



Ministry of Water

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# Identified Barrier #1 to climate-resilient water management in Tanzania

Inadequate funds for implementing resilient water  
resources investments

**A root cause analysis**



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# Executive summary

Water security is critical for the growth and transformation of any economy. Tanzania's current National Development Vision 2025 recognises water as a priority sector for enhancing the quality of life of its citizens. The 2002 National Water Policy was translated into the Water Sector Development Programme (WSDP) that began to implement development initiatives in 2006. WSDP aims at strengthening sector institutions for integrated water resources management and improving access to water supply and sanitation services.

WSDP has indeed facilitated sector improvements and currently 77% and 85% of the rural and urban populations, respectively, can access clean and safe water. However, recorded achievements in water resources management (WRM) are dismal, due to many factors, including low financing. Tanzania is challenged in managing its water resources by rapid catchment degradation, population growth, and climate change. A key concern today is how to meet the increasing demand for water. This matter is particularly important since water is an important enabler of socio-economic development in the country. It is further predicted that climate change will accentuate the frequency and intensity of floods and droughts ultimately affecting ecological systems and compromising sustainable development.

To guarantee social and economic prosperity, huge investments in water resources are needed. Over the past seven years, the WRM subsector has received an average of 6.8% of annual budgets (the lowest share of water sector funding), and efforts to improve allocations have proved futile. The Global Water Leadership Programme, an initiative supported by the United Kingdom's Foreign, Commonwealth & Development Office seeking to address the most critical challenges for WRM within the framework of the National Multisectoral Forum, conducted an investigation of the root causes behind this low budgetary allocation and this report presents its findings.

A multi-disciplinary team with individuals from basin authorities, central government (Ministries of Water, Industry and Trade, and Finance and Planning), development partners, academic institutions, the private sector, and financial institutions was established to critically assess the disproportionately low budget allocation and identify the root cause. The team analysed secondary information, interviewed staff from WRM and Planning, and conducted an assessment using political, economic, social, technological, environmental, and legal (PESTEL) and strengths weaknesses opportunities and challenges (SWOT) tools to determine the root causes.

## **The Problem – Inadequate funds to implement resilient water resources investments**

The WSDP Phase II for WRM required a total of USD 804 million. In 2022, at the time of the evaluation, WRM reportedly received only USD 129 million, or 16 percent, out of the USD 804 million needed. Meanwhile, 67 percent of the funds mobilised for the WSDP II went to water supply projects.

A comparison of the amounts of approved annual budgets and WSDP II programme needs (annual ratios) averages 3.5 percent.

## **Root Cause 1 – Political pressure to prioritize water supply over water resources**

In Tanzania, access to water for drinking and livestock is a determining factor in local politics. For the past 15 years, both rural and urban populations have faced an acute challenge in accessing water. As a result, they elect politicians who promise to resolve their water access challenges. Once elected, these politicians exert pressure on technocrats to prioritise water supply projects, which has the result of channelling resources away from the water resources subsector during the annual planning process. To rectify this zero-sum approach, during the National Water Sector Development Strategy (strategy) formulation in 2003, the Ministry of Water (MoW) committed to a sector-wide approach to planning (SWAP). Implementing a SWAP meant that the water resources and water supply subsectors would be consolidated into a single programme with a holistic, balanced plan to guarantee water security. *According to this root cause analysis, proper execution of the SWAP process has not been achieved a decade later.*

Despite the SWAP process being in place, slow progress on water supply and corresponding political pressure to address it have overshadowed the joint planning effort, resulting in the water resources subsector receiving low allocations for over a decade.

## **Root Cause 2 – Low appreciation for the contribution of water resources management to the economy**

Alongside political pressure to prioritize water supply, the contribution that the WRM subsector provides to the economy is poorly understood. The actual contribution (i.e. economic value) of water to the economy is

unknown. This lack of understanding makes the subsector an easy target for budget cuts when faced with competing priorities.

**Root Cause 3 – Consistent under-investment in water resources management reduces the effectiveness of the subsector and demoralizes staff**

At the National level, perpetually low budgetary allocations impair the ability of the WRM department to fulfil its mandate effectively. At the sub-national level, inadequate funding limits Basin Water Boards (BWBs) from executing their duties, including critical information-sharing responsibilities. This chronic insufficiency of funds has resulted in severe staff demoralization, functioning as a barrier to preparing investment and funding proposals for alternative funds.

**Root Cause 4 – Human resources challenges**

Low resource mobilisation is largely attributed to a human resources capacity gap in terms of skills, competency, and actual number of staff.

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We are also grateful to the diverse range of stakeholders, both governmental and non-governmental, who contributed their time, expertise, and perspectives to shape this report.

