY
Ministry of Water

CHAPTER ONE: INTRODUCTION

1.1 The Policy, Legal and Institutional Framework

1.1.1 Policy Framework

The National Water Policy of 2002 version 2025 addresses interests in water resources management and development; water quality management; water supply; sanitation and hygiene. Furthermore, The Water Sector Development Programme III focuses on addressing the goals of the policy with an objective of strengthening sector institutions for integrated water resources management and improved access to water supply and sanitation services. This and other strategic initiatives provide the roadmap for implementation of interventions in the water sector and charts out targets for improving water supply and sanitation services to rural and urban populations and ensuring sustainability of water resources. In that matter, NAWAPO 2002 version 2025 provides guidance and operational directives to all water subsectors for the achievement of national and international targets.

1.1.2 Legal Framework

The Water Resources Management Act (WRMA) No. 11 (2009) and its amendments provides institutional legal framework for sustainable management and development of water resources; outlines principles for water resources management; prevention and control of water pollution; and participation of stakeholders and the general public in implementation of the National Water Policy (2002) version 2025. The WRMA establishes Integrated Water Resources Management (IWRM) institutions including the National Water Board, Basin Water Boards, Catchment Committees and Water User Associations; and supports joint IWRM bodies on shared waters with other countries.

On the other hand, the Water Supply and Sanitation Act No.5 (2019) provides for sustainable management and adequate operation and regulation of water supply and sanitation services. The Act establishes Water Supply and Sanitation Authorities (WSSAs), Rural Water Supply and Sanitation Agency (RUWASA), National Water Fund (NWF) and Community Based Water Supply Organisations (CBWSOs).

In line with Water Acts and EWURA Act 2001, the Environmental Management Act (EMA) No. 20 of 2004 provides for and promotes the enhancement, protection, conservation and management of the environment. The EMA provides legal framework necessary for coordinating harmonious and conflicting activities with a view to integrating such activities into an overall sustainable environmental management system by providing key technical support to Sector Ministries.

1.1.3 Water Sector Institutional Framework

The Water Sector Institutional framework comprises of Ministry of Water, RUWASA, Community Based Water Supply Organisations, WSSAs, NWF, Water Institute, Sector Ministries, EWURA, National Water Board, Catchment Committees, BWBs and WUAs. The responsibilities of the institutions are as follows:

i) The Ministry of Water is responsible for providing sector policy, coordination, monitoring and evaluation;
ii) National Water Board is the advisory body regarding water resources management and development;
iii) Basins Water Boards are responsible for management and development of water resources in their respective basins;
iv) Catchment Committees are responsible for coordination and harmonizing catchment level integrated water resources management plans;
v) Water User Associations are responsible for management of water allocation at local levels;
vi) RUWASA is responsible for development and sustainable management of rural water supply and sanitation projects;
vii) The WSSAs are responsible for provision of urban water supply and sanitation services;
viii) EWURA is responsible for regulation and protects interests of customers with regard to tariffs, quality and reliability of water supply and sanitation services;
ix) Community Based Water Supply Organisations are responsible for operating and maintaining rural water supply and sanitation facilities;
x) Sector Ministries responsible for Health, Education and Local Government are involved in provision of sanitation and hygiene services;
xi) Water Institute is responsible for providing technical training, research, consultancy and other services; and
xii) National Water Fund (NWF) has the responsibility of providing investment support in water projects.

1.1.4 Water Sector Coordination

The Ministry of Water coordinates WSDP which is the main vehicle for implementing all water sector projects in Tanzania under the Sector Wide Approach to Planning (SWAP). The overall sector coordination is attained through a dialogue mechanism which provides an opportunity for the Ministry, Development Partners, Civil Society Organizations and other

sector stakeholders to assess programme performance and recommend sustainable implementation strategy. In the year 2018, the Ministry and stakeholders agreed to enhance the dialogue structure, architecture and focus to cater for the prevailing water sector challenges and improve dialogue, resource mobilization, programme management and coordination. Currently, the dialogue mechanism comprises four thematic working groups namely; (i) Financing & Planning, Institutional Capacity Building and Performance Monitoring; (ii) Water Resources Management and Development; (iii) Water Supply and Sanitation Service Delivery, and (iv) Sanitation and Hygiene.

1.1.5 Overview of WSDP

The Government of the United Republic of Tanzania through the Ministry of Water is implementing the Water Sector Development Programme (2006–2025). The objective of the programme is to alleviate poverty through improvement of governance of water resources and sustainable delivery of water supply and sanitation services. The First Phase (WSDP I) had four components namely Water Resources Management; Rural Water Supply and Sanitation; Urban Water Supply and Sanitation; and Institutional Strengthening and Capacity Development. The Phase started from July 2009 to 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 review of WSDP I noted some issues and recommended improving programme design, sharpening the targets within components and strengthening operational aspects and capacity development.

Building on recommendations, experience and lessons learnt during the implementation of WSDP I, the Government designed and implemented the Second Phase (WSDP II) from July 2016 to June 2022. The Programme components were: (i) Water Resources Management and Development; (ii) Rural Water Supply and Sanitation; (iii) Urban Water Supply and Sanitation; (iv) Sanitation and Hygiene; and (v) Programme Management and Delivery Support. The WSDP II had a total commitment of **3.2 billion USD** and as of December 2021, the disbursement was **37%** of the overall commitment. Upon the completion of WSDP II in June 2022, the Government designed WSDP III to be implemented from July 2022 to June 2026. The WSDP III is the last phase of the Water Sector Development Programme with a total financial requirement amounting to **6.46 billion USD**.

1.1.6 WSDP III 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

Water Resources Management and Development component objective 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 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 other 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 component 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

Programme Coordination and Delivery Support component is designed to provide support to other components to deliver the expected outputs and targets. It comprises of 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 and non-communicable diseases; governance and corruption as well as private sector engagement.

CHAPTER TWO: SECTOR FINANCING

2.1 Resource Mobilization

The Government of Tanzania in collaboration with sector stakeholders is implementing the Water Sector Development Programme Phase Three from July 2022 to June 2026. The amount mobilized and utilized for the period of January to December 2025 stands at **TZS 883.93 billion** equivalents to **USD 351.04 million**. The projects/subprograms that received funds are shown in **Table 1.**

Table 1: *List of projects and subprograms funds mobilized and utilized for year 2025.*

PROJECTS	CURRENCY	AMOUNT	TSHS	USD
Mugango-Kiabakari (BADEA, SFD)	USD	513,669.43	1,282,864,994.70	513,669.43
	TZS	1,103,554,667.62	1,103,554,667.62	437,918.52
IFF-OBA (KFW)	EURO	1,115,043.56	3,403,112,946.00	1,350,441.65
Establishment of Iringa Water Supply and Sewerage Infrastructure Project	USD	223,845.61	543,940,401.02	223,845.61
Improvement of sewerage services in Dodoma capital city (TZA 0I4) Tranche 1 Consultancy	USD	332,466.33	870,831,359.72	332,466.33
Improvement of Water Supply and Sanitation Services in Iringa Municipality Project	USD	1,252,929.22	3,075,122,445.85	1,252,929.22
Extension of Lake Victoria Pipeline to Tabora, Igunga and Nzaga Towns	USD	55,200.00	144,585,740.88	55,200.00
LVWATSAN-MWAUWASA (EIB, EU)	TZS	0	0	0
	EUR	10,552,500.18	25,642,366,505.63	10,552,500.18
LVWATSAN-MUWASA (EU)	EUR	268,489.53	819,430,045.56	268,489.53
	USD	9,537,723.86	24,035,064,127.20	9,537,723.86
	TZS	5,503,266,629.44	5,503,266,629.44	2,183,835.96
Construction, Testing and Commission of 28 Towns	USD	92,652,244.81	236,477,386,526.85	92,652,244.81
	TZS	17,655,698,087.47	17,655,698,087.47	7,006,229.40
Simiyu Climate Resilience Sustainable Water Supply and Sanitation – Simiyu (KfW)	USD	1,410,001.73	3,419,519,414.59	1,410,001.73
	TZS	8,981,955,613	8,981,955,613	3,564,268.10
P4R (Rural Water Supply-WB)	USD	45,508,200.01	110,906,452,206.01	45,508,200.01

GoT (Other Projects)	TZS	340,035,841,503.57	340,035,841,503.57	134,934,857.74
Same Mwanga Korogwe water supply project (BADEA, OPEC Fund, SFD & Kuwait Fund)	USD	1,720,575.42	4,428,825,817.82	1,720,575.42
	TZS	6,048,637,844.49	6,048,637,844.49	2,400,253.11
Dodoma Resilient and Sustainable water Development and Sanitation (AfDB)	TZS	3,103,935,948.41	3,103,935,948.41	1,231,680.93
	USD	890,758.59	2,265,830,165.60	890,758.59
Dodoma Water Development & San Program	USD	647,173,.76	1,702,284,247.92	647,173,.76
USANGU JSDF	USD	1,140,656.90	2,799,567,270.22	1,140,656.90
Morogoro Water and Sanitation Project (AFD)	USD	20,578,484.05	52,882,425,745.97	20,578,484.05
	TZS	780,980,000.00	780,980,000.00	309,912.70
Water Sector Support Project II	USD	10,119,232.00	25,492,077,548.19	10,119,232.00
Wastewater Treatment System Development In Dar Es Salaam Project	USD	215,130.66	521,732,322.87	215,130.66
TOTAL			**883,927,290,126.6**	**351,038,680.2**

2.2 Internal and External Audit

2.2.1 Internal Control Mechanism

Ministry of Water in collaboration with other Implementing Agencies is responsible for preparing and implementing strategic audit plans of implemented projects and subprograms. This is done through established Internal Audit Units and Audit Committee to assist the Accounting Officer to enhance internal control by fulfilling stewardship, leadership and control responsibility in managing resources of the sector. Under the reporting period, a total of **four (4)** audits and audit committee meetings were conducted as per annual plan.

2.2.2 External Audits

In year 2025, all 2023/24 financial statements received **unqualified** audit opinion. Audit reports were for WSDP, Water Sector Support Project II (WSSP II), Sustainable Rural Water Supply and Sanitation, National Water Fund, 6 specific projects and Vote 49. For financial year 2024/25, National Audit Office in fulfilment of the requirements of Tanzania's Constitution, conducted audits for 7 specific projects and Vote 49. The projects are WSDP, Water Sector Support Project II (WSSP II), Sustainable Rural Water Supply and Sanitation, Simiyu Climate Resilience Sustainable Water Supply and Sanitation program, Dodoma Resilient and Sustainable water Development and Sanitation, National Water Fund and Capacity building. However, the final reports are expected to be out by 31st March, 2026.

CHAPTER THREE: PROGRAMME PERFORMANCE

3.1 WATER RESOURCES MANAGEMENT AND DEVELOPMENT COMPONENT

Water Resources Management and Development Component is divided into two sub-components of Water Resources Management and Water Resources Development. The implementation status of each sub components for the year 2025 is as follows: -

3.1.1 Water Resources Management Subcomponent

The Water Resources Management Subcomponent is responsible for developing a sound water resources management and institutional framework and promoting good governance of water resources. Generally, the country is divided into nine hydrological zones or River/Lake Basins to enhance water resources management. The basins are: Pangani, Wami/Ruvu, Rufiji, Ruvuma and Southern Coast, Lake Nyasa, Lake Rukwa, Lake Tanganyika, Lake Victoria and the Internal Drainage Basin, as shown in **Figure 1**. The River and Lake Basins were established under the Water Utilisation Act No. 42 of 1974 (Control and Regulations) with its amendments No. 10 of 1981. The Water Resources Management Act Number 11 of 2009, and its amendments, repeal the aforementioned Acts and were amended in 2022. Establishment of the Basin Water Boards aimed at enhancing water resources management for socio-economic development and a sustainable environment. The WSDP III focuses on the effective implementation of the Integrated Water Resources Management and Development (IWRMD) plans.

Figure 1. Water Basins in Tanzania

3.1.1.1 Status of Water Resources in the Country

a) Climatic and Rainfall Regime in Tanzania

Tanzania is characterized by a tropical climate with marked regional variations influenced by topography, altitude, proximity to large bodies of water, and oceanic effects. Mean annual temperatures across the country generally range between 18°C and 30°C, with a national average of approximately 23°C. In contrast, mean annual rainfall is estimated at 900–1,000 mm, depending on location and period of reference. The national average potential evapotranspiration (PET) is relatively high, estimated at approximately 1,200–1,400 mm per year, exceeding average annual rainfall in many parts of the country.

The interaction between temperature, rainfall, and evapotranspiration results in distinct climatic zones. The coastal belt is typically hot and humid, influenced by the Indian Ocean. The central plateau is generally hot and semi-arid, characterised by low and erratic rainfall and high evapotranspiration rates. The northern highlands experience cooler, more temperate conditions due to their higher elevations, while the western and southern regions are generally warm to hot but less humid, with relatively higher rainfall than in central Tanzania. The hottest period in Tanzania usually occurs between November and February, coinciding with the main rainy season in much of the country, while the coolest period typically spans May to August, during the dry season and is influenced by southeast trade winds. Seasonal rainfall distribution is largely controlled by the migration of the Intertropical Convergence Zone (ITCZ). The ITCZ moves southwards across Tanzania between October and December, reaches its southernmost position during January and February, and then migrates northwards between March and May. This seasonal oscillation governs the onset, duration, and spatial variability of rainfall across the country.

Tanzania experiences two principal rainfall regimes:

1. Unimodal rainfall regime, where the rainy season typically starts in December and ends in April of the following year. This regime dominates much of the country, including the southern, southwestern, central, and western regions.
2. Bimodal rainfall regime, characterised by two distinct rainy seasons: the short rains (October–December) and the long rains (March–May). This pattern occurs mainly in the northern and northeastern parts of the country, including areas around Mount Kilimanjaro, Mount Meru, and the northern coastal belt.

The hydrological year 2024/2025 (1st November 2024 – 30 October 2025) was characterized by normal to below-normal rainfall conditions across much of Tanzania. The country received an average annual rainfall of approximately **798.5 mm**, equivalent to about 75% of the Long-Term Average (LTA), placing the year in the normal-to-moderately dry rainfall class. Spatially, rainfall distribution was uneven. Large areas experienced normal rainfall, while extensive zones recorded moderately dry conditions. Moderately dry

conditions were observed at several stations, including Mafinga, Iringa, Igawa, and Msembe. In contrast, severely dry conditions were recorded at St. Gasper Met Station (34% of LTA), highlighting localized drought stress, particularly in central Tanzania. Only a few isolated stations, such as Mtera, registered wet rainfall conditions (≥125% of LTA). Compared with the preceding hydrological year (2023/2024), which was exceptionally wet, rainfall in 2024/2025 was significantly lower. This reduction marked a transition from flood-dominated conditions to incipient hydrological drought conditions, particularly evident during the latter part of the dry season (June–October 2025). Figure 2 shows rainfall distribution in the country, while Table 1 provides the mean annual rainfall recorded in some stations in the country.

