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FINAL EVALUATION REPORT: GOVERNMENT OF TANZANIA WATER SECTOR DEVELOPMENT PROGRAM PHASE 2 FINAL EVALUATION

December, 2021

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This publication was produced at the request of the Government of Tanzania Ministry of Water (MoW) with support from the United States Agency for International Development. It was prepared independently by ME&A, Inc.

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LIST OF ACRONYMS

Acronym	Description
2030WRG	2030 Water Resources Group
AfDB	African Development Bank
AMCOW	African Ministers' Council on Water
APP	Approved Professional Person
BORDA	Bremen Overseas Research and Development Association
BRN	Big Result Now
BWB	Basin Water Board
BWOs	Basin Water Offices
CBWSO	Community-Based Water Supply Organization
CDMT	Central Data Management Team
CDP	Capacity Development Plan
COVID-19	Coronavirus Disease 2019
COWSO	Community Owned Water Supply Organization
CRDB	Cooperative Rural Development Bank
CSO	Civil Society Organization
CWIS	Citywide Inclusive Sanitation
CWST	Council Water and Sanitation Team
DAWASA	Dar es Salaam Water Supply and Sewerage Authority
DC	District Council
DED	District Executive Director
DLI	Disbursement Linked Indicators
DP	Development Partner
DPG	Development Partners Group
DWE	District Water Engineer
DWM	District Water Manager
DWR	Directorate of Water Resources
ET	Evaluation Team
EQ	Evaluation Question
EWURA	Energy and Water Utilities Regulatory Authority
FY	Fiscal Year
GIS	Geographical Information System
GIZ	German Development Cooperation Agency
GoT	Government of Tanzania
HQ	Headquarters
IDB	Internal Drainage Basin
IGA	Income-Generating Activity
IWRDP	Integrated Water Resources Development Project
IWRM	Integrated Water Resources Management
IWRMDP	Integrated Water Resources Management and Development Plan
JNHPP	Julius Nyerere Hydroelectric Power Plant
KASHWASA	Kahama Shinyanga Water Supply and Sanitation Authority
KII	Key Informant Interview
KPI	Key Performance Indicator
KWSP	Kilimanjaro Water Stewardship Program
LGA	Local Government Authority
LIMS	Laboratory Information Management System

Acronym	Description
M&E	Monitoring and Evaluation
MAC	Minimum Access Condition
ME&A	ME&A, Inc.
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly, and Children
MoEST	Ministry of Education, Science, and Technology
MOU	Memorandum of Understanding
MoW	Ministry of Water
MTR	Mid-Term Review
NAWAPO	National Water Policy
NBI	Nile Basin Initiative
NELSAP-CU	Nile Equatorial Lakes Subsidiary Action Program Coordination Unit
NGO	Non-Governmental Organization
NRW	Non-Revenue Water
NSC	National Sanitation Campaign
NSS	Non-Sewered Sanitation
NWF	National Water Fund
NAWAPO	National Water Policy
NWSDS	National Water Sector Development Strategy
O&M	Operation and Maintenance
ODF	Open Defecation Free
PbR	Payments by Results
PfR	Payments for Results
PDO	Project (or Program) Development Objective
PO-RALG	President's Office–Regional Administration and Local Government
PPP	Public-Private Partnership
RUWASA	Rural Water Supply and Sanitation Agency
RWSS	Rural Water Supply and Sanitation
SADCAS	Southern African Development Community Accreditation Services
SC	Steering Committee
SDG	Sustainable Development Goal
SLM	Sustainable Land Management
SNV	SNV Netherlands Development Organization
SS	Sewerage and Sanitation
SWAP	Sector-Wide Approach to Planning
SWASH	School Water, Sanitation, and Hygiene
TAWASANET	Tanzania Water and Sanitation Network
TDV	Tanzania Development Vision
TIB	Tanzania Investment Bank
TPC	Tanganyika Plantation Company
TSF	Tailing Storage Facility
TWG	Technical Working Group
UKAID	(United Kingdom) Department for International Development
URT	United Republic of Tanzania
USAID	United States Agency for International Development
UWSSA	Urban Water Supply and Sanitation Authority
WARIDI	(USAID/Tanzania) Water Resources Integration Development Initiative
WASH	Water, Sanitation, and Hygiene
WQ	Water Quality
WQM	Water Quality Management

Acronym	Description
WRM	Water Resources Management
WS	Water Supply
WSDP	Water Sector Development Program
WSMEF	Water Sector Monitoring and Evaluation Framework
WSP	Water Safety Plan
WSSA	Water Supply and Sanitation Authority
WUA	Water User Association
ZAMCOM	Zambezi Watercourse Commission

EXECUTIVE SUMMARY

The Water Sector Development Program (WSDP) is a multi-year, sector-wide program funded by the Government of Tanzania (GoT) and its development partners (DPs), whose coordinated implementation is led by the Ministry of Water (MoW). The Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDGEC) and the Ministry of Education, Science, and Technology (MoEST) are also involved in the implementation of water, sanitation, and hygiene (WASH) and schools' WASH components of the program, respectively. The primary development objective is to strengthen water sector institutions to achieve Integrated Water Resources Management (IWRM) and improved water supply and sanitation services.