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# Abbreviations and acronyms

BCM	billion cubic metres
BWBs	basin water boards
BWO	basin water officer
CSO	civil society organisations
FCDO	Foreign, Commonwealth & Development Office
FY	financial year
GBS	general budget support
IDB	internal drainage basin
IWRMD	integrated water resources management and development
MoFP	Ministry of Finance and Planning
MoW	Ministry of Water
NWB	National Water Board
NWF	National Water Fund
PESTEL	political, economic, sociological, technological, environmental and legal
RUWASA	Rural Water and Sanitation Agency
SWAP	sector wide approach to planning
SDGs	Sustainable Development Goals
SWOT	strength, weakness, opportunities and challenges
TDV 2025	Tanzania Development Vision 2025
WASH	water, sanitation, and hygiene
WRM	water resources management
WRMD	water resources management and development
WSDP	water sector development programme
WUAs	water users organisations

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# Introduction

Though Tanzania is applauded for progress to date, the country still faces multiple challenges with regards to managing its water resources. A decline in water resource endowment has resulted from rapid catchment degradation, urbanisation, increased industrial growth, uncontrolled movement of livestock to catchment areas, agricultural activities in the catchment, uncontrolled irrigation activities, mining sector expansion, and climate change. The decline in water resources is projected to deteriorate further due to the increasing population, which is expected to exert increasing demand for food and water withdrawals. Climate change will accentuate the frequency and intensity of floods and droughts, ultimately affecting ecological systems and compromising sustainable development. Consequently, one of the key concerns today is how stakeholders can meet demands for water in the face of increasing water scarcity and interdependency. This matter is particularly important to the agriculture sector since it is among the main water users.

Unfortunately, despite comprehensive planning enshrined in the Water Sector Development Programme (WSDP), the water resource management subsector suffers from inadequate funds to implement the water resource investments necessary to safeguard the country against projected water scarcity and all the economic, social and environmental consequences that would follow.

Close investigation of the reason that the WSDP continually fails to receive the funds required is needed to course-correct and increase the flow of funds necessary to safeguard Tanzania's water resources for present and future generations.



Multistakeholder taskforce team working session group photo in May 2023

## Purpose and objective of this report

To guarantee economic growth and social prosperity for Tanzania, attaining water security is essential. Investment in resilient water resources infrastructure and institutional reforms are urgently required. In March 2022, a multi-stakeholder consultation process was initiated to identify the most critical barriers to climate-resilient water management in Tanzania. That process, anchored in the National Multisectoral Forum and led by the Global Water Leadership Programme (GWL), identified “Inadequate funds to implement resilient water resources investments” as one of the three biggest barriers that must be addressed. Efforts to increase resources have been hampered by inadequate information on constraining factors. A diverse working group was constituted from within the NMSF and guided by the GWL to investigate this barrier over the course of one year. The investigation began with a comprehensive root cause analysis of the barrier, and the findings from this inquiry are shared in this report to fill that knowledge gap. This report is intended to serve as stimulus for additional efforts to address the underinvestment challenge.

The root cause analysis was the first phase of a comprehensive effort from the GWL to develop a response strategy to address the barrier of inadequate funds. Subsequent phases included the development of an action plan and an associated finance plan to ensure the actions can be undertaken. The findings presented are a direct outcome of this work, underscoring GWL’s pivotal role in addressing critical challenges in WRM within the framework of the National Multisectoral Forum.

### Overall objective

The primary aim of this assignment was to undertake a comprehensive evaluation of the underlying factors contributing to insufficient financial resources for investments in WRM to increase climate resilience.

### Specific objectives

1. Examine budget allocations and WSDP requirements for WRM
2. Identify and rank factors causing or influencing funding allocation for WRM in accordance with their level of importance
3. Provide evidence-based recommendations for increased allocation of funds for WRM



# Methodology

The study analysed secondary information from sector literature, specifically WRM in Tanzania. There was limited time to interview relevant stakeholders and institutions, and this restricted the quality of information obtained. However, the study involved a team of experts who have a broad range of knowledge and experience of implementing various activities in the water sector. The team included staff from the basin authorities, central government (Ministries of Water, Industry and Trade, Finance and Planning), development partners, academic institutions, the private sector, and financial institutions. The diverse expertise represented within the team provided leverage in identifying the limiting factors and linking them to the problem. A list of referenced documents is given in the last chapter of this report.

Information gathered was verified through discussions and interviews among the team members and stakeholders. Both a Strengths, Weakness, Opportunities, and Threats (SWOT) and a Political, Economic, Social, Technological, Environmental, and Legal (PESTEL) analysis were conducted to understand the power dynamics of the WRM department.



Taskforce members observing uncontrolled fire during field visit in February 2023

## Water Sector Development Programme

The WSDP (2006–2025) is the comprehensive sector programme encompassing both water resources and Water, Sanitation and Hygiene (WASH). Implemented in three phases (2006–2016, 2016–2022, and 2022–2026) using a Sector-Wide Approach (SWAP), the programme is managed via a government-led coordination mechanism and a formalized dialogue process. It operates within a national legal, strategic, policy, and planning framework, guiding its development, investments, and operations. Phase I (2006–2016) and Phase II (2016–2022) of the WSDP have been completed, and Phase III commenced in July 2022. Throughout the

planning of each phase, Water Resources Management (WRM) and development have been prioritized, with a substantial budget allocated for these areas.