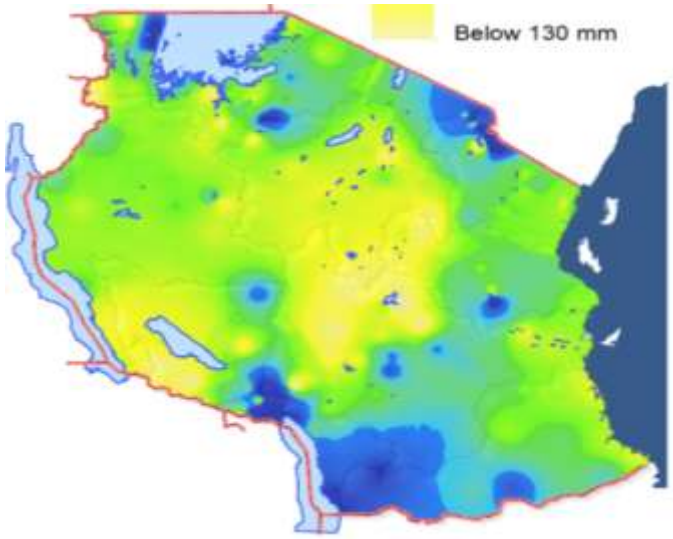

Figure 2. Rainfall Distribution map for the hydrological year 2024/2025

Table 2: Rainfall state of HY-2023/2024 and HY-2024/2025 compared to LTA

Sn	Rainfall Station	LTA (mm)	2023/2024			2024/2025		
			Rainfall (mm)	% LTA	State	Rainfall (mm)	% LTA	State
1	Msembe Rain Station	530.7	917.7	173	Ext. wet	401.9	75	Normal
2	Mafinga Met Station	989.3	1,229.3	124	Normal	770.0	70	Mod dry
3	Iringa Met Station	718.1	1,227.3	171	Ext. wet	479.2	67	Mod dry
4	Igawa Met Station	683.4	881.0	129	Wet	473.7	69	Mod dry
5	Uhafiwa Met Staion	1,904.7	2,468.0	130	Wet	1,536.0	81	Normal
6	Namtumbo Met Station	1,478.7	2,499.3	166	Ext. wet	1,655.6	112	Normal
7	St. Gasper Met Station	734.3	823.7	112	Normal	252.7	34	Sev dry
8	Bomalang'ombe	1,459.7	2,529.6	173	Ext. wet	1,360.4	93	Normal
9	Mtera Met Station	498.5	675.7	136	Wet	624.2	125	Wet
10	Ifakara Met Station	1,428.3	2051.8	144	Wet	1,252.8	88	Normal

Sn	Rainfall Station	LTA (mm)	2023/2024			2024/2025		
			Rainfall (mm)	% LTA	State	Rainfall (mm)	% LTA	State
11	Utete Met Station	951.1	1,460.3	154	Ext. wet	772.7	81	Normal
12	Njombe Met Station	1,070.8	1,592.4	149	Wet	1,183.5	111	Normal
13	Lukosi Met Station	437.0	665.1	152	Ext. wet	370.4	85	Normal
14	Magamba Met Station	979.7	1,283.0	131	Wet	758.0	77	Normal
15	Mbeya Rainfall Station	916.2	1,282.2	140	Wet	746.6	81	Normal
16	S'wanga Met Station	832.1	954.8	115	Normal	840.0	101	Normal
17	Rungwa Met Station	852.0	1,162.0	136	Wet	873.0	103	Normal
18	Chiwanda Rain Station	890.8	1,079.7	121	Normal	818.1	92	Normal

b) Renewable Water Resources

Water resources in Tanzania comprise surface water and groundwater systems, including rivers, lakes, reservoirs, shallow and deep aquifers accessed through boreholes and wells, artesian systems, and natural springs. The spatial and temporal distribution of these water resources is largely governed by the country's geological framework, physiography, and climatic variability, particularly rainfall patterns and evapotranspiration regimes.

The total renewable water resources of Tanzania are estimated at approximately **125,763 million cubic metres (MCM)** per year, of which about **104,568 MCM (83%)** are derived from surface water, while 21,195 MCM (17%) originate from groundwater. This volume translates to an average annual water availability of approximately **2,105 cubic metres per capita,** which is above the internationally recognized water stress threshold of **1,700 m³** per capita per year.

Despite this favorable national-level indicator, the per capita availability of renewable water resources is steadily declining. This reduction is driven by a combination of interrelated factors, including rapid population growth, increasing socio-economic activities, climate change impacts that increase rainfall variability and extremes, catchment degradation, inefficient water use and planning, and limited investment in water storage and water security infrastructure. As a result, many regions and catchments already experience localized water stress, particularly during dry seasons and drought years, underscoring the need for improved water resources planning, protection, and strategic development to ensure long-term water security.

c) River Flows

River flow conditions during the hydrological year 2024/2025 were generally below Long-Term Average (LTA) flows and significantly lower than those observed in 2023/2024. Perennial rivers experienced reduced discharges, particularly during the dry season. Seasonal rivers showed early cessation of flow, with many rivers drying up between June and October 2025. Although short-lived peak flows were recorded during periods of intense rainfall, these events were limited in duration and spatial extent. Overall, the river flow regime reflected the normal to moderately dry rainfall conditions, with reduced runoff generation and diminished baseflow contributions, especially in catchments highly dependent on direct rainfall recharge.

The hydrographs for the selected rivers (Momba, Kagera, Mnyera, and Great Ruaha at Msembe) clearly illustrate the strong interannual variability of river flows in response to contrasting rainfall conditions across HY-2022/2023, HY-2023/2024, and HY-2024/2025 relative to the LTA. Across all rivers, HY-2023/2024 is characterized by exceptionally high discharges, substantially exceeding both the LTA and the preceding hydrological year (2022/2023). In contrast, HY-2024/2025 shows moderate-to-subdued flows, generally below those of 2023/2024 and, in many cases, close to or slightly above the LTA, reflecting a transition to normal-to-moderately dry rainfall conditions.

Momba River

The Momba River exhibited a pronounced flood response during HY-2023/2024, with peak discharges exceeding 300 m³/s between January and April, approximately twice the LTA**.** The hydrograph shows a broad and sustained high-flow period, indicating persistent catchment saturation and prolonged rainfall.

In HY-2024/2025, peak flows are significantly reduced, closely tracking the LTA with a narrower peak occurring around March–April. Dry-season flows (June–October) are very low in all years, highlighting the strong seasonality and limited baseflow contribution of the river.

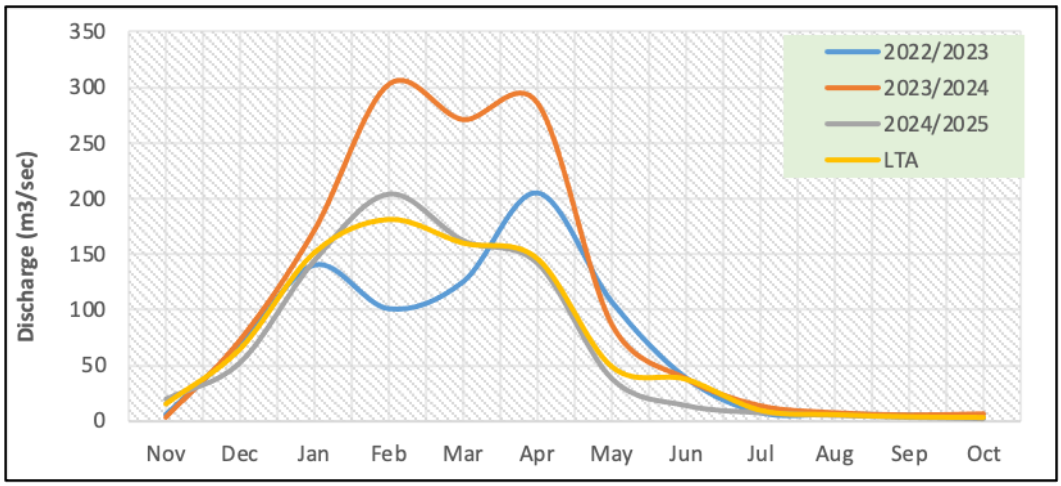

Figure 3. Monthly average discharge for the Momba river comparing flows for HY-22/23, 23/24 and 24/25 with their Long-Term Averages

Kagera River

The Kagera River, a large transboundary, lake-regulated system, shows less extreme variability than smaller rivers. Nevertheless, HY-2023/2024 recorded consistently elevated discharges**,** peaking at about **450 m³/s**, well above the LTA.

During HY-2024/2025, flows remained below 2023/2024 levels but generally above the LTA**,** reflecting the buffering effect of upstream storage and lake regulation**. The** hydrograph indicates a delayed and smoother peak**,** consistent with the river's large catchment and storage characteristics.

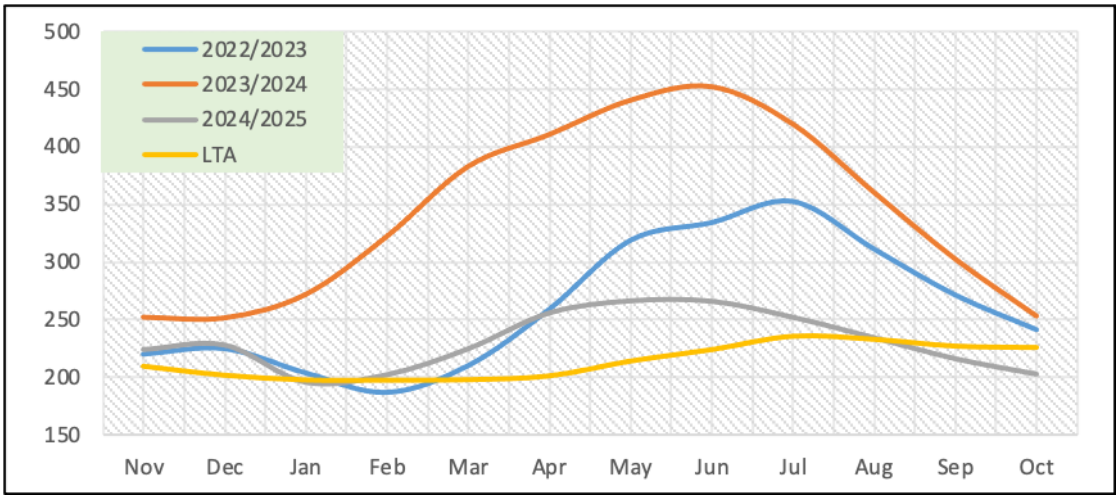

Figure 4. Monthly average discharge for the Kagera river comparing flows for HY-22/23, 23/24 and 24/25 with their Long-Term Averages

Mnyera River

The Mnyera River shows a sharp, flashy response to rainfall. HY-2023/2024 recorded two distinct discharge peaks between January and April**,** with maximum flows exceeding **200 m³/s**, more than three times the LTA peak**.** This pattern suggests rapid runoff generation and limited catchment storage.

In HY-2024/2025, peak flows were lower and shorter in duration, although still slightly above the LTA during the main rainy months. Dry-season flows declined rapidly, indicating high vulnerability to rainfall deficits**.**

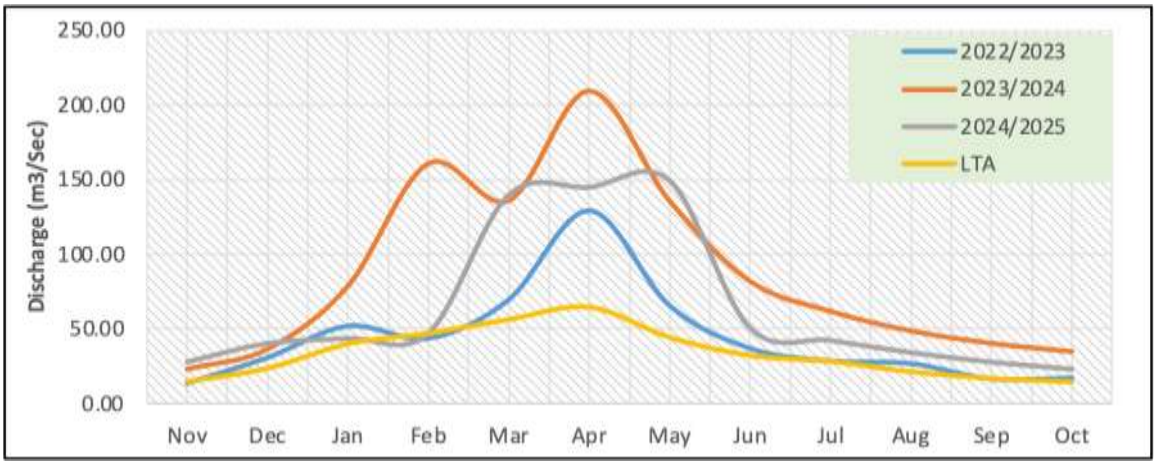

Figure 5. Monthly average discharge for the Mnyera river comparing flows for HY-22/23, 23/24 and 24/25 with their Long-Term Averages.

Great Ruaha River at Msembe

The Great Ruaha River at Msembe shows the greatest contrast among the analysed rivers. During HY-2023/2024, peak discharges exceeded **1,000 m³/s**, representing **four** to six times

the LTA, and indicating exceptional flood conditions. These flows are consistent with reported flooding and widespread impacts in the Rufiji Basin during that year.

In HY-2024/2025, discharge levels dropped sharply, with peak flows only slightly above the LTA and prolonged low-flow conditions during the dry season. This highlights the high sensitivity of the Great Ruaha system to rainfall variability and upstream abstractions.

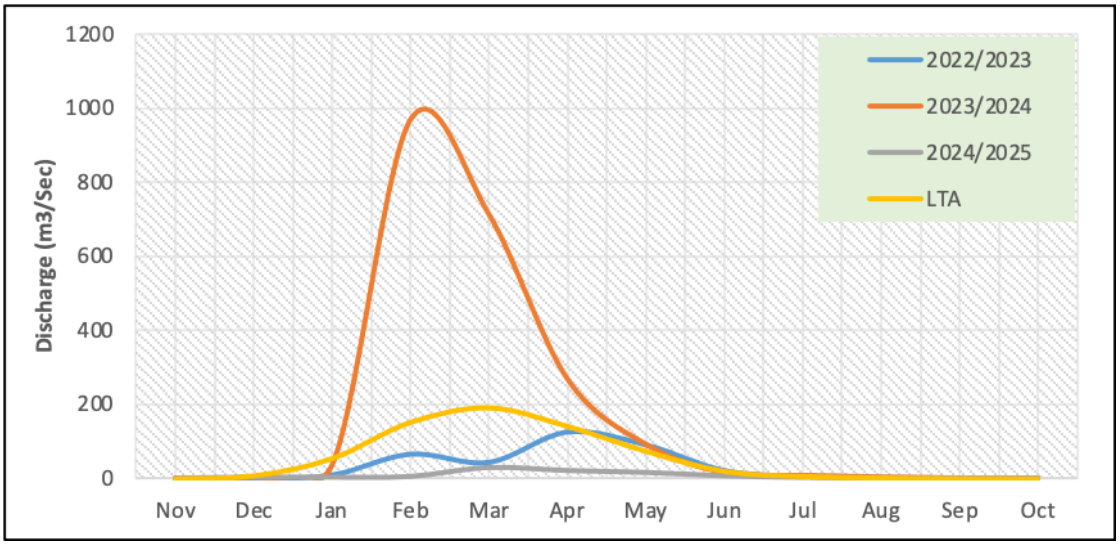

Figure 6. Monthly average discharge for the Great Ruaha river at Msembe, comparing flows for HY-22/23, 23/24 and 24/25 with their Long-Term Averages

d) Water Levels in Lakes/ Reservoirs/Dams

Water levels in major lakes and dams during 2024/2025 showed a **general decline** compared to the exceptionally high levels recorded in 2023/2024. Despite reduced rainfall, most lakes and reservoirs remained above their Long-Term Average (LTA) levels for much of the year. This apparent resilience is largely attributed to the cumulative storage effect from several preceding wet years, notably 2019/2020, 2020/2021, and 2023/2024, which resulted in sustained inflows and elevated baseline water levels.

Key observations include:

- **Major lakes** such as Lake Victoria and Lake Tanganyika exhibited gradual recession but remained above historical averages.
- **Lake Rukwa** recorded water levels in 2024/2025 that were equal to or higher than those of 2023/2024, despite receiving normal to moderately dry rainfall. This is explained by its endorheic (closed-basin) nature, which promotes long-term accumulation of water.
- **Strategic reservoirs** (e.g., Mtera, Nyumba ya Mungu) showed declining but still relatively stable storage levels.

Overall, surface water storage continued to buffer against rainfall deficits throughout the year.

Mtera Dam

Figure 7 illustrates the monthly water level variations at Mtera Dam during HY-2023/2024, compared with the Long-Term Average (1990–2023), the preceding hydrological year HY-2022/2023, and a representative dry year (HY-2005/2006). The figure shows that water levels during HY-2023/2024 were consistently higher than those during both LTA and HY-2022/2023 for most of the year, reflecting the exceptionally wet rainfall conditions experienced during that hydrological year. Peak reservoir levels were reached during the main rainy season, indicating strong inflows and effective catchment response.

In contrast, the dry year HY-2005/2006 shows markedly lower water levels across all months, clearly demonstrating the reservoir's sensitivity to prolonged rainfall deficits. The comparison highlights the buffering role of Mtera Dam during wet years and its vulnerability during dry years, underscoring the importance of sustained inflows, upstream catchment protection, and coordinated reservoir operation to support hydropower generation, downstream environmental flows, and water supply reliability amid increasing climatic variability.