EVALUATION PURPOSE

As Phase 2 has now concluded, MoW commissioned this final evaluation with support from the United States Agency for International Development (USAID)/Tanzania to assess the achievements of WSDP Phase II (WSDP II) in IWRM and improved access to water supply and sanitation services in Tanzania.

EVALUATION DESIGN, METHODS, AND LIMITATIONS

The evaluation approach used a mixed-methods design approach to collect and analyze quantitative and qualitative metrics for the program's performance against its design results framework. The evaluation team (ET) used semi-structured interviews with various sector stakeholders and extensive document reviews to collect data.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Conclusions

Following are the key conclusions made from evaluating WSDP II:

Evaluation Question (EQ) 1: To what extent have the design and objectives of the WSDP II Program components been structured to meet the needs and challenges it sought to address among target beneficiaries? To what extent has it achieved the expected results according to its results framework and Key Performance Indicators (KPIs)?

The WSDP II objectives and design were generally consistent to address Tanzania's primary water supply, sanitation, and WRM challenges; aligned with national priorities; and responsive to the needs of targeted beneficiaries. The ET found WSDP II made significant progress in some areas but fell short of addressing critical and persistent sector challenges in other key areas. The following are the key conclusions of each component of the program.

Component 1 – Water Resources Management

WRM investments made during the WSDP II period failed to meet several set key performance targets. This is particularly concerning given Tanzania is facing a rapidly declining water resource endowment, with annual renewable resources per capita predicted to fall to 1,605 cubic meters (m^3) per capita in 2035, below the global water stress threshold of 1,700 m^3 per capita per annum set by the United Nations.[1] Several factors contribute to this, including population growth, growth of the size of the economy, rapid catchment degradation, rapid urbanization, and climate change. One of the key gaps for the WRM component has been in the area of human resources. While progress was made in the construction of

[1] ***United Nations World Water Development Report 4. Volume 1: Managing Water under Uncertainty and Risk, March 2012.*** Water scarcity is assessed by looking at the population-water equation. Water stress starts when annual water supplies drop below 1,700 m^3 per person, water scarcity when water supplies drop below 1,000 m^3 per person, and absolute scarcity when water supplies are below 500 m^3 per person.

physical facilities, with eight Basin Water Board (BWB) Headquarters (HQ) and water quality laboratories built against a target of five BWB HQs completed, MoW-Directorate of Water Resources (DWR), BWBs, and water quality laboratories recruited only 98 staff cumulatively in various positions (against a target of 1,000 staff sector-wide from various technical disciplines). This implies that less than ten percent of the target was reached (9.8 percent), resulting in an acute shortage of staff. This affected the implementation of the program—particularly limiting the ability of MoW to offer consistent extension services and capacity-building support to community-level Water User Associations (WUAs). It also led to a lag in implementing the developed basin Integrated Water Resources Management and Development Plans (IWRMDPs). Also, the mobilization of only 16 percent of the total funds required to fully implement the WRM targets under WSDP II led to not meeting most performance targets. This was exacerbated by a low budget absorption rate averaging 59 percent across all components of the program (*i.e.*, the proportion of actual expenditures from the total amount of budget approved for activities during the program period).

The staff shortage, low levels of funding, and low absorption of funds are reflected in the underperformance against other WRM targets. These include gazettement of three (of 56 sub-catchments planned); establishment of 44 new WUAs (of 170 planned to enhance WRM through a participatory process); installation of 18 observation/monitoring wells and data loggers (of 150 planned); rehabilitation of two monitoring boreholes (of 120 planned); and a decline in the number of monitoring and weather stations as a result of poor investment in maintenance of existing stations, acts of vandalism, and the low pace of new installation.

Other activities planned to be implemented under WSDP II that were not carried out include updating the dam database; 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; and conducting research on dam failure assessment and maintenance for sustainable dam construction.

Component 2 – Rural Water Supply and Sanitation

WSDP II made significant progress in increasing the number of functional rural water points, up to a 23-fold increase. However, the sustainability of service delivery to rural populations benefiting from the increased number of water points remains a challenge requiring further investments and system-strengthening actions. The establishment of a specialized rural water services delivery agency called the Rural Water Supply and Sanitation Agency (RUWASA) mandated to ensure sustainability was lauded as a significant positive step by stakeholders from the government, DPs, and civil society actors. However, concerns about low tariff levels and other funding for operation and maintenance (O&M) beyond initial capital expenditures; inadequate staffing, training, and equipping of RUWASA to backstop operations, and insufficient operational capacity prevent the sustainable functionality of rural water points on a national scale.

There is also a lack of adequate structures and modalities for regulating rural services delivery. The Energy and Water Utilities Regulatory Authority (EWURA) currently only focuses on urban services delivery. This presents a significant risk for maintaining the water access levels achieved under WSDP II—with a fear among stakeholders that the large investment in rural areas under RUWASA may be unsustainable. RUWASA plans to implement clustering of rural water points, placing them under the management of larger service providers with economies of scale to enable them to be better-equipped, technically capable Community Based Water Supply Organizations (CBWSOs). This provides an opportunity to increase rural water functionality.