As of December 2022, progress towards the 2026 water supply targets is encouraging, with 77% of the rural and 88% of the urban population having access to clean and safe water, approaching the respective goals of 85% and 95%. However, it's important to note that while WRM has been allocated significant budgetary resources within the WSDP, the actual financial disbursement from the national government has not always aligned with these allocations. This discrepancy arises due to variations in national budgetary processes, where the allocated budget for WSDP and specifically for WRM, at times, faces constraints in actual fund release. This is why during the evaluation of the WSDP II there were few distinct achievements on the WRM side. Achievements for water resources management (WRM) include strengthening the operational capacity of basin water boards (BWBs) through the provision of targeted training in areas of operational hydrology, financial management, human resources management, hydrogeology, establishment and strengthening of water user associations (WUAs), and assessments on climate change vulnerability. To sustain the supply of water and maintain ecological systems, the water policy emphasises the optimal management of water resources. More specifically, it calls for a need to develop a comprehensive framework for promoting sustainable and equitable development, and use of water resources for the benefit of all Tanzanians, based on a clear set of guiding principles

## Institutional arrangement of WRM in Tanzania

The legal mandate for water resources management and development in Tanzania falls under the Ministry of Water (MoW). The institutional arrangement is comprised of ministries, executive agencies (including water basin boards), the National Water Fund, local government authorities, the Rural Water Supply and Sanitation Agency (RUWASA), water supply and sanitation authorities (WSSAs), civil society organisations (CSO), Water User Associations (WUAs), and other institutions. Apart from these institutions, other stakeholders include development partners and the private sector, who finance or support sector initiatives. The National Water Fund (NWF) is responsible for mobilisation and disbursement of funds to execute water projects. The NWF reserves are primarily generated from a fuel levy. The fuel levy charged by the Government and ringfenced to the National Water Fund (NWF) is a significant financing source. Fuel levy is assigned TZS 50 (USD 0.022) per litre of fuel (petrol and diesel), collected by the Ministry of Finance and Planning (MoFP), and disbursed directly to the NWF ringfenced account. Between 2015/16 and 2020/21, NWF budgeted TZS 878.6 billion (USD 382 million), while the actual collection was TZS 853.7 billion (USD 371.1 million), equivalent to 97%. Almost 60% of the funds by NWF are allocated to RUWASA (Maji na Usafi wa Mazingira, 2022).

BWBs are responsible for managing water resources, water demand, and supply. They issue water-use permits and charge for water usage. Following a miscellaneous amendment in 2022, additional power has been vested upon the Basin Water Boards, making them semi-autonomous.

## Funding mechanisms

In accordance with the water sector planning framework, WSDP determines investment requirements and priority interventions for water resources and water supply (WRM and WSS). The Medium-Term Expenditure Framework (MTEF) serves as a strategic policy and expenditure framework that links national policies and objectives to the budgeting process (Strategic Budget Allocation System, SBAS) priority interventions. The annual budget operationalises the interventions.

Programme funding is dependent on WSDP plans and stakeholder interests. Annual plans are based on discrete annual programme activity plans. Allocations and the quantity of funding is based on corresponding cost estimates for each specific area in the WSDP. There are two basic sources of funding used in budgeting, internal and external. Internal refers to all monies expected from the government (including the NWF) budget and allocation for WRM. External funds and delivery mechanisms are guided by the principles agreed when engaging the development partner, as documented in the Joint Assistance Strategy. The framework outlines three channels for delivering financial assistance for any development activity: general budget support, basket funding, and earmarked project financing.

During WSDP I, planning in the sector was done in collaboration with stakeholders in a SWAP, where the government, development partners, and others agreed on the priority activities to be undertaken with government leadership. Key stakeholders were involved during the preparation stage of the programme, enabling a mutual understanding between the government and development partners<sup>1</sup>.

The financial commitments made by partners towards implementation of various programme activities serves as testimony to this mutual understanding (in contrast to later phases). To ensure effective planning, multi-stakeholder forums were established to enhance cross-sectoral coordination between the water sector and others by enhancing dialogue and collaboration.

Other existing and future potential sources include innovative financing windows and approaches. These are such as the Payment by Result modality (DFID earmarked); and Payment for Results (earmarked World Bank), Also loans to Basins Water Boards (BWB's) and Water Supply and Sanitation Authorities (WSSA's), National Water Fund (NWF); Water Tariffs for the BWB and LGAs as well as Public Private Partnerships (PPP), which is so far not well developed.

## Performance review: Water resources in the WSDP I and II

WSDP I made several notable accomplishments. By the end of June 2016, it had:

- established and operationalised the NWB and BWBs
- identified 38 catchment water committees and 86 sub-catchment water committees, and initiated procedures to establish them
- established 90 WUAs
- necessary data for dam management and registration for 639 dams were collected
- developed six out of nine water basin Integrated Water Resources Management and Development Plans (IWRMDP)
- enacted a Water Quality Management and Pollution Control Strategy; and
- strengthened water quality laboratories.

**However, the water resources component in WSDP I is criticised for omitting strategic priorities in the programme document and not providing strong justification for hardware investments, thus resulting in a lower budget compared to other components (Government of the United Republic of Tanzania, 2015, p. 12).**

By June 2016, WSDP I had spent USD 1.42 billion against a budget of USD 1.63 billion since July 2007 (Ministry of Water, 2020). The WRM subsector needed USD 0.105 billion and ended up spending USD 0.075 billion (equivalent to 72% of the total requirements).

