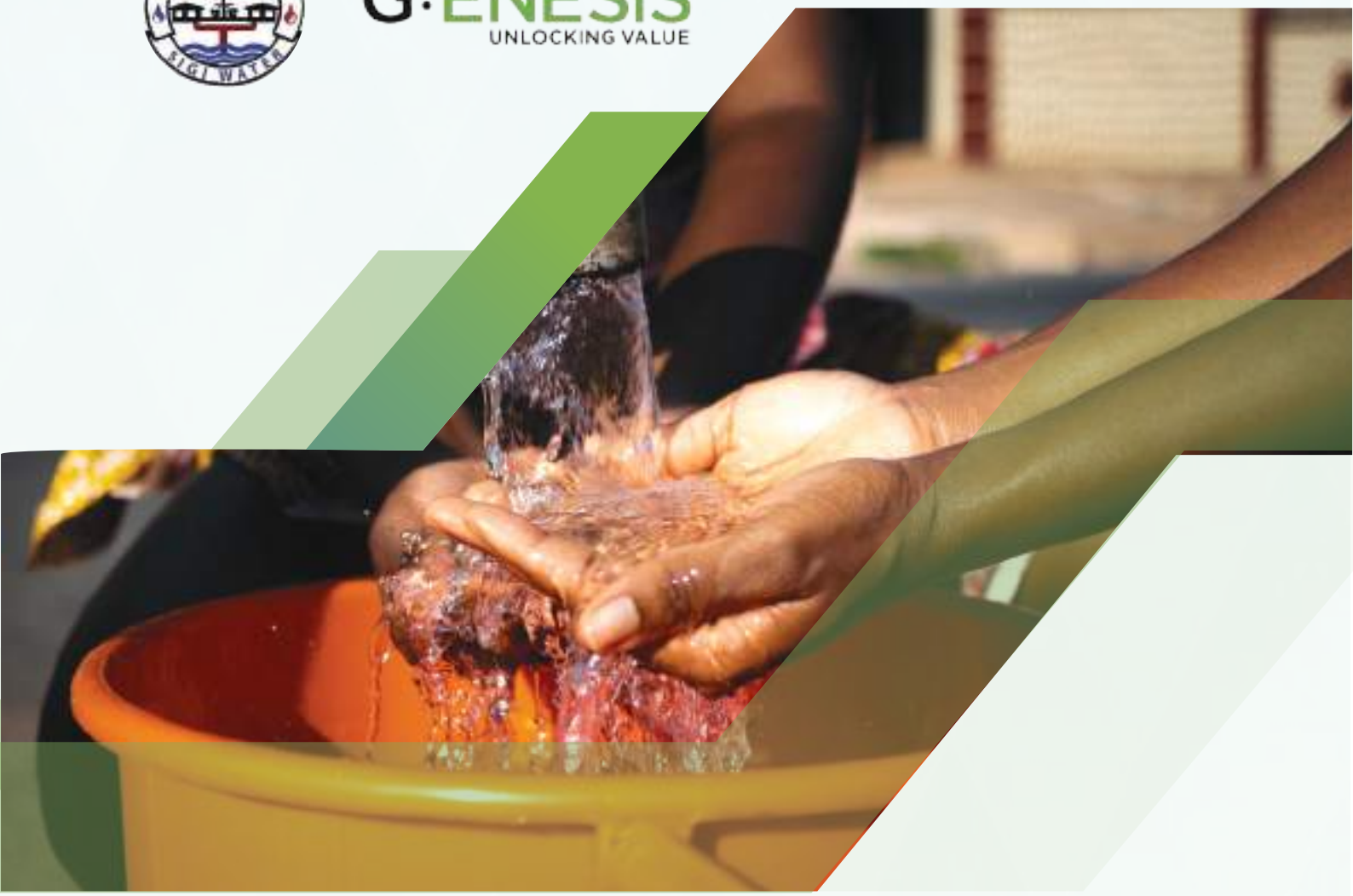


TANGA UWASA

WATER GREEN BOND

2025 Allocation and Impact Report

December 2025

Contents

Tables / Figures / Boxes

List of Abbreviations/Acronyms

DSE	Dar es Salaam Stock Exchange
DMAs	District Metered Areas
ERMS	Enterprise Resource Management System
ESG	Environmental, Social, and Governance
GBF	Green Bond Framework
GSS	Green, Social and Sustainability
ICMA	International Capital Market Association
SDGs	Sustainable Development Goals
NRW	Non-Revenue Water
TZS	Tanzanian Shillings
USD	United States Dollars
UWASA	Urban Water Supply and Sanitation Authority
WTP	Water Treatment Plant

Executive Summary

The Tanga Water Green Bond, issued in April 2024, represents Tanzania's first sub-national water infrastructure green bond and marks an important milestone in strengthening the sustainability and climate resilience of the Tanga region's water services. Through this inaugural issuance, the Tanga Urban Water Supply and Sanitation Authority (Tanga UWASA) raised TZS 53.12 billion (USD 20.8 million) to finance priority investments in water production, distribution, and wastewater infrastructure, along with catchment conservation. These projects address core structural challenges affecting water service delivery in the area while contributing to national development priorities and the United Nations Sustainable Development Goals (SDGs).