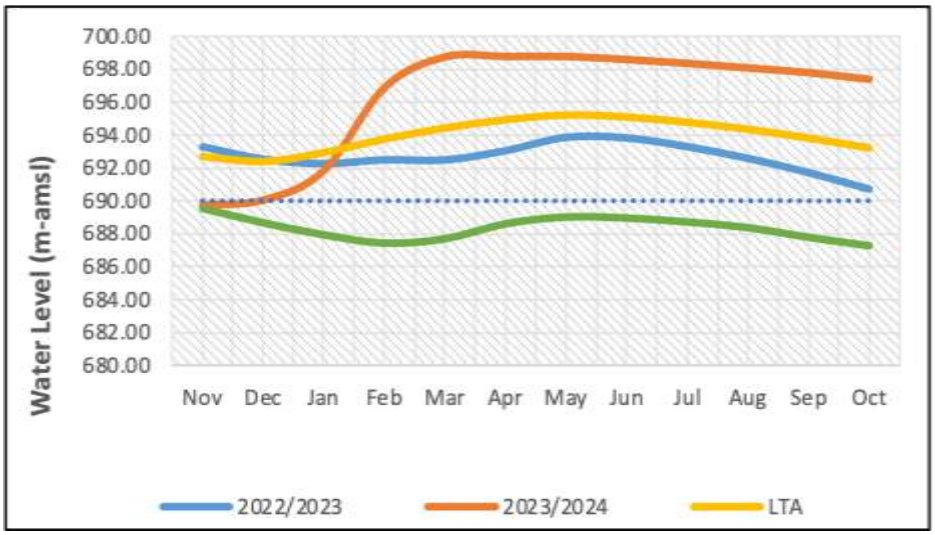

Figure 7. Monthly Water level at Mtera dam for HY-2023/2024 compared to LTA (1990-2023), HY-2022/2023 and Dry Year (HY-2005/2006)

Lake Victoria

Figure 8 presents the monthly water level variations of Lake Victoria during HY-2024/2025, compared with HY-2023/2024, the Long-Term Average (1990–2023), HY-2022/2023, and a representative dry year (HY-2005/2006). The figure shows that water levels in HY-2024/2025 declined gradually compared with the exceptionally high levels recorded in HY-2023/2024, reflecting reduced rainfall during the year. However, despite this decline, lake levels remained consistently above the LTA for most of the hydrological year.

The comparison with HY-2005/2006 highlights the contrast between current conditions and historical drought periods, where lake levels were substantially lower throughout the year. The relatively elevated levels observed in 2024/2025 can be attributed to the cumulative storage effect from several preceding wet years, which continued to sustain the lake despite normal-to-below-normal rainfall. Overall, the figure underscores Lake Victoria's resilience to short-term rainfall deficits and indicates the need for continued monitoring and coordinated basin-level management to mitigate risks associated with prolonged dry conditions.

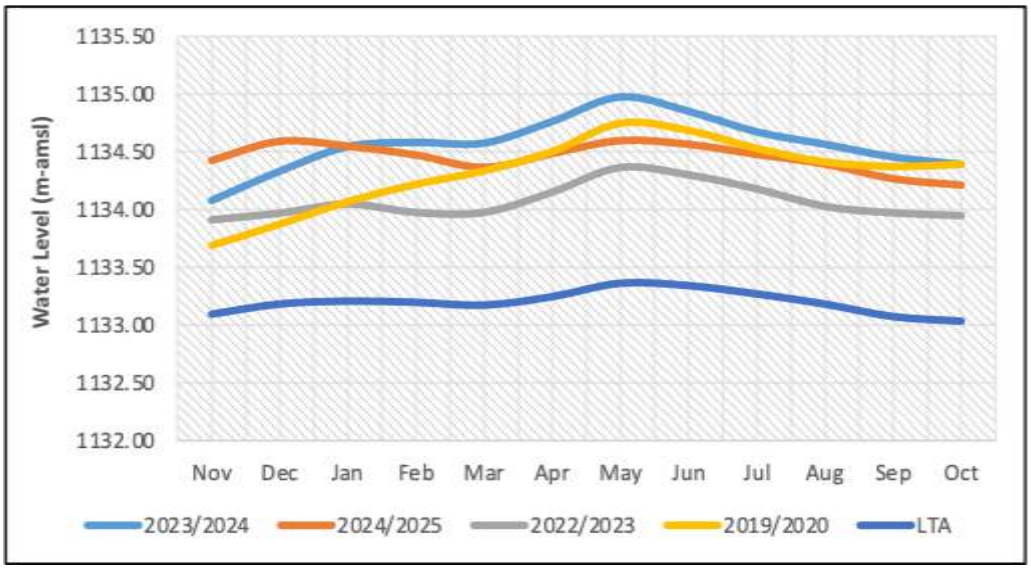

Figure 8. Monthly Water level at Lake Victoria for HY-2024/2025 compared to HY-2023/2024, LTA (1990-2023), HY-2022/2023 and Dry Year (HY-2005/2006).

Lake Rukwa

Figure 9 illustrates the monthly water level variations of Lake Rukwa for HY-2023/2024 and HY-2024/2025, compared with the Long-Term Average (1990–2023), HY-2022/2023, and a representative dry year (HY-2005/2006). The figure shows that water levels during HY-2023/2024 were markedly above the LTA, reflecting the exceptionally wet rainfall conditions that year.

Notably, HY-2024/2025 exhibits water levels comparable to or higher than those of HY-2023/2024, despite receiving normal to moderately dry rainfall. This behaviour is primarily attributed to the endorheic (closed-basin) nature of Lake Rukwa, which has no surface outlet, allowing continued cumulative accumulation of inflows from previous wet years. In contrast, the dry year HY-2005/2006 is characterised by persistently low water levels, clearly illustrating the lake's sensitivity to prolonged rainfall deficits.

Overall, the figure highlights the strong memory effect of Lake Rukwa's hydrological system, where water levels respond not only to current-year rainfall but also to antecedent wet

conditions. This underscores the importance of long-term climatic trends and basin-scale water balance considerations in managing lakes within closed drainage systems.

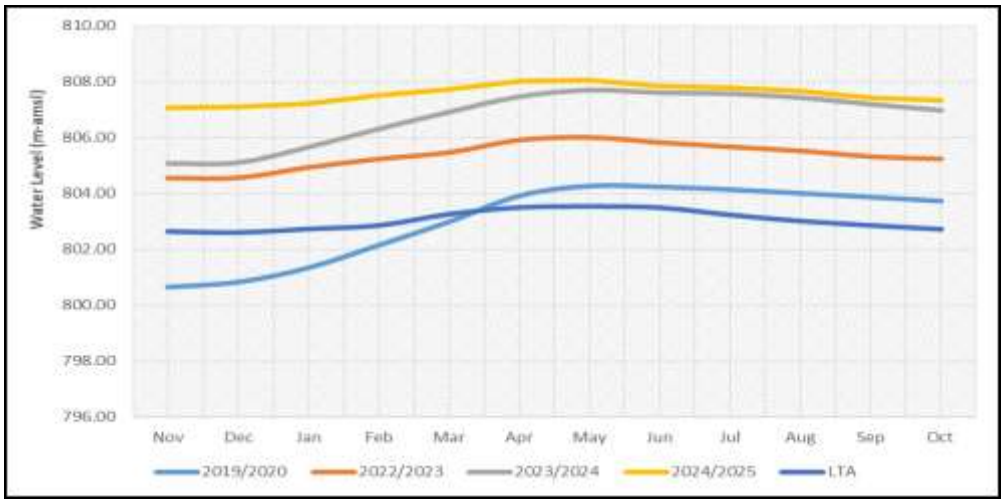

Figure 9. Monthly Water level at Lake Rukwa for HY-2023/2024 and HY-2024/2025 compared to LTA (1990-2023), HY-2022/2023 and Dry Year (HY-2005/2006).

3.1.1.2 Groundwater Resources and Aquifer Systems in Tanzania

Tanzania is estimated to possess a renewable groundwater potential of approximately 21,195 million cubic metres (MCM) per year, representing about 17% of the country's total renewable water resources. The occurrence, storage capacity, and productivity of groundwater vary significantly across the country, depending on the geological setting, aquifer characteristics, structural controls, and recharge mechanisms.

Groundwater availability in Tanzania is primarily governed by five major aquifer systems:

1. **Pre-Cambrian Basement Complex Aquifers** - these formations underlie approximately 75% of the country and consist mainly of hard, consolidated, and in some areas metamorphosed crystalline rocks. Groundwater occurrence is largely confined to weathered zones and fractured systems, resulting in highly variable, localised yields. Typical borehole yields generally range up to 3 litres per second (l/s), although higher yields may occur in well-developed fracture zones.

2. **Karoo Sedimentary Aquifers** - composed predominantly of sandstones and conglomerates, the Karoo formations occur in several sedimentary basins. Groundwater productivity depends on the degree of cementation and fracturing, with borehole yields typically ranging between 0.1 and 5 l/s.

3. **Coastal Sedimentary Aquifers** - found along the eastern coastal belt, these formations include limestones and sandstones of varying permeability. Limestone aquifers, particularly where karstified, can yield between 1 and 6 l/s, while sandstone formations

typically yield up to 2.5 l/s. These aquifers are important sources of water for coastal urban centres but are vulnerable to saline intrusion.

4. **Volcanic and Pyroclastic Aquifers** - located mainly in the northern highlands (e.g., Kilimanjaro, Meru, and associated volcanic terrains), these aquifers are often highly productive due to their fractured and vesicular nature. Average borehole yields are comparatively high, typically around 11 l/s, making them among the most productive groundwater systems in the country.

5. **Alluvial Aquifers -** these occur along river valleys and floodplains and consist of unconsolidated sands and gravels. Yields generally range between 0.2 and 2 l/s, though higher yields may be obtained in thicker and well-sorted deposits. Alluvial aquifers are particularly important for shallow wells and small-scale irrigation but are highly sensitive to seasonal variations in recharge.

Overall, groundwater availability in Tanzania is heterogeneous and site-specific, reflecting the country's complex geological framework. Sustainable development of these aquifer systems requires improved hydrogeological mapping, monitoring, recharge assessment, and protection against contamination and over-abstraction, particularly in regions increasingly reliant on groundwater for water supply and drought resilience.

3.1.1.3 Groundwater Management and Development.

In the year 2025, groundwater management was strengthened across all basins through hydrogeological surveys, expanded groundwater monitoring, and regulated groundwater development. Groundwater data were collected from monitoring boreholes as part of the Water Resources Monitoring network comprising 632 stations, including groundwater, rainfall, river gauging and dam stations. Basin-level groundwater monitoring activities included 110 groundwater monitoring stations from the Pangani, Wami Ruvu, Ruvuma, Rufiji and IDB Basins and were integrated into national databases. Monitoring data used to track groundwater level trends, seasonal variability, and abstraction impacts supporting water allocation, borehole drilling regulation, and drought resilience.

A total of **569** drilling permits were issued after processing over **580** applications, while groundwater source protection and recharge enhancement measures complemented regulatory actions. These interventions contributed to sustainable and climate-resilient groundwater resources management in line with WSDP III and PAF objectives. In addition, licensing activities were conducted in alignment with the Water Resources Management Act of 2009 and the Groundwater Drilling and Exploration Regulation of 2013. By December 2025, a total of seventeen **(17)** groundwater exploration licenses have been issued, of which two **(2)** are new and fifteen **(15)** have renewed. Also, forty **(40)** groundwater drilling licenses

were issued, of which five **(5)** were to new companies and thirty-five **(35)** renewed licenses that had previously expired.

Likewise, the Ministry, through the CLARITY Project, strengthens groundwater management by improving understanding of aquifer systems, recharge dynamics, abstraction patterns, and climate-related risks in vulnerable dryland areas. Through enhanced hydrogeological data collection, modelling, and scenario analysis, the project supports the establishment of sustainable abstraction limits, protection of recharge zones, and early identification of depletion or water quality risks. By linking scientific assessment with policy and regulatory frameworks, **CLARITY** reinforces the Ministry's capacity to regulate groundwater use, prevent over-exploitation, and promote equitable access. This integrated approach ensures that groundwater development contributes to long-term water security while safeguarding aquifer sustainability under increasing climate variability and growing demand.

3.1.1.4 Monitoring and Assessment

The national spatial water resources monitoring network **(Figure 10)** comprises **777** core hydrometeorological and groundwater stations distributed across the country. These include **311** river gauging stations**, 337** rainfall and meteorological stations**, 25** lakes and dams water level stations**,** and **104** groundwater monitoring stations. While surface water and rainfall stations provide relatively good national coverage, the comparatively limited and uneven distribution of **groundwater** monitoring stations underscores the need for further expansion to represent Tanzania's diverse hydrogeological settings adequately.

In 2025, the Ministry of Water implemented comprehensive reforms to strengthen monitoring infrastructure, data management, and institutional performance across all nine Basin Water Boards (BWBs), in line with Integrated Water Resources Management (IWRM) and climate-resilience objectives. During the year, approximately **632** hydrological, meteorological, groundwater, and dam monitoring stations were operated, rehabilitated, or upgraded. Key interventions included: establishing new stations; rehabilitating ageing infrastructure; installing automated telemetry systems for near-real-time data transmission; conducting routine data validation; and preparing hydrological bulletins and basin water status reports.

By December 2025, the Ministry had commissioned **300** modernised monitoring stations**, i**ntegrating automated loggers, telemetry systems, and centralised data platforms. This significantly enhanced spatial coverage, data reliability, hydrological forecasting capacity, and flood- and drought-early warning systems. Capacity-building programmes were also conducted to strengthen technical skills in monitoring, data management, and operation and maintenance of automated systems. To further enhance evidence-based decision-making, the Ministry advanced hydrological database centralisation by integrating the AQUARIUS National Hydrological Database with DEMASdb for real-time station data across all BWBs. The integrated system improves data validation, interoperability, storage and retrieval efficiency, analytical capacity, and timely dissemination of information for water allocation, groundwater management, dam operations, and climate risk assessments.

Institutional performance was strengthened through the operationalisation of Quality Management Systems (QMS) within Basin Water Boards. By December 2025, six BWBs of Pangani, Wami–Ruvu, Lake Rukwa, Lake Victoria, Internal Drainage, and Rufiji had operationalised QMS, standardised procedures, improved service delivery, and enhanced data reliability. These reforms position the institutions to achieve ISO 9001:2015 certification and institutionalise continuous quality improvement.

Overall, the 2025 monitoring and data management reforms significantly strengthened Tanzania's capacity to manage hydro-climatic variability, improve regulatory oversight, and enhance long-term national water security.

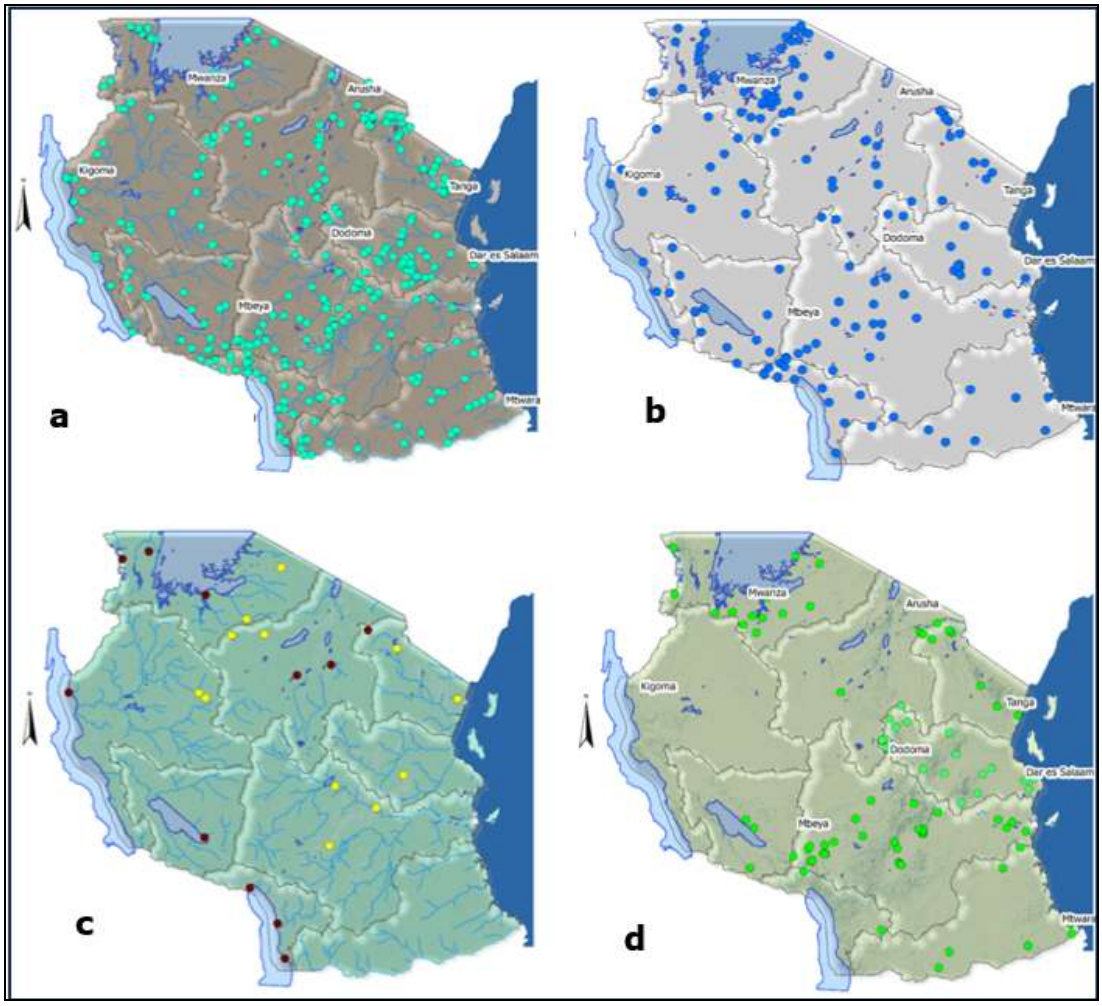

Figure 10: Spatial distribution of water resources monitoring stations: a) river gauging, b) rainfall, c) lakes and dams water level, d) groundwater

3.1.1.5 Water Resources Planning

Water resources planning is conducted through the establishment of IWRMD Plans, applied research, and strategies for sustainable water resources management and development. A participatory approach to preparing IWRMD plans is vital to ensure efficient use and sustainable management and development of water resources. It was planned that all sector plans would be included in the IWRMD Plans and implemented in each basin by June 2026.