### Phase II (2016-2022)

The Water Sector Development Programme Phase II (WSDP II), spanning from July 2016 to June 2022, marked a significant stride in Tanzania's commitment to enhancing water resources management. With an ambitious budget of USD 3.2 billion, the program earmarked USD 804 million specifically for Water Resources Management (WRM) interventions. This substantial allocation underlined the government's prioritization of water security, a pivotal aspect of the nation's development agenda. The cornerstone of this initiative was the construction of three multi-purpose dams: Kidunda, Ndembera, and Farqwa, collectively valued at USD 575 million. These dams, symbolizing the program's focus on sustainable water supply, formed a part of the largest allocation within the WRM - USD 385.8 million dedicated to ensuring water security. Complementing these

efforts, USD 169.3 million was allocated to the implementation of Integrated Water Resources Management and Development Plans (IWRMDP), reflecting a holistic approach towards water resource management. Additionally, USD 104.7 million was set aside for basin-level institutional strengthening, highlighting the program's commitment to reinforcing the organizational framework governing water resources. WSDP II also integrated considerations for climate change mitigation and adaptation, demonstrating a forward-looking approach to safeguarding and conserving water sources.

*This comprehensive allocation of funds under WSDP II illustrated Tanzania's strategic and multifaceted approach to water resource management, addressing immediate needs while laying the groundwork for long-term sustainability and resilience.*

However, at the time of the evaluation of WSDP II in 2022, WRM had reportedly received only 16 percent (USD 129 million) out of the USD 804 million needed, while water supply projects received more than 67 percent of the funds mobilised for water, indicating that financing for WSDP II favoured water supply efforts. It is worth noting that some of the WRM mandates, especially those related to the construction of Dams, shifted to the responsibility of the Water Supply subsector. While this reallocation of responsibility reduced the WRM subsector's need to USD 274 million, they still did not receive the full amount needed.

The WSDP phase II evaluation report (United Republic of Tanzania Ministry of Water and USAID, 2021) pointed out that the WRM component failed to achieve set targets partly due to staff shortages, low levels of funding, and low absorption capacity of allocated funds (proportion of actual expenditures from the total amount of budget approved for activities). Some of the activities planned that were not completed include:

- updating the dam database (MoW periodically collects necessary data for dam management and registration);
- procuring and installing dam monitoring instruments in large dams;
- developing design manuals for small dams;
- conducting economic assessments of existing large dams to ensure dam safety and advising on remedial or intervention measures;
- conducting research on dam failure assessment; and
- maintenance for sustainable dam construction.



Multistakeholder taskforce team working session in May 2023

## Phase III (2022-2026)

WSDP phase III (WSDP III) builds upon the lessons learnt in implementation of WSDP II. In 2020, the Water Sector Status Report recommended a shift in prioritisation of planning to water resources to defer the looming water security risk (Ministry of Water, 2020). Another recommendation, albeit on the finance side, was a need to review and adjust realised commitments, instituting a simple mechanism to track and account for all sector interventions to determine a true picture of sector performance and close the gap on the accounted support that passed out of the formal system.

WSDP III, a much more ambitious programme, requires USD 6.46 billion to realize. WRM requires USD 2.1 billion which is equivalent to 32.5% of the total WSDP III financial requirements. WSDP III subdivides WRM activities into two sub-components: Subcomponent I is WRM (budget USD 0.1343 billion) and subcomponent II is water resources development (budget USD 1.9681 billion). The WSDP III shall depend on Government, Development Partners, Private Sector, and other sources such as NGOs to mobilize finances for implementation of the programme. The financing modalities are Government Funding; Basket Funding; Earmarked Funding; Innovative Financing; Loans to BWBs and WSSAs and National Water Fund; the Private Sector and PPPs.

The mobilised funds for WRM, as of December 2022, amount to a meagre USD 164 million (7 percent of the USD 2.1 billion requirements).

## PESTEL analysis

**Political** – Water has a high political and economic influence due to its importance in supporting human life and society. As a result, water plays a very important role in national politics, resulting in politicians exerting a lot of power and influence over water, sanitation, and hygiene (WASH) matters. Even though water supply receives the largest share of overall water sector allocations, water service coverage both in urban and rural areas is not hundred percent due to political interference with and obstruction of technical staff decisions on WASH matters.

**Economic** – The economic perspective highlights that financing the WRM and WASH subsectors is a challenge in comparison with other sectors like Agriculture, Health, Mining etc. That said, a comparison of the two Water related subsectors clearly shows that WRM receives a far lower budgetary allocation than WASH due to a low understanding of the economic contribution that the WRM subsector provides (i.e. the economic value of water). In addition, the small allocation is either disbursed in an untimely manner that prevents it from being spent as planned, or it is reallocated to economic activities due to high competition from different sectors.