The bond is implemented in accordance with Tanga UWASA's Green Bond Framework, which guides project eligibility, management of proceeds, and reporting requirements, and is aligned with the International Capital Market Association (ICMA) Green Bond Principles.

Allocation Highlights

As of this first reporting cycle, Tanga UWASA has fully allocated the net proceeds of the Tanga Water Green Bond to eligible projects. These projects fall under two Green Bond Framework categories: Sustainable Water and Wastewater Management and Climate Change Adaptation. For reporting clarity, the financed activities are grouped into four project areas:

1
Water Supply Infrastructure

2
Water Distribution and Non-Revenue Water (NRW) Reduction

3
Wastewater Management

4
Environmental Protection and Catchment Conservation

Most funding (64.1%) was allocated to expanding and rehabilitating bulk water production capacity at the Mabayani Pumping Station and the Mowe Water Treatment Plant (WTP). All financed activities represent new projects, with no portion of proceeds applied to refinancing. There are no unallocated proceeds at the close of this reporting period.

Progress Highlights

Although projects remain in early implementation, construction and/or procurement are underway across all project areas. Key progress includes: the laying of 5.8 km of the planned 6.4 km of rising main from Mabayani Dam to Mowe Water Treatment Plant (WTP); civil works advancing at the Mowe WTP; and the planting of 20,000 seedlings across upstream communities as part of catchment restoration efforts.

Impact Outlook

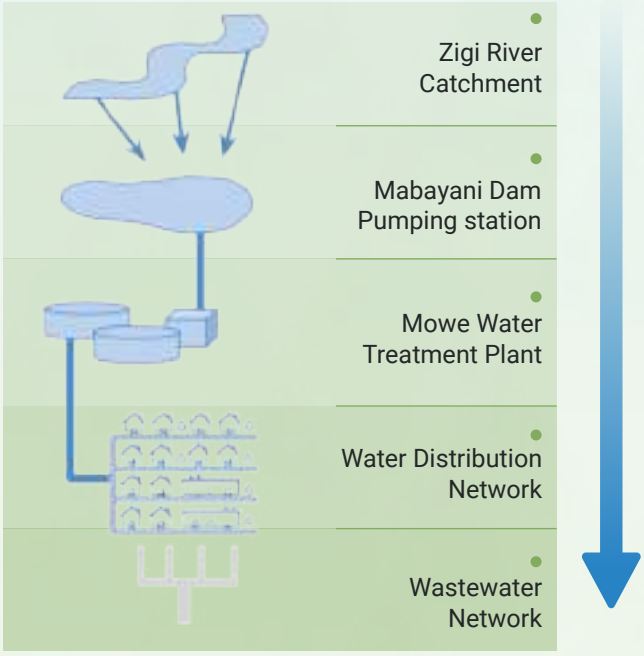
As the majority of financed assets are still under construction, environmental and social impacts will materialise in future reporting cycles. This inaugural report presents a structured Impact Framework aligned with Tanga UWASA's Green Bond Framework and ICMA guidelines, outlining the expected outputs, outcomes, and long-term impacts for each project area. This will guide impact reporting as assets reach commissioning and begin operating.

Beyond project-specific metrics, the Tanga UWASA Green Bond has served as a catalytic instrument within the Tanzanian financial ecosystem. By successfully navigating the inaugural sub-national green bond process, the transaction has contributed to the deepening of the domestic capital market. This is evidenced by the subsequent momentum in the infrastructure bond pipeline—notably seen in emerging initiatives like the Samia Bond. While not a direct result of Tanga UWASA's operations, this 'demonstration effect' underscores the bond's role in fostering a new asset class for public-sector funding in the region.

1 Introduction

1.1. Tanga UWASA's Commitment to Sustainable Water and Sanitation

The Tanga Urban Water Supply and Sanitation Authority (Tanga UWASA) is dedicated to providing reliable, safe, and sustainable water and sanitation services to the communities of Tanga City, Muheza Town, and Pangani Town in Tanzania. The service area currently expands to Mkinga District's town of Parungu Kasera and Townships of Horohoro and Maramba. As a commercially licensed and regulated sub-national entity, Tanga UWASA's core mission is to manage water resources in a world-class, cost-effective, and sustainable manner that protects public health and the environment. This commitment is particularly vital given the rapid population growth and urbanization in utility's service areas, which is placing increasing pressure on existing water infrastructure.