In the year 2025, the Ministry of Water, in collaboration with the FAO – Tanzania Country Office, launched and piloted the Water Accounting and Auditing (WAA) Project in the Pangani Basin. The initiative strengthens water resources planning by providing a structured framework for quantifying water availability, use, losses, and allocation efficiency, thereby improving basin water balance analysis and supporting informed allocation decisions. The pilot generated methodologies and lessons to inform national planning frameworks,

enhancing allocation efficiency, climate resilience, and long-term water security under Integrated Water Resources Management (IWRM).

In parallel, the Ministry, through the Water Resources Centre of Excellence (WRCoE), continued implementation of the CLARITY Project, which integrates climate resilience and sustainable groundwater management into national and basin-level planning. By developing improved datasets, analytical tools, and groundwater modelling frameworks, CLARITY supports drought preparedness, infrastructure planning, and groundwater–surface water management, strengthening evidence-based decision-making and long-term water security.

3.1.1.6 Water Allocation

Water allocation involves equitably distributing available water resources to meet various water demands. As population grows and economies expand, competition for water to meet household, municipal, agricultural, and industrial needs continue to increase. It was planned to issue **2,320** water use permits by 2026.

In the year 2025, water allocation was strengthened through robust permitting and regulatory controls across all basins. A total of **853** water-use permits and **569** drilling (borehole) permits were issued, following the receipt and processing of over **1,000** water-use applications and more than **580** drilling applications. Allocation decisions were supported by monitoring data and compliance reviews, ensuring sustainable abstraction in line with statutory requirements.

3.1.1.7 Protection and Conservation

The degradation and pollution of water sources are significantly reducing water availability and usability. Protection and conservation of water sources include identifying water sources, demarcating and gazetting them, and restoring degraded land cover. It was planned to demarcate and gazette **200** water sources; issue **300** discharge permits and control **121** pollution hotspot areas by 2026.

In the year 2025, the Ministry of Water, through the Basin Water Boards, strengthened water resources governance, regulation, and catchment protection, delivering measurable results in permitting, source protection, and environmental conservation. By December 2025, a total of **853** water-use permits had been issued nationwide, alongside **569** drilling permits and **14** wastewater discharge permits. Regulatory demand remained strong, with over **1,048** water-use, more than **583** drilling, and over **126** discharge permit applications received and processed. Variations between applications processed and permits issued reflect statutory technical reviews, compliance verification, and gazettement procedures in accordance with the Water Resources Management Act. In parallel, **79** water sources were identified, **35**

water sources were demarcated, and **28** water sources were advanced through the gazettement process, focusing on strategic springs, wellfields, rivers, and dam catchments critical to domestic, agricultural, and urban water supply.

To strengthen enforcement and public awareness, **14,034** boundary beacons and **120** information signboards were installed nationwide. Environmental conservation actions complemented regulatory measures, with at least **118,817** water-friendly trees planted in priority catchments. Increasing emphasis was placed on post-planting monitoring and survival assessment to ensure the sustainability and long-term impact of these investments.

3.1.1.8 Water Use and Demand Management

Proper management of water use and demand is key to minimising the pressure on water resources. It was planned to improve water-use efficiency by **15%** across all productive sectors; improve water billing and fee-collection efficiency to **100%**; establish the economic value of water in the country; and implement conjunctive use of surface and groundwater in nine **(9)** areas by June 2026.

In the year 2025, water use and demand management were strengthened across all basins through regulatory allocation, monitoring, and compliance measures. A total of **651** water-use permits were issued, with over **1,000** applications processed, supported by hydrological and groundwater monitoring from a national network of stations. Basin-level interventions focused on high-demand catchments, registration of new users, public awareness, and enforcement, contributing to improved control of abstractions and more sustainable use of water resources in line with WSDP III and PAF objectives.

In addition, demand management was conducted through awareness and compliance, whereby the public was sensitised on efficient water use and legal compliance in the Wami Ruvu Basin, stakeholder engagement and advocacy for improved compliance and understanding of allocation rules in all basins, including conducting inspections and enforcement of water use and discharge sites to strengthen compliance with abstraction limits. Lake Victoria basin identified and registered new abstractors to bring them under regulatory control

3.1.1.9 Dam Safety Management

The management of dam safety includes proper design and location of dams, preparation and implementation of dam safety standards and guidelines. It was planned to review and implement dam safety standards and guidelines by June 2026.

In 2025, dam safety management activities continued, with a total of **18** construction permits for Tailings Storage Facilities (TSF) and water dams issued following technical and safety compliance reviews. Dam registration and safety oversight activities, including inspections, permitting, and professional certification, continued as part of routine regulatory functions under Component 1 of WSDP III. In addition, two certificates for Approved Professional Persons (APPs) were issued, bringing the total number of registered professionals nationally to **69**. The reports do not distinguish whether the certificates issued were new registrations or renewals.

In addition, under the Second Intermodal and Rail Development Project, the status of key dams, including Hombolo (Dodoma), Dabalo (Chamwino), Chalinze (Chamwino), Buigiri (Chamwino), Kidete (Kilosa), and Kimaiga (Mpwapwa), was reviewed. The engagement strengthened dam safety compliance, monitoring frameworks, and coordination between infrastructure development and water resources regulation.

3.1.1.10 Flood, Droughts, Storm Water and Other Related Disaster Management

Floods and droughts are attributed to the skewness of rainfall intensities and duration. Other factors include land-cover modification that reduces the infiltration rate. Disasters caused by these phenomena have detrimental effects on human life, property loss, infrastructure damage, food insecurity, and other risks. Monitoring these disasters and providing early warnings are of paramount importance for reducing risks. The intervention ensures effective and efficient flood, hydrological drought, and other water-related disaster management systems. It was planned to prepare a flood and drought early warning system; prepare and implement hydrological drought monitoring and mitigation plans; and review and prepare stormwater management regulations and guidelines by June 2026.

In 2025, flood, drought, and stormwater risks were addressed primarily through preventive water resources management measures, including dam rehabilitation, catchment protection, hydrological monitoring, and public awareness. While no major flood or drought disasters were reported, several basins remain vulnerable due to climate variability, catchment degradation, and competing water demands. Investments in dam safety, water-source protection, tree planting, and monitoring systems strengthened national preparedness and resilience to water-related disasters.

3.1.1.11 Trans-boundary Water Resources Management

Tanzania is a multi-riparian country, sharing seven of its nine Basins with neighbouring countries, as indicated in **Table 3**. The shared water resources in the seven basins include Lakes Victoria, Tanganyika, Nyasa, Natron, Chala and Jipe, as well as Rivers Kagera, Mara, Malagarasi, Mwiruzi, Ruvuma, Songwe, Momba and Umba.

Table 3: Neighbouring Countries Sharing Water Resources with Tanzania

No.	Country	Basin	Shared Water Resources
1	Kenya	Lake Victoria	Lake Victoria and the Mara River
		Pangani	Lake Chala and Jipe, River Lumi and Umba
		Internal Drainage	Lake Natron
2	Uganda	Lake Victoria	River Kagera, and Lake Victoria
3	Rwanda	Lake Victoria	River Kagera
4	Burundi	Lake Victoria	River Kagera
		Lake Tanganyika	River Malagarasi and Mwiruzi
5	Malawi	Lake Nyasa	Lake Nyasa, and Songwe River
6	Mozambique	Ruvuma	Ruvuma River
7	Zambia	Lake Tanganyika	Lake Tanganyika
		Lake Rukwa	Momba River
8	DRC	Lake Tanganyika	Lake Tanganyika

Efficient and effective management of trans-boundary water resources is critical for social, political and economic stability as well as for sustainable development of all countries sharing the resource. On-going programmes are within the frameworks of the East African Community (EAC), Southern Africa Development Community (SADC), Nile Basin Initiative (NBI), Lake Tanganyika Environmental Management Programmes, Songwe River Basin Development Programme and Ruvuma Basin Commission. The achievements of regional cooperation in transboundary water resources management for Tanzania include the establishment of treaties, conventions or agreements and transboundary organisational frameworks such as joint bodies, joint mechanisms and commissions, as detailed in **Table 4**.

Table 4: Conversions, Protocols and Memorandums of Understanding in the management of Transboundary Water Resources in Tanzania

Conventions and Protocols	*i) Revised Protocol on Shared Watercourse Systems, 2000 (ratified in 2003);* *ii) Protocol for the Sustainable Development of Lake Victoria Basin, 2003 (ratified in 2004);* *iii) The Convention on the Sustainable Management of Lake Tanganyika, 2003 (ratified in 2004);* *iv) Zambezi Watercourse Commission (ZAMCOM) Agreement, 2004 (ratified in 2010);* *v) Republic of Tanzania and the Republic of Mozambique on the Establishment of a Joint Water Commission Agreement (JWC), 2006 (ratified in 2009);* *vi) The Nile Cooperative Framework Agreement, 2010 (ratified in 2015);* and *vii) Convention on the Establishment of a Joint Songwe River Basin Commission, 2017 (ratified in 2017).*

Memorandums of Understanding	*viii) Memorandum of Understanding between Tanzania and Kenya for the Management of Lake Chala- Jipe and River Umba Ecosystem, 2011;* *ix) Memorandum of Understanding between Tanzania and Kenya for the Management of Transboundary Water Resources of Mara River Basin, 2015;* *x) Memorandum of Understanding between Tanzania and DRC for the Construction of Lukuga Barage, 2015;* *xi) Memorandum of Understanding on Kagera River Basin Transboundary Integrated Water Resources Management and Development between Tanzania, Burundi, Rwanda, Uganda and Nile Equatorial Lakes Subsidiary Action Plan – Coordination Unit – NELSAP- CU, 2016;* xii) *Memorandum of Understanding between Tanzania and Malawi for the Implementation of Phase III of SRBDP, 2017.*

In 2025, the Ministry of Water strengthened regional and transboundary water resources cooperation through active engagement in multiple river-basin organisations and regional coordination frameworks. These engagements supported cooperative management of shared surface and groundwater resources, enhanced climate resilience, and alignment with regional legal and institutional arrangements.

Nile Basin Initiative

The Nile Basin Initiative (NBI) is an intergovernmental partnership of **10** Nile Basin countries: Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda. Eritrea participates as an observer. Tanzania, in collaboration with the Nile Basin Secretariat and the Nile Equatorial Lakes Subsidiary Action Programme Coordination Unit.

In 2025, Tanzania actively participated in the Nile Basin Initiative (NBI), in collaboration with the Nile Basin Secretariat and the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP). Key engagements included participation in Nile-COM and technical meetings, regional water quality workshops, and Nile Day celebrations, which contributed to strengthened regional cooperation, harmonised water quality monitoring, and the advancement of governance reforms toward a permanent Nile River Basin Commission. Tanzania also benefited from NBI-supported projects on conjunctive surface and groundwater management in transboundary aquifers, including the procurement and initiation of monitoring-borehole drilling. These activities enhanced transboundary data sharing, climate resilience, and cooperative water resources management in the Nile Basin

During this year, Tanzania participated in the following meetings: -

- Regional Water Quality Workshop (3rd Workshop)
  - Date: February 2025
  - Venue: Addis Ababa, Ethiopia

- Focus: Review of regional water quality assessment reports, modelling approaches, and harmonised monitoring.

- Regional Water Quality Workshop (7th Workshop)
  - Date: August 2025
  - Venue: Nairobi, Kenya
  - Focus: Validation of water quality models, scenario development, and recommendations for basin-wide assessments.

The Lake Victoria Basin Commission

The Lake Victoria Basin Commission (LVBC) is mandated to coordinate the sustainable development and management of the Lake Victoria Basin across the **5** East African Community (EAC) Partner States; Tanzania is among them.

In 2025, Tanzania actively engaged in Lake Victoria Basin Commission (LVBC)– led initiatives to strengthen transboundary water governance, water quality management, and the sustainable development of the Lake Victoria Basin. Key achievements included the preparation of a Regional Multisectoral Multiphase Programme with World Bank support, allocation of financing for Mwanza City sewerage expansion, advancement of joint Tanzania–Kenya ecosystem projects, adoption of basin-wide water quality and safeguards frameworks, and participation in the mid-term review of the 4th LVBC Strategic Plan and the Lake Victoria State of Basin Report. These actions contributed to improved regional coordination, enhanced environmental protection, and strengthened foundations for climate-resilient and inclusive development in the Lake Victoria Basin.

During this year, Tanzania participated in the following meetings: -

- Validation of the Mid-Term Review of the 4th LVBC Strategic Plan (2021–2026)
  - Date: March 2025
  - Venue: Nairobi, Kenya
  - Focus: Strategic planning realism, monitoring and reporting, alignment with EAC Vision.

- Review of the Lake Victoria State of Basin Report (SoBR)
  - Date: March 2025
  - Venue: Nairobi, Kenya
  - Focus: Basin environmental status, pressures, and response measures.

- Preparation of the Regional Multisectoral Multiphase Programme for the Lake Victoria Basin (with World Bank support)
  - Date : *August 2025;*

- Focus: Ecosystem restoration, sanitation, water quality, navigation, blue economy, and climate resilience.

Southern African Development Coordination (SADC)

In the year 2025, Tanzania continued to engage in Southern African Development Community (SADC) coordination mechanisms for water resources management. Through collaboration with the SADC Secretariat and the SADC Groundwater Management Institute (SADC-GMI), the Ministry of Water participated in regional initiatives to strengthen transboundary groundwater management, harmonise assessment methodologies, and enhance institutional capacity. These engagements supported alignment with the SADC Revised Protocol on Shared Watercourses and contributed to improved regional cooperation and knowledge exchange on shared water resources.

Southern African Development Coordination – Groundwater Management Institute (SADC-GMI)

In the year 2025, Tanzania continued to collaborate with the SADC Groundwater Management Institute (SADC-GMI) to strengthen groundwater governance and management. Key engagements focused on aligning national aquifer mapping and groundwater assessment activities with SADC-GMI regional methodologies, supporting transboundary aquifer management processes, and participating in regional capacity-building and knowledge-sharing initiatives. These actions enhanced harmonisation of groundwater data, strengthened institutional capacity, and reinforced regional cooperation on shared groundwater resources in line with SADC frameworks.