The economic losses related to floods and droughts are \$44.06 million USD and \$5.32 billion USD annually. Occurrence of water-related disasters is a result of extreme weather events aggravated by anthropogenic pressure on land uses. Extreme weather events that have been recorded in Tanzania are major floods that happened in 2016. In terms of sectors, economic losses related to floods are estimated at USD14.58 million for infrastructure and USD 8.42 million for agricultural production, while drought-related economic losses in terms of agricultural production are USD 110.16 million. Due to lack of data, the country's financial vulnerability to water-related disasters which are not related directly to infrastructure and agriculture are not discussed. The majority of basins lack data and have low preparedness on disasters.

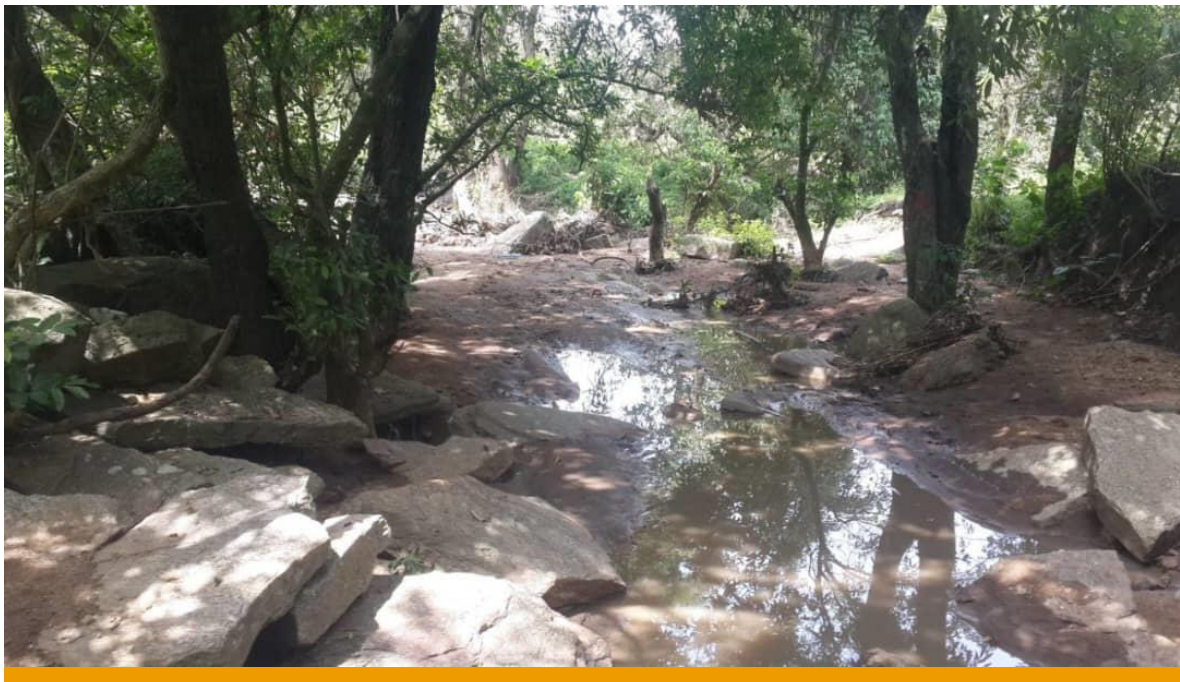
**Social** – In areas experiencing water shortages, the public's demand for reliable and safe drinking water becomes a primary concern. Politicians, in response to these demands, often prioritize policies and projects that directly address these immediate needs, such as constructing water supply systems, over long-term WRM strategies. This political prioritization naturally affects budget allocations. Funds are more likely to be directed towards developing and maintaining water supply infrastructure – like pipelines, treatment plants, and storage facilities – which have a direct and visible impact on the population's daily life. While focusing on water supply is crucial, it is also essential to balance this with sustainable WRM. WRM involves a more integrated approach, considering aspects like water source protection, ecosystem health, and sustainable usage practices. However, these long-term strategies may not be as immediately apparent or politically rewarding as providing direct water supply solutions, leading to their under-prioritization. So, although the country aims to ensure safe drinking water and good sanitation services for all, it is doing so at the expense of WRM, potentially jeopardizing long-term water supply (GWPTZ, 2022).

**Technical** – There are several new technologies that have the potential to improve water management in Tanzania. These technologies include water-efficient irrigation systems, desalination plants and water reuse technologies. However, these technologies are often expensive and require significant investment which makes it difficult for water sector to easily adopt them.

**Environment** – Tanzania is water-rich compared with almost all its semi-arid neighbours. It sits on Africa’s three largest lakes: Tanganyika, Nyasa, and Lake Victoria, with high rainfall. Less than ten percent of surface water is abstracted, and 85 percent of the water resources have good ambient quality. Of the water that is abstracted, close to 90 percent is used for agriculture, forestry, and fisheries; nine percent is for services like potable water; and less than one percent goes for industry. Nonetheless, increased dams and abstraction of surface water for flood irrigation and hydropower in the Pangani and Rufiji Basins have disrupted river flows and threaten biodiversity, while agricultural and mining runoff, untreated municipal and industrial wastewater, and inadequate sanitation compromise surface and groundwater quality. Climate change is expected to make water situation worse in Tanzania (GWP, 2022).