Source: Simplified illustration from Tanga Water Green Bond Information Memorandum

The region's water supply system is channeled through established Tanga UWASA infrastructure. The Tanga UWASA's system relies on the Zigi River as its primary source, with water stored in the Mabayani Dam (7.7 million m³ capacity) and treated at the Mowe Water Treatment Plant (WTP), which has a current usable capability of 42,000 m³/day. The Water Distribution Network serves approximately 93.5% of the urban population within its area. Currently, only 4.2% of Tanga city is served by the Sewerage Removal Network.

The current system faces critical deficits in capacity, efficiency, and environmental resilience. Current production of 36,722 m³/day falls short of the estimated demand of slightly above 54,000 m³/day. The efficiency of the system is compromised by high Non-Revenue Water (NRW) due to dilapidated Water Distribution Networks and poor metering. The underlying water source (Zigi River) is also under threat from siltation, erosion, and human activity in the catchments, requiring dedicated conservation efforts.

To address these challenges, Tanga UWASA is focused on modernising infrastructure and extending essential water and sanitation services to underserved areas. Their focus also includes protecting and conserving the Zigi and Mkurumuzi river catchments as the main water sources for served areas. These efforts align with national development policies and goals[1] and global objectives such as the United Nations Sustainable Development Goals (SDGs). [2]

1.2. Tanga Water Green Bond Framework

To accelerate these sustainability and infrastructure objectives, Tanga UWASA established a Green Bond Framework (GBF) in September 2023. This framework serves as the governing document for all green debt issuances, ensuring that proceeds are exclusively used to finance and refinance projects with clear environmental and social benefits. The framework is fully aligned with the International Capital Market Association's (ICMA) Green Bond Principles (2021) and the Dar es Salaam Stock Exchange (DSE) Green Bond Listing Rules. The Green Bond Framework was independently reviewed by ISS Corporate Solutions, which provided a second-party opinion confirming its alignment with international best practice.

The GBF provides a **list of eligible project categories**, which is consistent with ICMA's recognised green categories, under which Tanga UWASA may finance future investments. These eligible categories and the kinds of projects that fall under them include :

Sustainable Water and Wastewater Management

Projects that expand, rehabilitate, or improve water supply and sanitation systems, including raw water intakes, treatment plants, distribution networks, water storage tanks, water kiosks, household connections, leakage reduction programmes, sewer networks, wastewater treatment plants, sludge treatment, and smart metering to improve efficiency and access.

Renewable Energy

Projects such as the installation of renewable energy systems to reduce dependence on grid electricity, including solar PV for pumping and treatment operations, solar-powered disinfection systems, renewable-powered boreholes (solar/wind), biogas from sewage sludge, and sludge-to-biochar initiatives.

Energy Efficiency

Projects that include upgrades or retrofits that reduce energy consumption by at least 20%, including efficient pumps, improved treatment technologies, energy management systems, and circular economy energy solutions such as energy recovery from wastewater or solar-integrated systems.

[1]The National Water Policy (NAWAPO 2002), the Water Sector Development Program (WSDP), Tanzania's National Five-Year Development Plan III (2021/22 - 2025/26) and the Tanzania Development Vision 2025.
[2]The United Nations Sustainable Development Goals. Available at: https://sdgs.un.org/goals.

SDG 13 Climate Change Action

Climate Change Adaptation

Activities that strengthen water supply resilience and protect water sources, including riverbank protection, watershed management, terracing and erosion control, reforestation and buffer zone restoration, sustainable land management, and community livelihood initiatives that reduce pressure on river ecosystems.

1.3 The Tanga Water Green Bond

Tanga UWASA launched Tanzania's first-ever sub-national Water Infrastructure Green Revenue Bond ("Tanga Water Green Bond") on February 22, 2024. This landmark 10-year, Senior Unsecured Fixed Rate Bond successfully raised the full issue amount of TZS 53.12 billion (approximately USD 20.8 million) at an annual fixed coupon rate of 13.5%. The bond is designed as a revenue bond, meaning the debt is serviced and repaid primarily from the revenue generated by the improved efficiency and expanded customer base resulting from the financed projects.