During this year, Tanzania with financial and technical support from SADC Groundwater Management Institute (SADC-GMI), continued to implement a groundwater management and development project in seven villages within the Rufiji Basin (Dodoma Region), namely Fufu Village, Nyabu Village, Seluka Village, Chipogoro Village, Iwondo Village, Igoji II/Isazala Village, and Chamanda Villagealong Dodoma Iringa Road. The project aimed to strengthen groundwater development and climate resilience in semi-arid communities facing chronic water shortages. Key interventions included detailed hydrogeological investigations, geophysical surveys (Vertical Electrical Sounding – VES), drilling of production and monitoring boreholes, installing pumps (including hybrid solar systems), establishing groundwater monitoring mechanisms, and developing recharge assessment frameworks. In addition to infrastructure development, the initiative prioritised capacity building for Ministry and Basin Water Board staff, community sensitisation, and preparation of operation and maintenance plans to ensure long-term sustainability. With SADC-GMI support, Tanzania enhanced groundwater assessment capacity, improved the reliability of rural water supply, and demonstrated a scalable model for integrating groundwater monitoring, recharge

management, and climate-resilient water supply systems, thereby contributing to national water security and Integrated Water Resources Management (IWRM) objectives.

Zambezi Watercourse Commission

The Zambezi Watercourse Commission (ZAMCOM) is an intergovernmental organisation that brings together 8 riparian states (Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe) that share the Zambezi River Basin.

In the year 2025, Tanzania continued to participate in the Zambezi Watercourse Commission (ZAMCOM) as part of its commitment to transboundary water resources management. Engagements focused on regional coordination, policy and institutional alignment, data and information sharing, and basin-wide integrated water resources management. These activities supported cooperative management of the Zambezi River Basin and strengthened regional responses to climate variability, floods, and drought risks affecting shared water resources.

Songwe River Basin Commission

The Songwe River Basin Commission (SONGWECOM), on behalf of the governments of Malawi and Tanzania, is implementing the Songwe River Basin Development Programme (SRBDP).

In the year 2025, Tanzania continued to engage through the Songwe River Basin Commission (SRBC) to strengthen transboundary cooperation with Malawi on the management of the Songwe River Basin. Activities focused on sustaining institutional coordination, advancing integrated water resources management, sharing hydrological information, and addressing flood and drought risks affecting the basin. These engagements supported cooperative utilisation and protection of shared water resources in line with bilateral agreements and regional water governance frameworks.

Ruvuma Watercourse Commission

In the year 2025, Tanzania continued to engage through the Ruvuma Watercourse Commission (RWC) to strengthen transboundary cooperation with Mozambique on the management of the Ruvuma River Basin. Activities focused on sustaining institutional coordination, advancing integrated water resources management, sharing hydrological information, and addressing flood and drought risks affecting the basin. These engagements supported cooperative utilisation, protection, and climate-resilient management of shared water resources in line with the Ruvuma Watercourse Agreement.”

Regional Awareness and Advocacy Events

In 2025, Tanzania participated in regional awareness and advocacy events that promoted cooperation, public engagement, and shared stewardship of transboundary water resources.

- Nile Day Celebrations
- **Date:** February 2025
    - **Venue:** Addis Ababa, Ethiopia
    - **Theme/Focus:** Strengthening Nile cooperation for climate resilience and shared prosperity; promotion of basin-wide solidarity, dialogue, and visibility of transboundary water challenges.

- Mara Day Celebrations
    - **Date & venue: Butiama**
    - **Focus:** Raising awareness on conservation and sustainable management of the transboundary Mara River Basin shared by Tanzania and Kenya.

Collectively, these **meetings, technical engagements, and regional advocacy events** strengthened **cooperative water governance**, enhanced **data sharing and technical harmonisation**, increased **public and political awareness**, and supported **climate-resilient management** of shared rivers, lakes, and aquifers. While some frameworks reported activities without detailed meeting metadata, documented engagements—particularly under LVBC, regional water quality initiatives, and basin-wide celebration events—demonstrate concrete progress consistent with **WSDP III objectives and PAF requirements**.

3.1.2 Water Resources Development Subcomponent

Water security remains an important goal for Tanzania despite its abundant endowment of freshwater resources. The causes of water insecurity include inadequate investment in water storage and other water resources infrastructures; inadequate water quality management and pollution control; and inadequate capacity for groundwater development. It was planned to construct four **(4)** strategic water storage infrastructures, **20** medium water storage infrastructures and nine **(9)** new sites identified for dam construction by June 2026.

Construction of Kidunda Dam

In 2025, the Ministry of Water implemented a comprehensive programme for water resources development, covering both surface water and groundwater infrastructure, in line with WSDP III, the Water Resources Management Act (WRMA)**,** and national water security objectives. The interventions focused on strengthening water storage capacity, enhancing groundwater development, improving dam safety oversight, and increasing resilience to climate variability. In accordance with the WRMA, the key achievements during the reporting period include:

- Strengthening groundwater infrastructure through the completion of **114** groundwater monitoring boreholes and **24** water supply boreholes across four Basin Water Boards—Internal Drainage Basin (IDB), Rufiji Basin, Wami–Ruvu Basin, and Pangani Basin.
- Completed Construction/Rehabilitation of two **(2)** water dams—Malambo and Soitsambu, located at Loliondo, Longido District (Manyara Region)—were constructed/rehabilitated during the period.
- Ongoing Dam Construction Projects of three **(3)** dam construction projects are ongoing: Mwambazi Water Dam at Sumbawanga District under the Rukwa Basin Water Board; Gidahababiegi Water Dam at Hanang District under the Internal Drainage Basin Water Board; and Mwamashindike Water Dam at Maswa District under the Lake Victoria Basin Water Board.

These investments contribute to improved water storage, enhanced drought-mitigation capacity, flood regulation, and strengthened water-supply reliability across multiple basins.

In parallel with surface water development, hydrogeological investigations were conducted across all Basin Water Boards as part of routine groundwater assessment, monitoring, and regulatory functions. Activities included groundwater surveys at priority locations, data collection from monitoring boreholes and hydrometric stations, and integration of groundwater information into national databases. These efforts supported groundwater development planning, sustainable abstraction regulation, catchment management, and improved understanding of groundwater–surface water interactions.

Specifically:

- The Internal Drainage Basin (IDB) conducted groundwater surveys in Ikungi, Iramba, Mkalama, Singida District Council, Singida Municipal (Singida Region), and Bahi District (Dodoma Region)**.** A total of **18** Vertical Electrical Sounding (VES) surveys were undertaken, resulting in the identification of **nine (9)** priority sites recommended for borehole drilling**.**
- In July 2025**,** the Ministry conducted a geophysical survey at Kongwa Well Field under the DUWASA Water Supply Enhancement Project. The survey aimed to identify viable aquifer zones and optimise borehole siting to improve drilling success rates and sustainable yields. The investigation supports the planned drilling of **seven (7)** boreholes to enhance water supply reliability in Kongwa District**,** strengthening groundwater-based urban and peri-urban water services.

The 2025 water resources development initiatives—covering dam construction, dam safety oversight, groundwater assessment, and infrastructure strengthening—have significantly enhanced Tanzania's capacity for sustainable water storage, regulated groundwater development, improved water supply reliability, and climate-resilient water resources management**.** These interventions collectively support long-term national water security and integrated water resources management objectives.

3.2 WATER QUALITY MANAGEMENT COMPONENT

3.2.1 Water Quality Management Component

Water quality is a fundamental pillar of sustainable water resources management and a critical determinant of socio-economic development and ecosystem integrity. In alignment with Sustainable Development Goal (SDG) 6—particularly Targets **6.1** (universal access to safe and affordable drinking water), **6.2** (adequate and equitable sanitation and hygiene), and **6.3** (improvement of water quality through pollution reduction)—the Water Sector

continues to implement integrated water quality management interventions. These include systematic monitoring and assessment of ambient water bodies, water supply systems, wastewater discharges, and water treatment chemicals.

However, sector performance is increasingly constrained by rising pollutant loads from both point and non-point sources, which negatively affect progress toward **SDG Indicator 6.3.2** (proportion of water bodies with good ambient water quality). In addition, inadequate investment in water quality infrastructure and monitoring systems has weakened the sector's capacity to sustainably deliver safe water supply and sanitation services nationwide.

The main objectives of this component are to:

i. Strengthen sustainable management and development of national water resources through enhanced ambient water quality monitoring (SDG 6.3.2);
ii. Expand access to safe and clean drinking water services (SDG 6.1.1); and
iii. Improve sanitation and hygiene coverage (SDG 6.2.1).

Collectively, these interventions contribute to the protection of aquatic ecosystems, improved public health outcomes, and enhanced overall performance of the water sector. As of the January – December 2025 reporting period, implementation status and performance of key activities are summarized below.

3.2.2 Water Quality Assessment and Monitoring Sub-Component

3.2.2.1 Ambient Water Quality Assessment and Monitoring

Ambient water quality assessments were conducted at strategically selected water sources to evaluate suitability for ecosystem health and multiple uses, including domestic, industrial, and agricultural purposes.

Under the Water Sector Development Programme Phase III (WSDP III), the sector aims to monitor and assess **2,071 water sources annually by June 2026**. During the reporting period, **867 water sources** were monitored, comprising: 801 boreholes, 7 dams (7), lakes (6), rivers and streams (34), and 19 springs.

The assessments identified major contaminants across regions. Surface waters include Lake Victoria demonstrated elevated Nitrogen, Phosphorus while Ruaha, Ruvu, Songwe, Kabanga, Chai, Miseno and Kagera rivers were mainly affected by, Colour, Turbidity which are originated from anthropogenic activities Some groundwater sources showed high levels of Salinity, Acidity, Fluoride, Iron, Manganese, and Chloride which are naturally occurred depending on the nature of the parent rocks. These groundwater sources were observed in Lindi, Dar es Salaam, Mwanza, Dodoma, Morogoro, Mtwara, Shinyanga, and Tanga regions. Despite these challenges, most evaluated sources remain generally suitable for

development and intended uses. As per SDG 6.3.2. Generally, the proportion of bodies of water with good ambient water quality has shown to increase from 87.7 percent in 2024 to 88.8 percent in 2025. However, the review and establishment of monitoring stations have been done in the Wami and Rufiji basins only, whereby the number of focused water quality monitoring networks established has increased from 35 in 2024 to 38 in 2025.

These activities are implemented under the Water Quality Management and Pollution Control Strategy, which provides the regulatory and operational framework for pollution prevention, source protection, and sustainable water resource utilization while safeguarding public health.

3.2.2.2 Drinking Water Quality Assessment and Monitoring

During the reporting period, water quality laboratories assessed 207 urban water supply networks managed by Water Supply and Sanitation Authorities (WSSAs). Samples were analyzed for compliance with Tanzania Potable Water Specification (TZS 789:2018). The results indicated that 191 water supply networks complied, and 16 water supply networks were non-compliant. Non-compliance was primarily due to inadequate residual Chlorine, High Turbidity, and bacteriological contamination.

Similarly, 1,212 rural water supply schemes were monitored for physicochemical and bacteriological parameters: 1033 rural water supply schemes complied, and 179 rural water supply schemes failed to comply. Non-compliance was associated with elevated chloride, hardness, manganese, turbidity, fluoride, bacterial contamination, and unacceptable levels of residual chlorine.

In general, as per SDG 6.1.1 on the Proportion of the population using safely managed drinking water services, the report of 2025 indicated an increase from 83 % in 2024 to 85.2 % in 2025 in rural areas. While in urban areas it has increased from 91.6 % in 2024 to 92.5 percent in 2025.

Non-compliance of the supplied drinking water poses significant health risks by triggering disease outbreaks. To improve drinking water safety in both rural and urban areas, the sector promotes proactive risk-based management through Climate-Resilient Water Safety Plans (CR-WSPs). These plans apply comprehensive risk assessment and management across the entire water supply chain—from source to point of use.

During the reporting period, the Ministry of Water reviewed the Guidelines for Preparation of Climate-Resilient Water Safety Plans for rural and urban systems. As of December 2025, 41 CR-WSPs have been developed and implemented against a target of 85 by June 2026. The low pace of implementation is attributed by less priority given by WSSAs in the development

and implementation of the Water Safety Plan. To address the challenge, awareness creation has been conducted among stakeholders include WSSAs.

3.2.2.3 Wastewater Quality Assessment and Monitoring

In line with SDG 6.3 on reducing pollution, wastewater discharges from **238 WSSAs and other institutions**, including industries and companies, were monitored. Assessments evaluated compliance with effluent discharge standards and operational performance of treatment facilities. A total of **172** institutions (72.3%) complied, while 66 institutions (27.7%) were non-compliant. The non-compliant institutions were mainly located in Mwanza, Dar es Salaam, Coast, Tanga, and Morogoro regions**.** Non-compliance was mainly caused by exceedances in Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Nitrates, and inadequate Dissolved Oxygen levels. Based on audit findings, corrective measures and technical recommendations were issued to improve treatment performance, ensure regulatory compliance, and reduce risks to water resources and aquatic ecosystems.

3.2.3 Water Quality Technical Support and Development Sub-Component

3.2.3.1 Water Quality Data and Information Management System

In accordance with ICT governance and digital public service delivery frameworks, the Government is implementing a Laboratory Information Management System (LIMS) in collaboration with technical consultants to improve water quality data management and laboratory operational efficiency. During the reporting period, system integration with the Government e-Payment Gateway (GePG) was completed. The integration enabled automated billing, cashless payment verification, improved revenue collection, and enhanced transparency in laboratory service delivery.

3.2.3.1 Capacity Building

Sustainable Water quality management relies on building the capacity of people, systems, and institutions capable of continuously protecting ecosystem public health. For the period of January to December 2025, the Ministry of Water, in collaboration with other stakeholders, continues with the improvement of the water quality services, whereby a highly sophisticated machine (GC-MS) was procured and installed in Iringa Water Quality Laboratory to improve and widen the scope of water quality testing. In addition, water quality laboratory staff were provided with training on the application of GC-MS.

Figure 1: GC-MS installed at Iringa lab

Furthermore, the Ministry facilitates the periodic calibration of water quality laboratory equipment; training of laboratory staff on ISO 17025 requirements, and provides the laboratories with necessary equipment and reagents to smooth the implementation of water quality monitoring and assessment activities. As of December 2025, 17 staff were provided with short-term training, while 10 were attending long-term training.

Accreditation guarantees that water quality results are accurate, trustworthy, and acceptable for ecosystem and public health protection, regulation, and national decision-making. To recognize this in the year 2025, the Ministry of Water supports seven (7) water quality laboratories (Mwanza, Dar es Salaam, Bukoba, Kigoma Musom, Shinyanga, and Singida to maintain accreditation status, which is provided by Southern Africa Development Community Accreditation Services (SADCAS).

Moreover, to strengthen the accuracy, precision, and reliability of water quality analytical data, the laboratories under the Ministry of Water participate annually in external Proficiency Testing (PT) schemes. The PT program involves the analysis of standardized microbiological samples prepared and distributed by SADC-MET (Botswana) and chemical samples prepared and distributed by NAMWATER (Namibia). The result revealed a higher performance of above 90 percent of the quality assurance program which were carried out in 2025. These outcomes demonstrate analytical performance to produce water quality data that are reliable, accurate, and meet quality control and technical competence in compliance with national and international standards, including ISO/IEC 17025 requirements.

3.2.3.2 Water Quality Research and Development

Water quality research in Lake Victoria

The Ministry of Water, in collaboration with DPs, conducted a research study to examine the current water quality status and to monitor long-term changes in Lake Victoria.

Results indicate that water quality in the Tanzanian portion of Lake Victoria is generally better in the pelagic zone (offshore) than in the littoral zone (nearshore). The littoral zone showed elevated concentrations of ions and nutrients, algal blooms, and extensive proliferation of water hyacinth, posing risks to fisheries productivity and public health. The littoral zones receive high nutrient loads from the catchments through rivers and streams; moreover, domestic and industrial effluents are also discharged to the littoral zones. Although the pelagic zone generally exhibited better water quality, localized exceedances of total phosphorus and total hardness were observed. High phosphorus availability promotes excessive phytoplankton growth, including harmful cyanobacterial blooms. These blooms reduce water transparency, alter food-web structure, and negatively affect fisheries. Furthermore, these algae produce toxins that affect human and animal health, and also cover the water surface, reducing air circulation, hence resulting in anoxic conditions at the lake bottom and the death of fish and other fauna.