**Legal** – The Tanzanian government has several laws and regulations in place to protect the country’s water resources. However, these laws are often not well enforced. Water Resources Management in particular face complexities due to overlapping and sometimes conflicting legal mandates. Issues like the Mzakwe land rights conundrum highlight gaps in regulatory alignment. The situation at Mzakwe, where new Certificates of Occupancy are issued within reserved areas despite pre-existing gazetted land rights, is a clear demonstration of the challenges arising from the absence of streamlined legal frameworks.

*Such overlaps often arise from inadequate inter-sectoral coordination rather than deliberate misconduct, emphasizing the dire need for integrated planning and coordination mechanisms.*



**A river that is rapidly drying up due to a lack of effective water resources management upstream**

## SWOT analysis of the WRM subsector

### S

#### Strengths

- There is an enabling environment for the WRM's subsector.
- There is a clear, good policy, legal plans (WSDP III), implementation framework and environment, as well as a skilled (but insufficient) workforce.

### W

#### Weaknesses

- The WRM subsector is perceived as inflexible and an unattractive ally within and outside the MoW
- Low influence within and outside the MoW
- Low implementation capacity due to the poor budget absorption
- Shortage of technical staff to execute the water resources activities, contributing to underperformance
- WRM's response time to address issues is too long
- Tasks (some being key and strategic) often take longer to be implemented in WRM than most other subsectors.
- This perception of inflexibility, alongside high competing demands for WASH needs, has resulted in WRM receiving a lower allocation from the water budget.

### O

#### Opportunities

- The possibility of reducing reliance on traditional financing mechanisms (foreign and domestic sources) and strategically accessing financing from other players (green financing, private sector, etc.) to bridge the gap in financing.

### T

#### Threats

- BWBs inability to effectively discharge their duties jeopardises MoW's overall reputation and credibility with other sector ministries.
- Respondents from MoW and the BWB highlighted the limited funding allocation for Component 1 of the WSDP II resulted in a failure to execute many planned activities: Procuring and installing dam monitoring instruments in large dams, developing design manuals for small dams, conducting economic assessments of existing large dams to ensure dam safety, advising on remedial or intervention measures, and conducting research on dam failure assessment and maintenance for sustainable dam construction.
- Out of nine targeted, seven IWRMD plans were prepared under WSDP II. Of the seven IWRMD plans in place, funding constraints have prevented the BWBs from fully implementing them, according to the BWB officials interviewed. This failure to execute erodes confidence in BWBs to do their job and may be used as an excuse by the government to decrease WRM allocations in the future.
- Staff shortage – risk of underperformance and perpetuation of negative perception
- Low levels of funding – risk of underperformance and perpetuation of negative perception
- Low absorption of funds resulting in overall underperformance and continuing a cycle of underinvestment.

# Study findings

The team investigation of allocations in the development budgets for WRM for a period of more than six years (WSDP II and III), the SWOT analysis and the PESTEL analysis identified the following root causes for inadequate funds to implement resilient water resource investments:

1. The WRM subsector's budget allocation has reduced. **The water sector has faced challenges with limited budget allocation for direct and indirect support costs.** For instance, in the fiscal years 2018/19 and 2019/20, the sector had a recurrent budget of around TZS 48 billion (USD 19 million), with around TZS 12.4 billion (USD 4.9 million) allocated for support costs. However, only TZS 7.5 billion (USD 2.9 million) was released. The actual funds received in the water sector have averaged at 58 percent of the total budget allocation over the past 14 years, showing a consistent shortfall in the actual release compared to the allocations.
2. **The majority of WRM investments are made through basket donors, and they have demonstrated preferences for supporting activities in the form of works, consultancies, or procurement of goods due to a preference for tangible results attained via predictable processes.** WRM's receipts in WSDP I, amounting to 6.5 percent of the USD 1.63 billion,<sup>1</sup> were primarily from basket financiers. Basket donors preferred their releases to pay for approved procurement plan items. These included large consultancies, like IWRMD plans, works such as office construction, and the procurement of goods and services, including the design of large multi-purpose dams for storage. The large multi-purpose dams (Kidunda, Farkwa, and Ndembera) included in Phase II would have cost a minimum of USD 0.575 billion at the time of commissioning. Study findings revealed that the works responsibility was transferred to the Water Supply division. The transfer of responsibility for constructing the large dams in Phase II reduced potential resources destined for WRM, as this transfer leaves fewer activities for WRM that meet foreign funders preference criteria. In FY 2021/22, WRM received 80 percent of its requested budget where construction of ten medium sized dams was achieved.
3. WRM activities (including water resources monitoring and assessment, registration of abstractors and abstractions, user participation and public awareness, water source and resource protection, and pollution control) that were not supported by basket donors were funded by earmarked and local resources as they became available, **preventing adequate advance planning from taking place.**
4. WRM has received some allocations from foreign sources, including GIZ (Germany), the World Bank, USAID (United States), and FCDO (United Kingdom), but notably less than Water Supply and/or Sanitation and Hygiene projects. It is not clear why **fewer stakeholders have shown interest in directly supporting WRM activities.**
5. **Changes in the WRM sector's financing modality impacted foreign donor interest.** The way the Water Resource Management (WRM) sector is financed has changed, affecting the interest of foreign donors. In the second phase of the Water Sector Development Program (WSDP II), the funding method shifted from a pooled approach (as in WSDP I) to specifically allocated, or earmarked, funds. This led to a decrease in the number of donors interested in WRM, resulting in less funding available.
6. **Changes in National budgeting processes limited what could be built into budget plans.** During the beginning of FY 2017/18 (*the second year of WSDP II*), the government via the Ministry of Finance and Planning (MoFP) introduced new budgeting criteria to alleviate pressure on resources and curtail ambitious overall development plans. MoFP's new budgeting criteria required sectors to include only items due for payments (with valid contractual claims/commitments expected to mature). Plans that had not reached the procurement stage were not accepted in the budget. Analysed evidence from budget memorandum books (Annex Table 2) reveal that it took WRM three years to benefit and receive funds using the new budget approach.
7. **Government WRM staff are rigid, have low motivation and are not open to new ideas (inflexible).** WRM managers showed low motivation to embrace the changes (e.g the budget process, the move from basket to earmarked as well as proactively looking for opportunities to leverage resources from other use or benefitting departments) and had a low capacity to quickly develop alternative funding