Table 1: Details of the Tanga Green Water Bond

Feature	Details
Issuer	Tanga Urban Water Supply and Sanitation Authority (Tanga UWASA)
Tranche	Tranche 1
Issue Date	24 April 2024
Maturity Date	24 April 2034
Net Proceeds	TZS 53.12 billion (USD 20.8 million)[3]
Annual Coupon	13.5%
Listing	Dar es Salaam Stock Exchange (DSE) Cross-listed on the Luxembourg Green Exchange on 17 October 2024

[3] Exchange rate applied for all conversions: 1 USD = TZS 2,544 (as at February 2024)

The proceeds from Tanga UWASA's inaugural Green Bond have been allocated to a portfolio of priority water, sanitation, and catchment-protection projects designed to address the most pressing system constraints described in section 1.1. A high-level overview of the financed projects is provided below, and more details on individual projects are available in Section 4.

Table 2: Tanga Water Green Bond Project Portfolio

Project Name	Project Description	Committed Budget (TZS)
Water and Sewerage Infrastructure Improvement Projects		
Mabayani Pumping Station Rehabilitation and Expansion	This project **addresses the current supply deficit and stabilises the region's raw-water output** by upgrading ageing intake structures and installing new high-capacity pumps capable of abstracting and transmitting up to 72,000 m³/day to the Mowe Water Treatment Plant.	10,844,156,160
Mowe WTP Rehabilitation and Expansion	To help **treat the increased raw-water supply from Mabayani and improve water quality and reliability,** this project expands treatment capacity from 45,000 to 60,000 m³/day through new clarifiers, rapid sand filters, and supporting infrastructure.	23,198,059,470
Water Distribution Network Extension and NRW reduction	This project **reduces water losses in the onward distribution network from Mowe WTP and expands coverage** by rehabilitating 110km of pipes, laying 60km of new pipes, establishing District Metered Areas (DMAs), and installing 10,000 smart prepaid meters.	16,097,419,522
Sewerage Network Extension and Rehabilitation	This project **improves sanitation coverage and reduces environmental contamination** by rehabilitating 1.5km and extending 1.5km of sewerage infrastructure in Tanga City.	2,455,745,060

Environmental Improvement and Climate Resilient Projects		
Environmental Water and Resources Protection and Conservation	This project **protects the long-term security of the raw-water sources for Tanga City, Muheza and Mkinga District** by funding dam demarcation, terracing, reforestation and community-led catchment restoration in the Zigi and Mkurumuzi basins.	524,619,788
Total committed Investment (TZS)		53,120,000,000

1.4 Structure of this report

This report is part of Tanga UWASA's commitment to transparent, annual reporting on the allocation and impact of all Green, Social, and Sustainability (GSS) bonds until their maturity. As the first-year report for the Tanga Water Green Bond, covering activities up until December 2025, it outlines the initial allocation of proceeds (Section 2), the planned tracking of environmental and social impacts (Section 3), and summaries of the project areas and progress (Section 4).

Tanga UWASA is actively enhancing its data capture and analysis systems to ensure the impact reporting grows in depth and comprehensiveness in future cycles.

2

Allocation Reporting

2.1 Use of Proceeds Allocation

As of this inaugural allocation reporting cycle, Tanga UWASA has fully allocated the net proceeds of the TZS 53,120,000,000 (USD 21,779,200) Green Bond to the eligible projects. Table 3 below provides a high-level summary of the allocation across the two Green Bond Framework categories.

Table 3: Allocation by Green Bond Framework Category

Green Bond Framework Project Category	New/ Refinanced	Project Budget / Committed (TZS)	Amount Allocated (TZS)	Amount Allocated (USD)
 Water and Sewerage Infrastructure Improvement Projects	New	52,595,380,212	52,595,380,212	21,564,106
 Climate Change Adaption	New	524,619,788	524,619,788	215,094
	Total Allocated		53,120,000,000	21,779,200
	Unallocated Proceeds		0	0
	Total Net Proceeds		**53,120,000,000**	**21,779,200**

Building on this high-level allocation, the full proceeds have been deployed across four project areas reflecting Tanga UWASA's most urgent operational and environmental priorities. The largest share of funding (64.1%) was directed toward expanding bulk water production and treatment capacity, while 30.3% supported network rehabilitation and Non-Revenue Water (NRW) reduction. A further 4.6% strengthened wastewater management, with 1.0% allocated to environmental and catchment resilience initiatives. Table 4 below provides a detailed breakdown of allocations at the project level within these categories.