In terms of phytoplankton species composition, Cyanobacteria were the dominant species, followed by diatoms and green algae, which were the least dominant in the lake. Algae are very important primary producers at the base of every food chain. The green algae and diatoms are some of the important species palatable to the fish, and are therefore vital for the fisheries sector. The shift from palatable green and diatoms to Cyanobacteria poses a threat to the fish productivity and the health of aquatic, land biodiversity and human health. They produce algal toxins, some of which are considered carcinogenic. They proliferate fast under eutrophic conditions and outcompete the palatable green algae and diatoms. They are difficult to remove during water treatment processes as they are smaller in size, hence clogging the micro-filters. They also emit a foul smell and clog water treatment infrastructure, raising the cost of water treatment and the cost of domestic water.

Figure 2: Water hyacinth (Eichhornia crassipes) and Kariba weed (Salvinia molesta), respectively. These invasive water weeds outcompete the local non-invasive species and proliferate due to the presence of nutrients in the water, but also due to the lack of natural predators. They block the water, hence affecting visibility and Dissolved Oxygen (DO) in the water, leading to fish kills.

Performance of Nanofilter technology

In 2025, the Ministry of Water, in collaboration with the Nelson Mandela African Institution of Science and Technology (**NM-AIST**), conducted research on the performance of Nanofilter technology in removing/reducing the levels of heavy metals, Fluoride and bacteria in drinking water.

Nanofilter is a low-cost water purification system that removes microbes and heavy metals from drinking water through the adsorption method by using bonechar, sand, activated carbon and hollow-fiber-membrane of 0.1 micron. This research seeks to develop an innovative WASH - Sanitation solution, “Nanofilter" for clean and safe drinking water to students in 29,000 schools (primary and secondary) in mainland Tanzania, hence enhancing public health outcomes amongst students as well as improved learning outcomes and performance.
Experiment results proved that the Nanofilter system can remove bacteria, heavy metals, and Fluoride in water to the WHO guidelines and Tanzania Standards limits. The research findings revealed that Nanofilter is a suitable technology that can contribute in improving access to clean and safe water to the population in rural and urban setting of the Tanzania. Therefore, the Nanofilter system qualifies for complete removal of microbes and reducing fluoride and heavy metals in water. The technology can be used in communities for water treatment at the point of use (POU) for de-fluoridation, bacteria and heavy metals removal.

The assessment of water quality produced in private owned Water Kiosk

In recent years, several areas increasingly adopted the use of water kiosk systems for water purification and retail distribution for domestic consumption. These systems employ Reverse Osmosis (RO) technology, which is widely utilized in small-scale water treatment plants to produce potable water that meets drinking water quality standards. The RO process effectively removes a substantial proportion of dissolved ions, bicarbonates, carbonate species, and mineral constituents, thereby significantly modifying the physicochemical properties of the treated water."

The assessment was conducted in Morogoro, Arusha, Manyara, Dodoma, Singida, Shiyanga, Kigoma, Dar es Salaam, and Mbeya regions.

Figure 3: Water Kiosk in Dodoma and Morogoro regions, respectively

The results indicated that Microbiological analysis revealed that all samples complied with the drinking water quality standards of TZS 789:2018 – EAS 12:2018, thus confirming the microbiological safety of the water supplied to consumers at the surveyed water kiosks. However, the physicochemical analysis of water quality parameters indicates that 66 percent of the collected samples complied with the Tanzania Drinking Water Standards TZS 789:2018 – EAS 12:2018, while 34 percent did not meet the drinking water quality standards. The major challenge observed was related to pH values, with some samples exhibiting low pH (below 6.5) and others exhibiting higher pH (above 8.5).

The main cause of the low pH is due to the Reverse Osmosis (RO) treatment process, which removes natural minerals and salts that normally help stabilize the pH of water. As a result, the treated water loses its natural buffering capacity and allows retention of carbon

dioxide, which lowers the pH and makes the water acidic (low pH value). Additionally, RO-treated water can show higher pH due to post-treatment processes such as remineralisation filters, whereby water is often remineralized to improve taste and stability, and also if RO-treated water is aerated or stored in open/ventilated tanks.

Based on the findings and information obtained during this exercise, the Ministry will implement a training and public education program on water safety management and quality control in water kiosks, and also require the water kiosk operators to regularly test the quality of water to ensure water meets the required standards.

3.3 WATER SUPPLY COMPONENT

The Government goal is to provide adequate, clean, safe, and affordable water supply 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 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 aims to improve universal access to adequate, clean and safe water. The Water Supply Component has two subcomponents namely rural and urban water supply.

3.3.1 Rural Water Supply Subcomponent

The Rural Water Supply subcomponent focuses on rehabilitation and expansion of existing water schemes, construction of new water projects that cut across more than one village and ensuring sustainability of rural water supply service delivery. In WSDP III the subcomponent has two interventions whereby the performance for January – December 2025 is as follows:

3.3.1.1 Water Supply Infrastructure in Rural Areas

RUWASA continued implementing rural water projects throughout the country by constructing new projects, rehabilitating dilapidated water supply schemes to improve service provision, and extending existing water supply schemes to areas with low access to improved water supply services. It was planned to construct a total of **37,648** new water points and connect **60,139** households serving a total of **9,770,000** people in rural areas by June 2026.

Rural Water Supply Project constructed by RUWASA

During the reporting period, January – December 2025, a total of **94** water projects were constructed and completed in rural areas with **459** new water points benefiting **533,240** people in **197** villages. In addition, there has been an increase of **459** household connections with water supply services making a total of **196,061** household connections in rural areas. Furthermore, **862** boreholes had been drilled out of **2,400** targeted by June, 2026.

3.3.1.2 Rehabilitation of Rural Water Schemes

The planned target was to rehabilitate **115,484** non-function water points and restore water supply services to **3,871,000** people in rural areas by June 2026. During the reporting period, **165** water schemes were rehabilitated to restore **20,786** water points which benefited **5,196,500** people in rural areas. The cumulative water points constructed were **198,354** out of which **374,035** water points were functional equivalent to **88.6%** of all water points. In addition, it was planned to install/construct **4,611** treatment facilities in water supply schemes by June 2026. During the reporting period, **4,439** water treatment facilities in form of simple chlorination were installed, **1** Bonechar, **164** Conventional, and **7** Reverse Osmosis (RO). This makes a total of **4,611** out of **5,135** equivalents to **89.8%** water supply schemes being installed with functional treatment facilities.

3.3.1.3 Service Delivery, Demand Management and Regulations

Water Demand in rural areas is increasing at a high rate due to population growth and socio-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 aim of service delivery, demand management and regulations in rural areas is to strengthen monitoring and regulation of water supply and sanitation services. The implementation status as of January – December 2025, is as follows: -

a) Service Delivery

The government planned to increase the coverage of clean and safe water to at least 85% and minimize non-revenue water to 20% by June 2026. During the reporting period, both functional water points and household connections serve a total of **85.2%** people residing in rural areas. However, the baseline for non-revenue for rural areas has not yet established.

b) Regulations of Services

WSDP III planned to establish **3,520** CBWSOs in water supply schemes by June 2026. In order to reduce operational cost and maximizing economies of scale, RUWASA has clustered **1,018** CBWSOs making a total of **931** CBWSOs that manage **5,507** water schemes in rural areas.

3.3.2 Urban Water Supply Subcomponent

Her Excellency President Samia Suluhu Hassan and Hon. Jumaa Aweso (MP) Inaugurating Water Projects

This subcomponent aims to improve access of clean and safe water services in urban populations. The improvement of water supply service is through implementation of various projects including construction, rehabilitation and expansion of existing infrastructure. The mandates to ensure the sustainability of service delivery in urban areas are vested to Water Supply and Sanitation Authorities (WSSAs).

The subcomponent has four (4) intervention areas namely Water Supply Infrastructure; Water Supply Service Delivery; Water Supply Services Demand Management; and Regulation of Water Supply Services. The status of implementation of each intervention is as explained below and the summary of the achievements of each targets/KPIs are in **Table 5.**

3.3.2.1 Water Supply Infrastructure in Urban Areas

WSDP III planned to construct **3,600 km** of new transmission lines and **10,000 km** of new distribution water supply networks by June 2026. In the year 2025 being evaluated, **579.87 km** of new transmission mains have been constructed, raising the cumulative total to **1,860.997 km** representing **51.7%** of the intended goal, alongside **1,549.91 km** of new water supply distribution networks, amounting to **9,084.354 km** and equivalent to **90.8%.**

Regarding storage tanks, **9** have been constructed, bringing the total to **109,** which constitute **64.2%** of the targeted **240** storage tanks. Furthermore, **2** water treatment plants have been constructed, increasing the total to **13** WTPs, which equates to **52%** of the planned Water Treatment Facilities.

Furthermore, the goal was to connect an extra **600,000** households serving **3,600,000** people by June 2026. During the specified period, **129,546** new households were connected, serving **1,036,368** people. This led to **446,342** newly connected households, which is equivalent to **74.4%** of the goal, benefitting **3,570,736** people.

Moreover, the aim was to drill **64** boreholes by June 2026, yet during the reporting period, a total of 8 boreholes were drilled. This led to a total of **92** boreholes being drilled, which represents **150.3%** of the target. The goal was to rehabilitate **500 km** of transmission lines and **1,500 km** of the distribution water supply network by June 2026. During the reporting period, **31.293 km** of transmission mains were rehabilitated, leading to an overall total of **191.495 km,** which is equivalent to **38.3%** of the intended objective. Moreover, **176.76 km** of new water supply distribution systems were established, bringing the total to **661.77 km,** which is equivalent to **44.1%.**

3.3.2.2 Water Supply Service Delivery in Urban Areas

The aim was to improve access to clean and safe water to **95%** for the urban population in Regional Centers and **85%** for National Projects, District Headquarters and Small Towns by June 2026. By December 2025, enhancements in water supply systems increased access to clean and safe water to **92.5%** in Regional Centres, **71.5%** in District and Small towns, and **75%** in National Projects achieved.

3.3.2.3 Water Supply Services Demand Management

The need for water in urban areas is increasing quickly due to population growth and economic activities. The rising need for water necessitates enhanced investment in the growth of water supply services. The goal was to reduce NRW to 20% by June 2026. The financing for water supply systems in all urban areas, including those benefiting from National Projects, reduced Non-Revenue Water (NRW) to an average of **33.2%** by December 2025. This average NRW continues to exceed the targeted objective. Various elements contributing to heighten NRW include outdated distribution networks, acts of vandalism, and the ineffectiveness of customer meters.

3.3.2.4 Regulation of Water Supply Services in Urban Areas

The regulation of water supply services in urban areas has been delegated to Energy and Water Utilities Regulatory Authorities (EWURA). A regulator aims to maintain the long-term viability of service provision by issuing licenses to Water Supply and Sanitation Authorities. WSDP III wated all providers of water supply and sanitation services to acquire valid licenses by June 2026. By December 2025, **82** out of the **87** Water Supply and Sanitation Authorities held valid licenses.

EWURA likewise authorizes tariff requests for water supply services presented by Water Supply and Sanitation Authorities. WSDP III wanted to evaluate cost-reflective water tariffs for all water utilities by June 2026. During the reporting period, **82** Water Supply and Sanitation Authorities had approved cost-recovery water tariffs.

Table 5:*Summary of the KPIs for Water Supply Services in WSSAs*

Target&KPI	Implementation Jan– Dec 2025	Total Accumulation by Dec 2025
25 new treatment plants constructed by June 2026	**2** treatment plants constructed	**13** treatment plants
3,600 km of new transmission main networks constructed by June 2026	**579.87** km new transmissionmain networks constructed	**1,860.997** km new transmission main networks
10,000 km of new distribution water supply networks constructed by June 2026	**1,549.91**km length of the distribution pipe	**9,084.354** km of distribution water supply networks
240 storage tanks constructed with **576,000,000** litres by June 2026	**75** Storage Tanks with **55,500,000** litres constructed	**109** Storage Tanks with capacity of **80,661,000** litres
600,000 new household connections installed by June 2026	**129,546** new household connections installed	**446,342** new household connections installed
64 boreholes drilled by June 2026	**8** boreholes drilled	**92** boreholes drilled
500 km of transmission main rehabilitated by June 2026	**31.293 km** of transmission main rehabilitated	**191.495 km** of transmission main rehabilitated

1,500 km of distribution water supply network rehabilitated by June 2026	**176.76 km** of distribution water supply network rehabilitated	**661.77 km** of distribution water supply network rehabilitated
Non-Revenue Water (NRW) reduced to 20% by June 2026	Non-Revenue Water (NRW) reduced to **33.2 %**	Non-Revenue Water (NRW) reduced to **33.2 %**

3.4 SANITATION AND HYGIENE COMPONENT

The Component aims to improve universal access to adequate sanitation and hygiene services essential for health, general wellbeing, environmental protection and economic development as a basic human right. 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.

The implementation status for the year 2025 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 centers. WSDP III planned to construct **3,000 km** of new sewerage network; **26** DEWATS; nine **(9)** new wastewater treatments plants; rehabilitate **150 km** of sewerage network and eight **(8)** wastewater treatment plants; and connect **22,150** new customers to the sewerage system by June 2026. In the year 2025 the Government continued to improve sewerage system in urban centers whereby **85.765 km** of new sewerage networks were constructed making a total of **348.3 km** of sewerage network and one **(1)** DEWATS constructed making a total of six **(6)** DEWATS. Also, during this year **11,400** new customers were connected to sewer network which led to additional **91,200** people with access to sewerage services and making a cumulative of **18,381** sewerage connections serving **150,539** people. In addition, six **(6)** joint town level master plans are on progress at Mpwapwa, Ifakara, Mafinga, Ludewa, Namanyere and Makete.

3.4.2 Non Sewered Sanitation Subcomponent

Non-sewered sanitation chain consists of capture, containment and emptying/ collection, transportation, treatment of faecal sludge and safe end use, recycling and disposal. The government continues to improve sanitation services in regional, district and small towns. Currently, the use of onsite sanitation services exists in Lindi, Bukoba, Sumbawanga,

Kigoma, Musoma, Shinyanga, Geita, Lamadi, Magu, Kahama, Misungwi, Nzega and Nansio.

The plan was to construct **22** Faecal Sludge Treatment Plants (FSTPs) with capacity of **131,000m^3/day** by June 2026. During the reporting period, three (**5)** Faecal Sludge Treatment Plants were constructed at Shinyanga, Nzega, Muheza, Pangani and Tunduma. The construction of Faecal Sludge Treatment Plants in Singida Municipal, Igunga, Njombe, Tabora, Babati, Chato, Kayanga/Omurushaka, Kyaka-Bunazi, Bunda and Mpanda Towns were at different stages of implementation. The summary KPIs for sewered and non-sewered sanitation status in WSSAs is given in **Table 6** and the implementation of projects is in **Table 7.**

Table 6: ***Summary of the KPIs for Sewered and Non- Sewered Sanitation Status in WSSAs***

Target & KPI	Implementation Jan – Dec 2025	Total Accumulation by Dec 2025
60 joint town level master plans developed by June 2026	**Three (3)** joint town level master plans on progress	**Ten (10)** joint town level master plans developed
3,000 km of sewerage network constructed by June 2026	207.33 km of sewer lines under construction	**348.3 km** of sewerage network constructed
22,000 households connected to the conventional public sewerage system by June 2026	**11,400** households connected to sewerage system	**18,381** households connected to sewerage system
Nine (9) wastewater treatment plant constructed by June 2026	**Two (2)** wastewater treatment plant under construction	**One (1)** wastewater treatment plant constructed
150 km of sewerage network and eight **(8)** wastewater treatment plants rehabilitated by June 2026	**11.7 km** of sewerage network are under rehabilitation	**60.834 km** of sewerage network were rehabilitated
Studies on sewerage systems in **20** urban centers conducted by June 2026	Studies on sewerage systems in **10** urban centers are under implementation	Studies on sewerage systems in **3** urban centers conducted
150 customers connections restored by June 2026	**47**customers connections to be restored are under implementation	**60** customers connections restored
60 emptiers and **200** transfer stations provided by June 2026	**16** emptier under procurement process	**12** emptier procured
22 Faecal Sludge Treatment Plants constructed by June 2026	**9** Faecal sludge treatment plants are under construction	**14** Faecal sludge treatment plants constructed.