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<sup>1</sup> Shares of the rural water supply and urban sub-sectors were 34% and 53%, respectively, plus others.



proposals – nor were they generally aware of available alternative financing options or provided guidance to seek such alternatives.

One of the main reasons for inadequate allocation of funds to WRM is low motivation or incentive to prepare proposals. Financial mobilisation and allocation are determined by the capacity of institutional staff to prepare project proposals to seek funding from different financiers.

Project preparation financing support to help staff address this capacity gap has not been provided, and the challenge is exacerbated by lack of information about the available financing options and guidelines required for accessing the associated funds.

8. **The participation of stakeholders, including main users and the private sector, has been limited due to inadequate coordination.** WRM requires stakeholder participation to effectively manage and develop water resources. This has limited the funding opportunities and made less use of public–private partnership arrangements. Although the situation has improved and there is more flexibility, limited funds have resulted to the unavailability of costs for convening and therefore coordinating and engaging other sectors and stakeholders. Ineffective coordination and planning between water-using sectors has resulted in limited data for comprehensive IWRMDs, environments that are not encouraging for private sector participation, and limited capacity of BWBs to discharge their duties.
9. **Unfavourable or tough financiers' conditions for funding limit the financing options for WRM.** High interest rates and strict repayment schedules from financial institutions and banks, both locally and internationally, do not align with the longer-term time horizons of water resources investments. Moreover, there is risk aversion from financiers that perceive water resources investment to have long-term returns instead of meeting their short-term preferences.
10. **Political interference results in orientation towards interventions with quick or short-term results (water supply services) as driven by political agendas (e.g. Kumtua mama ndoo kichwani).** In areas experiencing water shortages, the public's demand for reliable and safe drinking water becomes a primary concern. Politicians, in response to these demands, often prioritize policies and projects that directly address these immediate needs, such as constructing water supply systems, over long-term WRM strategies.
11. **The MoW failure to understand the role water resources play as an input to the economy result in WRM consistently being vulnerable to inadequate budget allocations.** Water is a public good required as an input by many other sectors, such as agriculture, health, mining, transport, tourism, industry, and energy, yet there is not an economic value assigned to water that can effectively translate its contribution to dollars and cents. GDP and the economy drive government budgeting and policymaking decisions. Until the economic value of water in Tanzania is clearly defined, the WRM subsector will continue to be undervalued and always on the losing side of budget allocation battles.

Understanding the constraining factors for allocation of funding to the sector is an important milestone towards addressing the existing challenge. The next step, having extracted the root causes, was ranking the identified above factors in order of importance to facilitate prioritisation in lobbying and advocacy.

**A ranking exercise conducted by the investigating team shows that the Ministry of Water WRM staff's low motivation towards action and its corresponding resistance to change is the most significant root cause of inadequate funds to implement resilient water resource investments.** Their failure to act results in lower funds to operate and will continue to be an obstacle and limitation until appropriately addressed.



National Multisectoral Forum convening in June 2022

## Conclusion and recommendations

### Conclusion

Financial commitments to support the WRM subsector's interventions have been low. Compared to the water supply subsector, both foreign and domestic sources have recorded significantly lower levels of funding.

*There are no serious external barriers that limit WRM's achievements, but the attitude and posture must change.*

These are the main barriers limiting progress of the water resources sector.

*The authors are convinced that the initial strategy should be directed at introducing a capacity enhancement programme to improve the working environment and foster a drive to work. These efforts should be directed at all WRM staff and focus on establishing a different culture that favours agility with flexibility.*

The intervention should aim to make WRM staff become sustainably motivated and more productive through increased execution speed and accuracy of results/deliveries, while enhancing collaboration with other departments and flexibility.