Figure 1: Summary of Allocation by Project Area

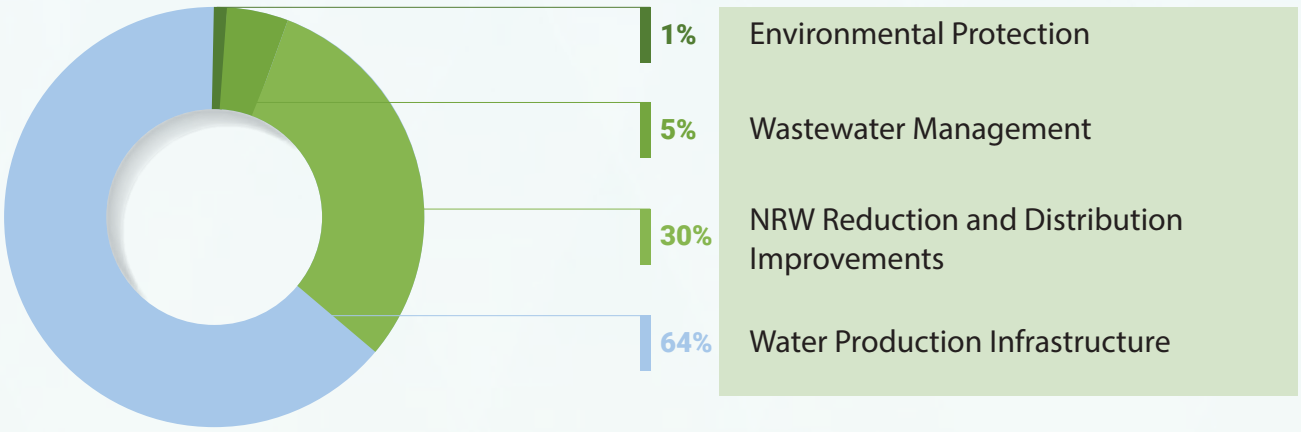


Table 4: Breakdown of allocation by Project Area

Project Area	Name of Project	New/ Refi-nanced	Project Budget / Committed (TZS)	Amount Allocated (TZS)	Amount Allocated (USD)
Water Production Infrastructure	Mabayani Pumping Station Rehabilitation and Expansion Mowe WTP Rehabilitation and Expansion	New	34,042,215,630	34,042,215,630	13,957,308
Distribution and NRW Reduction	Water Distribution Network Extension and NRW Reduction	New	16,097,419,522	16,097,419,522	6,599,942
Wastewater Management	Sewerage Network Extension and Rehabilitation (Tanga City)	New	2,455,745,060	2,455,745,060	1,006,855
Environmental Protection	Environmental and Water Resources Protection and Conservation	New	524,619,788	524,619,788	215,094

2.2. Asset-Level Tracking

Beyond the category- and project area-level allocation presented above, Tanga UWASA maintains asset-level tracking. Each project financed through the Green Bond is broken down into multiple underlying assets, each of which is documented through an individual asset sheet. These asset sheets feed into a Green Asset Register and record the specific budget, allocation amount, project ID,and eligibility category for every asset.

3

Impact Reporting

As this is the inaugural reporting cycle, the Green Bond-financed projects are still in early stages of implementation. While the physical works have commenced across all programme areas, most assets are not yet operational, and therefore measurable environmental and social impacts are not expected at this stage. Tanga UWASA will begin reporting realised impacts once construction milestones are completed and the associated infrastructure is commissioned.

To ensure transparent and consistent tracking of benefits over time, Tanga UWASA has developed an **Intended Impact Framework** that defines the output, outcome, and impact indicators expected for each project area. These indicators align with both the ICMA Green Bond Principles and the Tanga UWASA Green Bond Framework, and will form the basis of future annual impact reporting. Table 5 below summarises the key indicators that will be monitored and reported as the programme progresses.

Table 5: Intended output, outcome, and impact indicators by Project Area

Project Category (GBF)	Name of Project	Output (Asset Indicators)	Outcome (Functional Indicators)*	Impact (E&S Benefit Indicators)*
Water Production Infrastructure	Extension and rehabilitation of Mabayani Pumping Station Mowe WTP Rehabilitation and Expansion	• # of pumps installed • Km of rising main laid • # of clarifiers, filters, tanks constructed	• Volume of drinking water supplied (m^3/day) • Increased water production capacity/ reliability	• % of population with daily access to potable water • % of public buildings with basic water coverage
Distribution and NRW Reduction	Extension of Water Distribution Network and Reduction of NRW	• Km of water network rehabilitated • Km of new water network constructed • # of smart meters installed.	• % reduction in water loss (NRW) • # of new customers connected	• Annual water savings (m^3/year)

Project Category (GBF)	Name of Project	Output (Asset Indicators)	Outcome (Functional Indicators)*	Impact (E&S Benefit Indicators)*
Waste water Management	Sewerage Network Extension and Rehabilitation (Tanga City)	• Km of sewerage network constructed /extended • Km of sewerage network rehabilitated /improved • # of maintenance equipment procured (jetting machines/ pumps)	• # of inhabitants benefiting • # of people/ households covered by sanitation service	• Annual volume of wastewater treated or avoided (m^3/year)
Environmental Protection	Environmental and Water Resources Protection and Conservation	• # of seedlings planted • Area demarcated/ protected (ha)	• Areas protected (m^2 or ha) (TUGBF) • m^2 of conserved land	• Area covered by sustainable land management • Improved livelihood for the upstream community

E&S = Environmental and Social | **#** = Number/count | **km** = kilometer | **ha** = hectares | **m²** = meters-squared | **WTP** = water treatment plant | **NRW** = non-revenue water

*Outcomes and indicators are aligned with either the Tanga UWASA Green Bond Framework and/or ICMAs Harmonised Framework for Impact Reporting.