Target & KPI	Implementation Jan – Dec 2025	Total Accumulation by Dec 2025
100 disposal sites acquired in all urban centres and emerging townships by June 2026	**15** disposal sites under the process to be acquired	**38** disposal sites acquired
26 DEWATS constructed by June 2026	**One (1)** DEWATS constructed	**Six (6)** DEWATS Under construction

Table 7: ***List of Sewered and Non – Sewered Sanitation Projects implementation Status by December 2025***

SN	Region	WSSA	Name of Project	Status (%)
1	Arusha	Arusha WSSA	Construction of sewerage network from Kisongo to Olasiti	78
2	Dar es Salaam	Dar es Salaam WSSA	Construction of sewerage network and pumping stations in Mbezi Beach - Dar es Salaam	70
3	Dar es Salaam	Dar es Salaam WSSA	Construction of Public Toilet in Selected areas (30 toilet blocks)	100
4	Dar es Salaam	Dar es Salaam WSSA	Construction of six **(6)** DEWATS at Vijibweni, Gezaulole, Golani kimbiji, Kisopwa, Vikunai and Zingiziwa.	53
5	Dar es Salaam		Construction of sewerage network and wastewater treatment plants at Dar es Salaam	63
6	Dar es Salaam		Construction of Wastewater Treatment Plant under DBO Contract at Mbezi Beach	15
7	Dar es Salaam		*Construction of Wastewater Treatment Plant at Buguruni area*	34
8	Dodoma	Dodoma WSSA	Replacement of Concrete Sewer lines with PVC Pipes at Area C and Area D in Dodoma City (phase I).	96
9	Geita	Chato WSSA	Construction of sludge disposal facilities project	40
10	Kagera	Bukoba WSSA	Construction of Waste Water Stabilization Ponds at Kayanga/Omurushaka Karagwe - DC	80
11		Bukoba WSSA	Construction of Waste Water Stabilization Ponds at Kyaka/Bunazi Missenyi - DC	53
12	Katavi	Mpanda WSSA	Construction of sludge disposal facilities project	35
13	Kilimanjaro	Moshi WSSA	Extension of sewer network to connect lather factory at Kilimanjaro	96
14	Mara	Musoma WSSA	Construction of sewerage system at Musoma Municipality	98
15	Mara	Bunda WSSA	Construction of sludge disposal facilities project	74
16	Manyara	Babati WSSA	Construction of sludge disposal facilities project	70
17	Mwanza	Mwanza WSSA	Construction of DEWAT at Butimba	100
18	Njombe	Njombe WSSA	Construction of sludge disposal facilities project at Njombe Town	20

SN	Region	WSSA	Name of Project	Status (%)
19	Singida	Singida WSSA	Construction of sludge disposal facilities project at Singida	70
20	Songwe	Tunduma WSSA	Construction of DEWAT at Tunduma Town	100
21	Tabora	Igunga WSSA	Construction of sludge disposal facilities project	35
22		Tabora WSSA	Improvement of sanitation services at Tabora municipality	40
23	Tanga	Tanga WSSA	Construction of safe and affordable Treatment disposal and Reuse of Feacal Sludge options in Muheza	100
24		Tanga WSSA	Construction of safe and affordable Treatment disposal and Reuse of Feacal Sludge options in Pangani	100
25		Tanga WSSA	Construction of Sewer line from Duga Mwembeni to Makorora Pump House in Tanga City	85

3.4.3 Sanitation and Hygiene in Institutions and Public Areas Subcomponent

3.4.3.1 WASH in Health Care Facilities

Adequate WASH services in healthcare facilities are essential for maintaining healthy working environment for Health Care Workers (HCWs), prevention of Health Care Acquired Infections (HCAIs) and Antimicrobial Resistance (AMR). It includes provision of water from improved sources; improved toilets for staff, clients and disabled; hand washing facilities at points of care; and management of health care waste and environmental cleaning. The plan was to construct new water infrastructure and basic sanitation and hand-washing facilities in **2000** Health Care Facilities (HCFs) by 2026. In addition, the programme planned to rehabilitate WASH packages in **1500** HCFs by 2026.

By December 2025, a total of **1310** Health Care Facilities (HCFs) had received funding for the construction of new WASH infrastructure. All the WASH infrastructure were constructed as planned. The cumulative progress now stands at **2957** HCFs, representing an increment of **48%** of the Water Sector Development Program (WSDP III) target of reaching **2,000** HCFs by 2026. This initiative aims to enhance the provision of adequate WASH services and improve overall HCFs delivery.

Picture 11: Mayamaya Dispensary, Bahi D.C Dodoma Region.

Picture 2: Patient Toilet at Mtimbira H.C, Malinyi D.C, Morogoro Region.

Picture 3: Water Storage Tank at Mariwanda Dispensary, Bunda D.C, Mara Region.

Demonte Fort Incinerator, Ipinda Health Centre Kyela D. Mbeya Region

3.4.3.2 WASH in Schools

School Water, Sanitation and Hygiene (WASH) component encompasses the provision of safe water supply, adequate sanitation, and appropriate hygiene facilities and services within schools to ensure a healthy and supportive learning environment. Under WSDP III, priority is given to the construction of new WASH infrastructure, the establishment of School WASH Clubs to promote sustainable hygiene behaviour change, the provision of Menstrual Hygiene Management (MHH) facilities, and the distribution of sanitary pads to adolescent girls in school to enhance dignity, well-being, and school attendance.

In the year 2025, improved sanitation facilities were constructed in **276** Primary Schools and **123** Secondary Schools including installation of **828** water storage tanks for drinking water and basic hand washing facilities. This makes a total of **2,228** Primary and **145** Secondary Schools with access to basic drinking water improved sanitation and basic hand-washing facilities. Furthermore, **202** Primary Schools and **116** Secondary Schools had active School WASH Clubs which makes a total of **3,277** schools with sanitation and hygiene clubs that equip students with hygiene education and behaviour change.

Picture showing constructed sanitation and hygiene facilities Mkombe and Ibogo Primary Schools in Iringa District Council

3.4.3.3 WASH in Transportation Hubs

The availability of adequate WASH services at bus stops, highways and railway stations is critical in the fight against open defecation which occurs when these services are not adequately provided. WSDP III aimed to construct WASH service and promote engagement of the private sector to commercialize services. The target was the construction of 60 WASH facilities in transport hubs by June 2026. The total of **60 (100%)** transport hubs has been constructed. The Ministry of Health through the enforcement of Public Health Act, 2009 has continued to ensure the malpractice of open defecation known as *Kuchimba dawa* is prohibited along the highways and legal charges have been posed to bus owners violating the Act. As of December 2025, the total of **193 (64%)** new toilets constructed in public toilet out of target of **300**. Also, rehabilitation of **143 (91%)** of **150** public toilets was done along the highways. In addition, a

finalized National WASH Guidelines for Passenger Service Centers, Highways and Transport Conveyances have been submitted for approval.

3.4.4 Social Behavior Change Communication Campaign and Hygiene Promotion Subcomponent

In promoting sanitation and hygiene, Tanzania has used a combination of approaches including Social Behavioral Change Communication; -

3.4.4.1 Development of Social and Behavior Change Communication (SBCC) Materials

In June 2025, the MoH through Environmental Health and Sanitation Section conducted an intensive eight-day workshop in Dar es Salaam to produce **Social and Behavior Change Communication (SBCC)** materials for the national ***"Mtu ni Afya"*** campaign. A technical team of experts developed a diverse range of multimedia tools, including audio-visual clips, digital flyers, selfie banners, and radio mentions. These materials focus on nine critical thematic areas, such as improved latrine use, handwashing, clean cooking energy, and safe child hygiene (Baby WASH), all designed to align with the National Health Sector Strategic Plan V and foster a culture of personal health responsibility.

The workshop's methodology involved a structured transition from pre-production message conceptualization to a final post-production phase where creative content was refined for mass dissemination. High-impact scripts and posters were created to address specific health risks, such as the safe disposal of child faces and collective community sanitation. By leveraging diverse channels like social media, SGR transit displays, and community health workers, the Ministry aims to increase the visibility of government health initiatives and drive sustainable behavior change. Ultimately, the campaign seeks to empower citizens with culturally appropriate and accessible information to improve the overall quality of life across Tanzania.

3.4.4.2 Media orientation on the *"Mtu Ni Afya II"* campaign.

On August 11th –12th , 2025, the Ministry of Health through Environmental Health and Sanitation section held a strategic workshop in Morogoro to mobilize media professionals for the second phase of the *"Mtu ni Afya"* campaign. Officially opened by Ms. Roida Andusamile Head of Government Communication Unit (HGCU) the 4th from right of picture 6 on behalf of the Chief Medical Officer, the event aimed to equip editors and reporters to promote the campaign's slogan: *"Fanya Kweli Usibaki Nyuma Mtu Ni Afya."* The initiative

focuses on nine essential pillars, including improved sanitation, Hygiene, clean cooking energy, Menstrual Health and Hygiene, and nutrition, seeking to drive sustainable health behavior changes across Tanzania through powerful media advocacy.

The workshop featured field visits to transportation hubs like the Msamvu Bus Terminal, where data revealed an impressive **85%** public awareness of the campaign. To build on this momentum, the Ministry of Health and media practitioners agreed on a collaborative roadmap involving celebrity ambassadors, the use of local languages, and the development of a centralized message bank.

3.4.5 Menstrual Health and Hygiene Management Subcomponent

Menstrual Health and Hygiene (MHH) is fundamental to the dignity and wellbeing of girls and women and part of fulfilling their rights. This intervention under WSDP III aimed to facilitate women and girls in getting adequate facilities for management of menses at household, schools.

3.4.5.1 Launch of the Menstrual Health and Hygiene Guidelines and Toolkits.

With support from UNICEF and UNFPA, the MoH succesfully developed the National Menstrual Health and Hygiene (MHH) Guidelines and Toolkits, which were officially launched on May 28, 2025, by Dr. Otilia Gowelle on behalf of the Minister of Health. These guidelines aim to enhance the well-being of girls and women by providing accurate education and necessary services while actively dismantling the social stigma and misconceptions surrounding menstruation. By prioritizing access to private infrastructure and clean water in schools and workplaces, the initiative seeks to integrate safe menstrual management into national health, education, and sanitation policies to ensure dignified and comprehensive implementation across all administrative levels. The guidelines and toolkits can be accessed via https://sites.google.com/view/mhh-guidelines-2025/home.

Picture 12: The official launch of MHH Guidelines by Dr. Otilia Gowelle Ag. Director of the Preventive Services Department (4th from left) and the Chief of WASH from UNICEF, Ms.

3.4.5.2 Dissemination of the National MHH Guidelines and Toolkits

Following the successful technical development and official launch of the National MHH Guidelines and Toolkits, the Ministry of Health has transitioned into a strategic implementation phase. To ensure these resources translate into tangible impact, the Ministry convened a technical working session dedicated to crafting comprehensive dissemination plans. The session focused on distilling the MHH guidelines and its toolkits into accessible, summarized content tailored for diverse audiences. By streamlining the core messaging, the Ministry aims to disseminate to all stakeholders with the clarity and tools necessary to conduct a synchronized, effective rollout across the country.

Picture 13: A team of experts involved in MMH Guidelines and Toolkits Dissemination plan 17th-19th January,2026 in

Building on the strategic rollout, the core objective of this initiative is to bridge the gap between policy and practice by raising comprehensive awareness of the MHH guidelines' content and recommendations among multisectoral stakeholders. By fostering a unified understanding across different sectors, the Ministry aims to build the capacity of both technical experts and community actors, ensuring they are well-equipped to translate theoretical guidance into localized action. This dual approach of advocacy and training is designed to create a sustainable ecosystem where guidelines are not just understood, but effectively implemented and integrated at every level, from national to grassroots level.

The dissemination of the MHH guidelines follows a structured, multi-tier training approach designed for national scalability. The initial phase, the **Pre-NToT (National Team of Trainers**) workshop, has been successfully conducted on 17th – 19th January,2026 in Arusha, focused on preparation of comprehensive teaching materials, including standardized PowerPoint presentations and visual aids.

The next critical phase involves conducting the formal Training of the National Team of Trainers (NToT). These trainers will be intensively briefed on the guideline morphology, the structural and technical session of the MHH framework to ensure they possess a deep, uniform understanding of the policy. Once equipped, this National Team will serve as the primary educators for MHH officials within Local Government Authorities (LGAs) across the country.

Targets	Previous status of implementation	Status of Implementation as of December, 2025	Percent completion
Training of HCWs on WASH Guidelines and Infection Prevention and Control (IPC),	The training on WASH FIT has been conducted in **12** of the **26** regions	Assessment of implementation of WASH FIT conducted in two Regions, Mwanza and Songwe. A total of **15** HCFs were assessed (2 RRHs and **13** District Hospital)	No change from the previous reported status (46.2%)
Basic water supply infrastructures in **1,500** HCFs rehabilitated by 2026	The rehabilitation of Water supply infrastructure is completed in **873** HCFs.		58.5
Basic sanitation infrastructures in **1,500** HCFs rehabilitated by 2026	The rehabilitation of toilet facilities is completed in **873** HCFs.		58.5
Basic handwashing infrastructures in **1,500** HCFs rehabilitated by 2026	The rehabilitation of hand-washing facilities is completed in **873** HCFs.		58.5
Basic waste management infrastructure in **1,500** HCFs rehabilitated by 2026	The rehabilitation of Waste Management facilities is completed **50** in HCFs		3.3
New Basic water supply infrastructure constructed in **2,000** HCFs by 2026	The construction of New Water Supply infrastructure has been completed in **2,957** HCFs.	The status is the same (Delayed funding for financial year 2025/26)	148
New Basic sanitation infrastructure constructed in **2,000** HCFs by 2026	The construction of New Toilets has completed in **2,957** HCFs.	The status is the same (Delayed funding for financial year 2025/26)	148
New Basic handwashing infrastructure constructed in **2,000** HCFs by 2026	The construction of New Hand-Washing facilities has completed **2,957** HCFs.	The status is the same (Delayed funding for financial year 2025/26)	148
New Basic waste management infrastructure constructed in **2,000** HCFs by 2026	Construction of New Basic Waste Management has completed in **2,957** HCFs.	The status is the same (Delayed funding for financial year 2025/26)	148
Hygiene promotion materials developed and disseminated into **80%** of HCFs by 2026	Hand hygiene promotion was developed and distributed to all HCF in charges to mark Global Hand Hygiene Day for Health Workers	SOPs for hand hygiene have been disseminated to all Public HCF **(8,243 out of 13,751**(Both Public and Private) management team	60

3.5 PROGRAMME COORDINATION AND DELIVERY SUPPORT COMPONENT

The component aimed at improving planning, coordination, monitoring and evaluation; and institutional strengthening and working environment. It comprises four subcomponents namely Policy, Planning and Fiduciary Management; Coordination, Monitoring and Evaluation; Institutional Strengthening and Capacity Building; and Crosscutting Issues. The implementation status as of December 2025 is as follows:

3.5.1 Policy, Planning and Fiduciary Management Subcomponent

This subcomponent has intervention areas namely policy and legal framework; planning and budgeting; and fiduciary management. It was planned to review and disseminate Water Policy, Strategy and water sector legislations; improve sector capacity in planning and budgeting; prepare annual water sector plans and budgets; all water sector Implementing Agencies (IAs) obtain unqualified audit opinion annually; and one **(1)** technical and four **(4)** financial audits carried out by June 2026.

3.5.1.1 Policy and Fiduciary Management

In the year 2025, the National Water Policy 2002 Version 2025 was launched in March 2025. In the same year, legal instruments were prepared and published under the Water Resources Management Act No. 11/2009 and the Water Supply and Sanitation Act No. 5/2019. The prepered instruments include the following: -

1. Notice under the Act No. 11/2009 listed below:
    i. The Water Resources Management (Ruvuma and Southern Coast Basin Water Sources Protected Zone) Establishment Government Notice No.270 published on 2/5/ 2025.
2. Notices under the Act No. 5/2019 are listed hereunder:
    i. The Water Supply and Sanitation (Mbeya Urban Water Supply and Sanitation Authority) (Extension of Service Area) Notice, Government Notice No. 267 published on 2/5/2025,

    ii. The Water Supply and Sanitation (Singida Urban Water Supply and Sanitation Authority) (Extension of Service Area) Notice, Government Notice No. 268 published on 2/5/2025,

    iii. The Water Supply and Sanitation (Songea Urban Water Supply and

Sanitation Authority) (Extension of Service Area) Notice Government Notice No. 269 published on 2/5/2025,

iv. The Water Supply and Sanitation (Lushoto Water Supply and Sanitation Authority) (Extension of Service Area) Notice, through Government Notice No. 271 published on 2/5/2025,

v. The Water Supply and Sanitation (Iringa Water Supply and Sanitation Authority) (Extension of Service Area) Notice, Government Notice No. 272 published on 2/5/2025,

vi. The Water Supply and Sanitation (Morogoro Urban Water Supply and Sanitation Authority) (Extension of Service Area and Dis-Establishment of Authority) (Amendment) Notice, Government Notice No. 465 published on 25/7/2025,

vii. The Water Supply and Sanitation (Mikumi Water Supply and Sanitation Authority) (Establishment) Notice, Government Notice No. 473 published on 25/7/2025 (Kiswahili version).

viii. The Water Supply and Sanitation (Kasulu Urban Water Supply and Sanitation Authority) (Establishment) Notice, Government Notice No. 353 published on 4/7/2025.