## Recommendations

The team recommends the following:

The MoW must inculcate a culture that enhances competency in project management skills to improve project execution (speed and compliance discipline) and attain a shift in the mindsets of WRM staff. The current slow pace, low motivation, and unfavourable attitude needs to change. Increased collaboration, professional development, and learning should be prioritized. These enhancements in staff capacity will eventually lead to increased resource mobilization.


Specific interventions for the following barriers need to be implemented:

- low staff capacity to develop proposals and lack of project preparation financing support
  - training on proposal preparation
  - securing funding support for project proposal preparation
  - integrating project proposals into Key Performance Indicators of implementing Agencies (BWBs), for example, in the Performance Agreement Contract between MoW and BWBs
- Low staff awareness on available financing options and guidance
  - engaging financiers, MoFP, and the Capital Market and Security Authority to create awareness on financing options and guidance. This includes MoFP's guidelines on the processes to be followed up by implementing agencies in raising loans, issuing guarantee and using grants
- Low government prioritization of water resources management
  - creating awareness among political decision-makers on the importance of water resource investments, the link between good governance of water resources and sustainable water supply services, and, more importantly, on the multi-dimensional nature of water security in food security, energy security, improved livelihoods and human health, and transboundary cooperation.
  - WRM directorate to prepare papers that provide a clear picture of the importance of WRM and present them to political readers. Example, water scarcity (quality and quantity), loss due to flood and drought, etc.
- Lack of enabling/conducive environment for private sector participation
  - creating incentives (or perhaps a mandate) from MoFP for the water sector to develop a strategy for mobilisation of financial resources, considering a mix of funding both from the public and private sources; for example, a certain percentage of annual water sector budgets prepared by MoW should come from private sources
  - creating actual incentives to encourage the private sector to invest (preferential interest rates, loan guarantees, special incentives for lending over longer terms, including water in any designated Priority Sector Lending policies that already exist (if they do). This would be outside the direct control of the water sector and would likely require collaboration with the MoFP.
- Limited capacity of BWBs to discharge their duties
  - Reviewing BWB organisational structures to effectively assume their core mandates (e.g. mobilisation of financial resources).

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# Annexes

**Table 1. Approved budget against WSDP phase II requirement**

		Financial values below are in Billion TZS							
Financial Year (FY)	Title alias/ ID	16/17	17/18	18/19	19/20	20/21	21/22	22/23	Total
WSDP overall programme requirements	Row 1	877	1938	2176	1437	1007	unspecified	2118	9553
WRM requirements in WSDP (subsector)	Row 2	91	346	751	437	255	unspecified	502	
Vote 49 DEV budget (Approved by United Republic of Tanzania (URT) Parliament)	Row 3	782	623	673	616	705	647	658	4704
WRM Vote 49 DEV Budget (subsector)	Row 4	63	61	49	40	44	42	35	334
	Ratios								
Analysis of WRM allocations performance (ratio)	row4/row 1 (WRM's approved budget over WSDP)	7%	3%	2%	3%	4%	N/A	2%	
	row 4/row 3 (WRM's share to approved budget)	8%	10%	7%	6%	6%	6%	5%	
	row 4/ row 2 (WSDP plans coherence)	69%	18%	7%	9%	17%	N/A	7%	

Interpretation: First year of WSDP III, ratio of approved budget for Vote 49 DEV for WRM vs programme requirements. Approved budget is only sufficient to cover 7% of the activities.

**Table 2. Annual allocations (local and foreign sources) from vote 49 budget memoranda**

Vote 49, sub vote 2001.	2016/17			2017/18			2018/19			2019/20			2020/21			2021/22		
Project Code 6545:WRM	Local	Foreign	Total	Local	Foreign	Total	local	foreign	total	local	foreign	total	local	foreign	total	local	foreign	total
Annual allocation (TZS billions)	45	9.2	54.2	25	27.18	52.2	27	14	41	10	25	35	11	28	39	11	27	37.5
Actual spent (TZS billions)	5.7	2.3	10.5	0	0	2.4			5.7	7.8	9.86	18	0.7	10.2	10.9	8.4	15.45	23.9
Ration: Actual/ Budget allocation	13%		19%	0%		5%	0%		14%	44%		50%	6%		28%	80%		64%



# GLOBAL WATER LEADERSHIP PROGRAMME



Ministry of Water

## About the Global Water Leadership (GWL) Programme

Effective and equitable water management is becoming increasingly complex, and increasingly important, as climate change impacts add new uncertainty to policy decisions and financial investments. The Global Water Leadership in a Changing Climate programme (GWL) is working intensely in ten countries, bringing together key stakeholders and decision makers from two water management pillars – water resources and water and sanitation – to develop holistic, integrated policies and plans to enhance national water and climate resilience. The programme is funded by the UK Foreign, Commonwealth and Development Office (FCDO) and implemented by Global Water Partnership (GWP), the United Nations Children’s Fund (UNICEF), the Sanitation and Water for All Partnership (SWA) and the World Health Organization/UNICEF Joint Monitoring Programme (JMP). In Tanzania the programme has been implemented by Global Water Partnership Tanzania.



 [gwp.org/en/global-water-leadership-programme](http://gwp.org/en/global-water-leadership-programme)

 <https://www.gwptz.org/>

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