Although the majority of financed assets are still under construction or procurement, several early outputs have been delivered across two programme areas. More detailed updates on progress towards outputs are detailed in the Project Area Summaries in Section 4.

Table 6: Early output indicators by Project Area

Project Name	Project Description	Committed Budget (TZS)
Water Production Infrastructure	Extension and rehabilitation of Mabayani Pumping Station	• **5.8 km of transmission pipeline** laid out of 6.4 km • **1 transformer** installed
Environmental Protection	Environmental and Water Resources Protection and Conservation	• **10 additional villages** added to the programme • **20,000 seedlings** planted

4

Project Area Summaries

The following section provides an overview of each of the four project areas funded by the Tanga Water Green Bond. It sets out in more detail why the projects are needed, what progress has been made during this initial reporting period, and what environmental and social benefits are expected as construction and installation continue.

4.1 Water Production Infrastructure

Budgeted/Allocated

TZS 34b / USD 13.9m

Disbursed

TZS 3.8b / USD 1.6 m

Projects

2

Use of Proceeds

64%

Future impacts

- % of population with daily access to potable water
- % of public buildings with basic water coverage

The Water Production Infrastructure project area comprises two projects - **the Mabayani Pumping Station Rehabilitation and Expansion Project** and the **Mowe Water Treatment Plant (WTP) Rehabilitation and Expansion.**

Mabayani Pumping Station Rehabilitation and Expansion Project

The Mabayani Pumping Station, supplied by the Zigi River 40 km north-east of Tanga City, is the backbone of Tanga UWASA's raw water system. Although the Mabayani Dam provides **7.7 million m³** of storage, the station's aging infrastructure limits pumping capacity to **42,000 m³/day,** below the **50,000 m³/day** demand recorded in 2024. This shortfall has contributed to rationing, reduced reliability, and greater vulnerability during peak demand periods.

Proceeds from the **Green Water** Bond are being used to rehabilitate and expand the station, increasing abstraction capacity to **72,000 m³/day.** Works include installing **four new high-capacity booster pumps** (each 1,850 m³/hr), upgrading mechanical and electrical systems, and constructing a **6 km DN600 ductile iron rising main** to the Mowe Water Treatment Plant. Additional improvements include transformer and control panel upgrades, pump station building works, and **26 new chambers** along the transmission line.

Table 7: Summary of Mabayani Pumping Station Rehabilitation and Expansion

Baseline metrics	Target Outputs	Target Outcomes
Existing intake and pumps are limited to 42 000 m³/day due to initial designing of the pumping station, while equipment ageing has caused declining efficiencies day after day.	• 4 new high-capacity booster pumps • 6.4 km DN600 DI transmission main (new line) • Electrical upgrades including transformers & control panels • 26 chambers along the mainline	Achieve **72,000 m³/day** pumping capacity.

Progress during this reporting period

- 5.8 km of transmission pipeline (DN600 DI) has been laid (out of 6.4 km)
- Installation of fittings is underway.
- 1 transformer has been installed (with a second under procurement).
- 4 booster pumps have been procured,and are awaiting installation after the completion of the pump house
- The Pump station and MCCB (Moulded Case Circuit Breaker) building construction is under procurement.

Mowe Water Treatment Plant (WTP) Rehabilitation and Expansion Project

While its nominal capacity is **45,000 m³/day,** treatment constraints and aging infrastructure limit operational output, contributing to supply interruptions and rationing across the service area. As the rehabilitation of Mabayani increases raw water transfer to **72,000 m³/day**, the Mowe plant must be expanded accordingly to ensure that the additional production can be treated safely and consistently.

Green Water Bond proceeds are therefore supporting a major upgrade of the Mowe WTP, including construction of **six rapid sand filters**, a new **15,000 m³/day clarifier,** and a **35,000 m³ clear water tank**, alongside aeration, laboratory, mechanical, electrical, and rehabilitation works. These improvements will raise total treatment capacity to **60,000 m³/day**, enabling the full benefits of the Mabayani expansion to be realised and strengthening the reliability and quality of treated water supplied to Tanga, Muheza and Pangani, Parungu Kasera, Maramba and Horohoro..