Similarly, seventeen (17) draft Water Sources Protected Zone Notices were prepared under the Act No. 11/2009 and submitted to the Attorney General's Office for vetting as listed below:

A. Areas of Water Sources established to be protected zone in Pangani Basin Water Board:

Dam Water Sources;

i. The Water Resource Management (Pangani Basin Nairobi Dam Water Source protected zone) Establishment notice, 2025,
ii. The Water Resource Management (Pangani Basin Nyumba ya Mungu Dam Water Source protected zone) Establishment notice, 2025,
iii. The Water Resource Management (Pangani Basin Mbuta Dam Water Source protected zone) Establishment notice, 2025, and

iv. The Water Resource Management (Pangani Basin Horohoro Dam Water Source protected zone) Establishment notice, 2025.

Spring Water Sources;

v. The Water Resource Management (Pangani Basin Mina Mosque Spring Water Source protected zone) Establishment notice, 2025.
vi. The Water Resource Management (Pangani Basin Coffee Curing Spring Water Source protected zone) Establishment notice, 2025.
vii. The Water Resource Management (Pangani Basin Miwaleni Spring Water Source protected zone) Establishment notice, 2025.
viii. The Water Resource Management (Pangani Basin Kwamkoi Spring Water Source protected zone) Establishment notice, 2025.
ix. The Water Resource Management (Pangani Basin Rundugai Spring Water Source protected zone) Establishment notice, 2025.
x. The Water Resource Management (Pangani Basin Soko Spring Water Source protected zone) Establishment notice, 2025 and
xi. The Water Resource Management (Pangani Basin Karam at kambini Spring Water Source protected zone) Establishment notice, 2025.

River Water Sources;

xii. The Water Resource Management (Pangani Basin Themi River Water Source protected zone) Establishment notice, 2025, and
xiii. The Water Resource Management (Pangani Basin Una River Water Source protected zone) Establishment notice, 2025.

B. Areas of Water Sources established to be protected zone in Wami/Ruvu Basin Water Board:

i. The Water Resource Management (Wami/Ruvu Basin Chagongwe River Water Source protected zone) Establishment notice, 2025,
ii. The Water Resource Management (Wami/Ruvu Basin Ruvu-Morogoro River Water Source protected zone) Establishment notice, 2025,
iii. The Water Resource Management (Wami/Ruvu Basin Mvuha River Water Source protected zone) Establishment notice, 2025, and
iv. The Water Resource Management (Wami/Ruvu Basin Ruvu-Kibaha River Water Source protected zone) Establishment notice, 2025.

Water Regulations and Legal advice were undertaken as follows:

A. Preparation of Water Regulations;
    i. The National Water Fund (Amendment)Regulations, published on 2/5/2025 as Government Notice No. 266,

B. Legal Advisory Services;

Legal advice provided to the Ministry and Water Institutions on matters related to the implementation of water projects, management of water resources including protection of water sources and supply of water and sanitation services. Specifically, the legal advice services include: Tax issues for Water Supply and Sanitation Authorities.

Legal opinion provided:

Legal services were provided in relation to the Contracts and Memorandum of Understanding (MoU): 27 Draft Contracts were vetted and 9 Draft Memorandum of Understanding were scrutinized.

3.5.1.2 Planning and Budgeting

It was planned water sector plans and budgets to be prepared annually by June 2026; and 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.

In the year 2025, the Strategic Plan 2026/27-2030/31 for the Ministry of Water was reviewed and finalized; sector plans and budgets including MTEF for year 2025/26 – 2027/28 were prepared and approved. In addition, the National Water Fund mobilized **shillings 149,093,206,080.28** from fuel levy and provided financial support for implementation of water projects through the Rural Water Supply Agency (RUWASA), Water Supply and Sanitation Authorities and Basin Water Boards.

3.5.2 Coordination, Monitoring and Evaluation Subcomponent

Coordination aimed to facilitate efficiency in implementing the program through resource optimization and reducing project fragmentation, overcrowding, and overlaps. This was to be achieved through conducting four (4) TWGs, one (1) steering committee, two (2) JSMs, and one (1) JWSR, commemorating one (1) Maji Week event annually, and implementing Monitoring and Evaluation (M&E) systems by June 2026.

In the year 2025, Three (3) Thematic Working Groups (TWG) meetings were held in January, May, and October 2025. The meetings discussed sector strategic issues on Water Resources Management and Development, Water Quality Management, Water Supply, Sanitation and Hygiene, and Planning & Financing, Capacity Building & Performance Monitoring. In addition, the Maji Week Commemorations and Joint Water Sector Review Meeting (JWSR), which discussed the Water Sector Status Report 2024, was held in March 2025. Moreover, three (3) monitoring and technical field visits were conducted to all regions to assess WSDP processes, outputs, and outcomes in components as follows:

i. **January 2025** – A monitoring exercise was carried out in all nine (9) basin water board to assess the implementation status of projects planned in FY 2024/2025;
ii. **June 2025** – A monitoring exercise was conducted in nationwide to assess the implementation status of PforR projects across all Disbursement-Linked Indicators (DLIs), including Water, Health, and Education; and
iii. **October 2025** – A comprehensive monitoring exercise was conducted in 15 regions to assess the implementation status of projects funded under GoT in FY 2024/2025.
iv. **September 2025** – Participation of 14 staff from Ministry of Water in the Tanzania Monitoring, Evaluation, and Learning Conference held in Mwanza.

3.5.3 Institutional Capacity Building Subcomponent

WSDP III aims to strengthen the capacity of institutions and working environment in order to improve efficient functioning of water resources management and development; water quality management; water supply; sanitation and hygiene; and programme coordination and delivery support. The implementation status as of December 2025 is as follows:

3.5.3.1 Water Resources Management and Development Institutions

WSDP III has the strategy to construct and furnish WRM institutions and equip them adequately with operational tools. The target is to construct and furnish an office building by 2026. In 2025, construction of the Water Resources Centre of Excellence (WRCoE) Building in Dodoma continued to progress as a strategic investment aimed at strengthening national capacity in water resources research, data analysis, modelling, and policy support. The facility is designed to host specialized units including hydrological and hydrogeological modelling laboratories, GIS and database management systems, isotope hydrology functions, training facilities, and administrative offices. During the reporting period, key structural works have advanced, alongside internal installations.

It was also planned to establish and strengthen three **(3)** Catchment Water Committees (CWCs), three (3 Sub-catchment Water Committees (SCWCs) and **36** Water Users Associations (WUAs) by June 2026. In the year 2025, the Ministry of Water implemented

extensive capacity-building, training, and awareness-raising activities across all basins. A total of 196 Ministry and Basin staff were trained, alongside continued strengthening of Water User Associations, Catchment Water Committees, and professional certification systems. Public awareness campaigns reached over 498,000 people, complemented by community meetings, media engagement, and youth-focused environmental initiatives. These interventions enhanced institutional effectiveness, stakeholder participation, and public understanding of sustainable water resources management, in line with WSDP III and PAF objectives."

In addition, one (1) new Water User Association was formally established, making a total of 201 WUAs established so far while capacity-building and awareness activities strengthened **12** existing WUAs, with additional preparatory and training support was provided across several basins.

3.5.3.2 Water Quality Management Institutions

The During the reporting period, the Ministry of Water supported **17** water quality laboratories, with seven (located in Mwanza, Shinyanga, Bukoba, Musoma, Kigoma, Dar es Salaam, and Singida) maintaining accreditation under the ISO/IEC 17025:2017 standard. Support included covering accreditation fees, conducting surveillance audits, participating in proficiency testing, and procuring scientific instruments and chemical reagents. Furthermore, The Ministry continued the construction of five water quality laboratory buildings whereby the design and drawing reviews for the Arusha and Tanga laboratory buildings were completed. Tender documents and Bills of Quantities (BOQs) for construction were prepared and are under procurement.

3.5.3.3 Rural Water Supply and Sanitation Institutions

WSDP III focus was to support all CBWSOs technically and financially in order to achieve self-sufficiency; construct 153 offices buildings for RUWASA at national, regional and district level; and construct/rehabilitate and furnish 3,302 office buildings for CBWSOs by June 2026.


During the reporting period, **931** CBWSOs were enhanced by employing a total of **6,728** employees (4,488 males and 1,960 females). The categorization of employees were **2,072** (Me 1,656 Ke 416) Technicians; **1,842** (Me 857 Ke 985) Accountants; Other supporting Staff **2,799** (Me 2,264 Ke 535). In addition, **36** CBWSOs offices were built making a total of **327** CBWSOs offices constructed.

3.5.3.4 Urban Water Supply and Sanitation Institutions

The subcomponent aimed at improving utilities' capabilities by providing human resource training, improving working environments, supporting with operation and maintenance tasks, increasing revenue collection through billing software tools; encouraging water demand management; and enhancing customer care and management skills. The objective was to elevate **16** WSSAs to category “B” and eight **(8)** to category “A”; design and implement human resource development strategies for WSSAs; and construct/renovate and furnish **16** office buildings for WSSAs by June 2026. By 2025, two **(2)** office building were under construction in Sengerema, and Kasulu WSSAs. The condition of efforts focused on enhancing WSSAs involves the creation and implementation of human resources development strategies, which are presently underway.

3.5.3.5 Ministry and Other Implementing Institutions

The programme planned to construct/rehabilitate and furnish office buildings for the Ministry of Water, National Water Fund and Water Institute; procure transport facilities; and capacitate water sector institutions by June 2026.

Minister for Water, Hon. Jumaa Aweso (MP) during the Water Institute graduation ceremony

From January to December 2025, the Ministry employed **604** staff making a total of **14,000** staffs in Water Sector; facilitated registration of fifty eight (**58**) new engineers by Engineers Registration Board (ERB) making a total of **485** registered engineers; supported **2,228** staff to attend training whereby **1,516** attended short courses, **102** long courses and **05** attended long courses outside the country; and a total of **3,496** employees received special training on how to protect themselves from communicable and non-communicable diseases and tests to determine their own health.**13** staff from Ministry of Water attended the public Service Ethics and Confidentiality in office documents, Human Resource Skills for Human Resource Administrators, Efficient time Management and The discussion about relationship in working place and how to avoid unnecessary conflicts held in the Mwalimu Nyerere Cumpus of Karume Zanzibar. And eight **(8)** motor vehicles were purchased for the use of Ministry Headquarters, 216 motorcycles were purchased for the use of RUWASA. Also, The construction of the RUWASA headquarters office at Njendengwa, Dodoma reached **80%** completion.

Construction of the RUWASA HQ, Dodoma

In addition, the Ministry improved ICT systems and applications to support internal operations and external services to the public whereby Unified Maji Billing System is used by **85** Water Supply and Sanitation Authorities; **9** Basin Water Boards and **921** Community Based Water Supply Organizations (CBWSOs). Other government wide shared Systems/Applications used in the Water Sector include but not limited to Majls, Maji App, MUSE, e-Office, Central Budge Management System (CBMS), Human Capital Management Information System (HCMIS), National e-procurement System of Tanzania (NeST), Government Salary Payment Platform (GSPP), e-mrejesho, Government service Portal (TGSD),Government Mailing System (GMS), Government Bulk SMS (GovSMS), Enterprise Resource Management Suite (ERMS),Government Electronic Payment Gateway (GePG) and Public Employment Performance Management Information System (PEPMIS).

3.5.4 Crosscutting Issues Subcomponent

The crosscutting issues comprise of Environmental and Social Management; Gender Mainstreaming; HIV/AIDS and Non-Communicable Diseases; Good Governance and Private Sector Engagement. They influence all aspects of the programme and need to be mainstreamed throughout the programme implementation.

Environmental and Social Management plays a critical role in strengthening community engagement, ensuring programme sustainability, and promoting biodiversity stewardship for

long-term development. This intervention is designed to improve the planning, coordination, and monitoring of sustainable environmental and social management systems within the water sector. Key objectives include reviewing and implementing updated management guidelines, coordinating Environmental and Social Impact Assessments (ESIAs) for **90** Type A and B1 projects (encompassing water supply, sanitation, and dams) and **200** Type B2 projects, as well as facilitating the necessary land acquisition and resettlement processes for water infrastructure and source protection, all targeted for completion by June 2026.

During 2025, The Ministry made progress toward these goals by: -
Conducting Environmental and Social Impact Assessments (ESIAs) for 50 water supply projects categorized as Type A and B1; An Environmental and Social Audit for the Langai Damin Simanjiro project; and Compensation and land acquisition processes were advanced, with approximately **Tsh. 6,489,746,515.39** disbursed to **1,148** project-affected people across various regions where water projects and source conservation initiatives were implemented.

CHAPTER FOUR: CONSTRAINTS AND CHALLENGES

During the reporting period, constraints and challenges were encountered that need attention of the stakeholders to be comprehensively addressed for effective and efficient implementation of WSDP III.

4.1 Water Resources Management and Development

i. Institutional and Coordination Challenges including:
   - Weak coordination among stakeholders implementing water resources interventions within basins, particularly where multiple actors operate under different institutional frameworks.
   - Variations in institutional capacity across Basin Water Boards, affecting uniform implementation of IWRM and regulatory functions.

ii. Regulatory and Compliance Challenges:
   - High volume of permit applications compared to issuance capacity,
   - Encroachment on water sources and catchments, including illegal abstractions and land-use pressures, increasing enforcement demands.
   - Delayed compliance by some water users**,** particularly in permit renewal and wastewater discharge regulation.

iii. Water Source Protection and Environmental Challenges:
   - Catchment degradation caused by deforestation, agricultural expansion, livestock grazing, and settlement encroachment.
   - Slow gazettement process for protected water sources due to multi-stage legal and administrative procedures.
   - Pressure on strategic water sources supplying urban areas, irrigation schemes, and hydropower systems.

iv. Climate Variability and Hydrological Risks:
   - Increasing climate variability**,** manifesting as: drought conditions in some catchments; flood risks in others, and unpredictable rainfall patterns.
   - Low baseflows and declining water availability in stressed basins, intensifying competition among users.
   - Flood and drought risks affecting dam operations and downstream communities, requiring enhanced monitoring and preparedness.

v. Infrastructure and Technical Constraints:
   - Aging and damaged monitoring infrastructure, necessitating rehabilitation of hydrometric, groundwater, and meteorological stations.

- Limited storm-water management infrastructure, particularly in urban and peri-urban catchments, increasing flood vulnerability.
- Need for expanded groundwater monitoring networks to adequately support groundwater development and regulation.

4.2 Water Quality Management

(i) Insufficient financial resources limit effective water quality management;
(ii) Low public awareness and understanding of water quality's impacts on public health and livelihoods hinders efforts to improve water safety.; and
(iii) Inadequate number of skilled personnel in water quality laboratories that affects operational efficiency.

4.3 Water Supply

(i) High cost for operation and maintenance in numerous rural water supply systems especially those dependent on pumps (diesel powered schemes);
(ii) Inadequate capacity building and development among the local artisans and communities;
(iii) Most of water supply distribution networks in WSSAs are dilapidated and require rehabilitation;
(iv) Higher Non-Revenue Water in some WSSAs;
(v) Baseline for nonrevenue for rural areas is not yet established; and
(vi) Low investment of water supply and sanitation projects in small towns and peri-urban areas.

4.4 Sanitation and Hygiene

(i) Inadequate investments in conventional sewer systems contributing to slow progress in meeting sewerage targets;
(ii) Inadequate data and information regarding sanitation services;
(iii) Shortage of Environmental Health Officers in the implementing councils;

4.5 Programme Coordination and Delivery Support

(i) Inadequate financing of WSDP III interventions, coordination and sector monitoring;
(ii) Inadequate systems to track expenditures in water sector interventions; and
(iii) High cost of compensation for land acquisition in water projects and water sources conservation and protection has been one of key challenge.