Table 8: Summary of Mowe WTP rehabilitation and expansion

Baseline metrics	Target Outputs	Target Outcomes
Current treatment capacity is limited to **45,000 m³/day,** below regional demand. Ageing clarifiers, filters, and storage infrastructure constrain throughput and reduce supply reliability. Limited clear-water storage reduces buffer capacity and hampers 24-hour supply stability.	• 6 new rapid sand filters • 1 new clarifier that can handle 15,000 m³/day • 35,000 m³ clear water tank • 1 new aeration unit • Upgraded laboratory unit • Mechanical and electrical upgrades • Rehabilitation of existing WTP structures • Procurement of 6 operational vehicles	Increase treatment capacity to **60,000 m³/day** to match upgraded Mabayani raw water abstraction. Improve treated-water quality, operational efficiency, and resilience. Enable stable, (24-hour) water supply across the service area.

Progress during this reporting period

- The foundation works for the 35,000 m³ clear water tank have reached 35% completion.
- Work on adding an additional clarifier has progressed to 40% completion, with wall reinforcement installed.
- The sludge chamber for the rapid sand filters was completed
- Four operational vehicles were delivered.
- With the design of the aeration unit finalised, foundation works are now underway
- Procurement is ongoing for the laboratory equipment and outstanding mechanical and electrical components.

Image 1: Flocculation Tanks at Mowe Water Treatment Plant

4.2 Water Distribution and Non-Revenue Water Reduction

Budgeted/Allocated

TZS 16b / USD 6.6m

Disbursed

TZS 0.6b / USD 0.3 m

Projects

1

Use of Proceeds

30%

Future impacts

Annual water savings (m^3/year)

Extension of Water Distribution Network and Reduction of NRW Project

This project addresses two major challenges within Tanga UWASA's service network: high levels of Non-Revenue Water (NRW) and insufficient distribution coverage in rapidly expanding peri-urban areas. NRW remains significantly elevated due to aged and leaking pipelines, limited pressure management, inadequate network zoning, and widespread use of old or inaccurate meters.

At the same time, thousands of households in Tanga City, Muheza, and Pangani remain unconnected because existing distribution lines are undersized, deteriorated, or do not extend to new residential settlements.

To address these issues, the Green Bond finances a comprehensive programme that includes the rehabilitation of **110 km of dilapidated pipelines,** the **construction of 60 km of new distribution network**, and the establishment of District Metered Areas (DMAs) to improve leak detection, flow monitoring and pressure control. These investments will expand service coverage and enable approximately **6,000 new customer connections**, while substantially reducing physical water losses and improving service reliability across the network.

In parallel, the project is strengthening commercial metering infrastructure through the procurement of **10,000 prepaid smart meters** and **2,400 automated postpaid meters.** These modern metering systems will replace ageing and inaccurate meters, improve billing accuracy, reduce customer arrears, lower commercial losses, and provide Tanga UWASA with real-time consumption and revenue data. Together, these upgrades form a core component of NRW reduction and are central to restoring the financial sustainability of the distribution system.

Table 9: Summary of Distribution and Non-Revenue Water Reduction Project

Baseline metrics	Target Outputs	Target Outcomes
Network coverage is insufficient to meet demand in Tanga City, Muheza and Pangani. Approximately **110 km** of the existing distribution network is aged and leakage-prone. Current Non-Revenue Water (NRW) is approximately **30.7%.** Widespread use of **old or inaccurate meters** contributes to high commercial losses.	• Construction of 60 km of new distribution pipelines. • Rehabilitation of 110 km of dilapidated pipelines. • Up to 6,000 new household connections enabled. • Establishment of District Metered Areas (DMAs) for improved flow and pressure management. • Replacement of aged meters through the installation of 10,000 prepaid smart meters and 2,400 postpaid meters.	Reduce NRW from **30.7% to 25%** by the end of 2026. Increase actual water sales to **29,300 m³/day by end-2026** through improved system efficiency.

Progress during this reporting period

- Procurement of 65 km of pipes and fittings has been completed.
- Construction works are 34% complete across Tanga City, Muheza and Pangani.
- Chambers installation is scheduled to begin following completion of pipe laying.
- Procurement of 10,000 prepaid and 2,400 postpaid meters is underway.
- Preparatory steps for DMA formation have begun through planned network segmentation.
- 500 new customers have already been connected under the distribution network expansion

4.3 Wastewater Management

Budgeted/Allocated

TZS 2.5b / USD 1m

Disbursed

TZS 0m / USD 0m

Projects

1

Use of Proceeds

5%

Future impacts

- Annual volume of wastewater safely collected from households (m^3/year)

Sewerage Network Extension and Rehabilitation Project

This project focuses on extending and rehabilitating the sewer network in Tanga City. Currently, only **4.2%** of Tanga City is connected to a formal sewerage system, forcing most households to rely on on-site sanitation facilities that are often inadequate, poorly maintained, or located in areas prone to flooding and contamination. This limited coverage increases the risk of groundwater pollution, environmental degradation, and waterborne diseases.

Through the Green Bond, Tanga UWASA is investing in the construction of 1.5 km of new sewer pipelines in Tanga City and the rehabilitation of an additional 1.5 km of existing network, alongside new manholes, lateral chambers, and associated fittings. The project also includes procurement of essential maintenance equipment such as jetting machines and dewatering pumps, which will significantly enhance the Authority's capacity to maintain and unblock sewer lines, respond to emergencies, and reduce system downtime.

Table 10: Summary of Tanga City Sewerage Network extension and rehabilitation

Baseline metrics	Target Outputs	Target Outcomes

Sewerage services are limited to the central part of Tanga City; most households use septic tanks and pit latrines.
 	
Existing sewers are aged and leaking, causing blockages and groundwater contamination.
	• Construction of 1.5 km of new sewerage network.
	• Rehabilitation of 1.5 km of existing sewer pipelines.
	• Installation of new manholes and lateral chambers.
	• Procurement of essential maintenance assets, including:
	  • Jetting machine
	  • Dewatering pump
		Increase the coverage of the sewerage services.
		
		Increase the efficiency of the sewerage services.

Progress during this reporting period

- Replacement of the 3 km Ngamiani sewer line is ongoing, with approximately 1.2 km already rehabilitated.
- Extension of 1.5 km of sewerage network is near completion, with 1 km installed.

Image 1: Tanga UWASA Wastewater Collection Truck

Source: Tanga UWASA Website

4.4 Environmental Protection

Budgeted/Allocated

TZS 0.5b / USD 0.21m

Disbursed

TZS 0.4b / USD 0.17m

Projects

1

Use of Proceeds

1%

Future impacts

- Area covered by sustainable land management
- Improved livelihood for upstream community

Environmental Water and Resources Protection and Conservation Project

The Environmental Water and Resources Protection and Conservation project supports long-term water security for Tanga UWASA by safeguarding the health of the **Zigi River and Mabayani Dam catchments,** which are the primary sources of raw water for the entire system. The Zigi catchment faces increasing pressures from deforestation, soil erosion, encroachment, and unsustainable agricultural practices, all of which contribute to sedimentation and reduced inflows to the Mabayani Dam. Through the Green Bond, Tanga UWASA is investing in **landscape-level conservation activities** across upstream communities. These include expanding the number of participating villages in the conservation programme, undertaking **large-scale seedling planting** and land restoration activities, and promoting sustainable land and soil management practices.

Table 11: Summary of Environmental Water and Resources Protection and Conservation Project

Baseline metrics	Target Outputs	Target Outcomes
The Zigi and Mkurumuzi River catchments are under threat from siltation, erosion, and human activities, which endangers the long-term water supply security.	• Expand the conservation program to an additional 10 villages. • Plant a target of 100,000 seedlings, focusing on perennial and drought-resistant species. • Fund Dam demarcation and upscale conservatory activities in the UWAMAKAZI Project area.	Enhanced community participation in watershed restoration and sustainable land management. Increased forest and vegetation cover in catchment areas, leading to improved infiltration and reduced erosion. Improved raw-water quality and supply reliability for Mabayani and Mowe systems.

Progress during this reporting period

- 20,000 seedlings have been planted, with land preparation and soil conservation measures ongoing.

5

Ongoing Commitment and Future Outlook

Tanga UWASA remains committed to transparency, responsible use of proceeds, and sustainable service delivery. The projects financed through the Tanga Water Green Bond are multi-year investments, and while several components are still in early stages of construction or procurement, the foundations for long-term improvements in water supply, sanitation and catchment resilience have now been established.

Continued implementation progress is expected across major infrastructure components in the next reporting period. Work at the Mabayani Pumping Station and the Mowe Water Treatment Plant will continue to advance, alongside ongoing activities in the distribution network, sewer rehabilitation and metering programme. As these assets progress toward commissioning, Tanga UWASA will be able to capture more detailed operational information that will help quantify outcomes such as production capacity, treatment throughput, network efficiency and supply reliability.

Catchment conservation activities will also continue to evolve as part of Tanga UWASA's broader resilience efforts. Work undertaken in upstream communities, including reforestation and soil conservation, will carry forward and will be integrated into future reporting cycles as data becomes available and activities mature.

Tanga UWASA will maintain its commitment to consistent, accurate and transparent reporting. Future reporting cycles will build on this inaugural report by incorporating verified performance data as projects come online and begin delivering measurable environmental and social benefits to the communities of Tanga City, Muheza and Pangani.