The sanitation components were largely implemented under the National Sanitation Campaign (NSC), which focused on behavior change communication as opposed to sanitation infrastructure development in rural areas. RUWASA did not make any direct infrastructure investments in rural sanitation.

Component 3 – Water Supply and Sewage in Urban Areas

The ET found that, although falling short of targets, WSDP II made significant progress in providing urban populations with access to water. Dar es Salaam's water utility, Dar es Salaam Water Supply and Sewerage Authority (DAWASA), increased direct coverage with 172,000 household connections, from 62 percent of the population in its designated service area to 86 percent—nearing the target of 95 percent coverage. Other regional Water Supply and Sanitation Authorities (WSSAs) added 239,500 connections (target 200,000). However, national project, district HQ, and small-town WSSAs implemented only 15,462 new household connections from a target of 110,000 units.

WSDP II substantially improved sanitation facilities within households. However, the program made little progress in assuring effluents are being safely managed for the approximately 87 percent of urban residents who have no access to sewers. Progress is beginning in Dar es Salaam, where the urban water authority is implementing off-grid sanitation, as well as in Mwanza, which is pilot testing an innovative, simplified, and condominial sewer system. This could be accomplished using a Citywide Inclusive Sanitation (CWIS) approach,[2] which provides appropriate technical solutions combining investments in conventional sewer networks and off-grid, non-sewered, on-site sanitation solutions in centralized and decentralized systems.

The operational indicators for regional, district, and township WSSAs improved consistently over the WSDP II period. EWURA data shows that utilities, in aggregate, bill sufficient revenue to cover their cash operating expenses (although there are many weaker WSSAs). Revenue collection improved significantly in regional WSSAs from 86 percent to 95 percent, but remained stagnant at approximately 85 percent in districts and townships as well as national project areas.

The WSSAs have also made significant improvements in lowering non-revenue water (NRW) levels toward the national target of, at most, 25 percent. DAWASA lowered NRW levels from 57 percent to 40 percent; regional WSSAs from 43 percent to 37 percent; and national project areas from 48 percent to 25 percent—meeting the national target. The status of NRW levels is a pervasive and persistent problem that WSDP III must continue to address. Regional WSSAs improved their revenue collection from 86 percent to 95 percent, while districts and towns collect about 83 percent and national pilot project areas about 87 percent (after falling mid-program).

Commercial financing, blended with funds from German development bank KfW-provided output-based grants, both improved infrastructure and supported the financial sustainability of WSSAs. Preconditions to their accessing funds, such as insisting WSSAs have an approved business strategy and clear plans to maximize capital expenditure efficiency, led to an improvement in the internal organizational capacity of the WSSAs. This serves as an example to the MoW to adopt output-based funding and blending of grants with commercial financing for WSSAs to make debt financing affordable. The newly established National Water Fund (NWF) can benefit from support from WSDP III to adopt these approaches directly for WSSAs and public-private partnerships (PPPs). The fund also can be a vehicle where donors and the GoT pool their resources while specifying the application of each donor's funding.

[2] CWIS is an emerging approach to scaling up access to urban sanitation where a diversity of appropriate technical solutions is embraced, combining both on-site and sewered solutions, in either centralized or decentralized systems and Investment activities are designed to target specific unserved and underserved groups, such as women, ethnic minorities, the urban poor in low-income settlements and people with disabilities. It moves away from the traditional Infrastructure focused approach of investing in sewer lines only to a more people focused service delivery approach.

Component 4 – Sanitation and Hygiene

During WSDP II, most of the regions across Tanzania recorded significant increases in the number of households using improved latrines and possessing handwashing facilities. On average, the access rates to improved latrines increased from 42 percent in 2017 to 66 percent in 2021, while installed household handwashing facilities increased from 14 percent in 2017 to 40 percent in 2021. While most stakeholders attributed the success of the NSC under WSDP II to the separation of sanitation from other components, which was observed as a critical step toward ensuring adequate funding for sanitation and hygiene, still less than half of the budgeted $150 million was mobilized during the program's duration. This led to not fully achieving the performance targets, which included increasing the proportion of the national population that uses improved sanitation facilities from 2.2 million households to 7.8 million households (75 percent) by 2019.

During WSDP II, the sanitation and hygiene component received support from high-level political leaders who championed the "*Nyumba ni choo*" campaign, leading to the high level of awareness needed to drive behavior change and improved sanitation facilities in homes. However, unaddressed coordination issues between GoT agencies at the district level and local governments, as well as low levels of financing for sanitation, pose a significant risk to sustaining these sanitation and hygiene outputs.

EQ 2: How effective and efficient was the WSDP II Program's Sector-Wide Approach to Planning (SWAP), financial management, Monitoring and Evaluation (M&E), coordination, and program implementation at the national, regional, and local-level structures?

Most stakeholders believe that the envisioned SWAP did not perform as well as anticipated under WSDP II, in comparison to WSDP I. Key informants noted three main factors that contributed to WSDP II's weakness in fully realizing the implementation of the SWAP per its design: 1) the shift of DP funding from the Basket Fund to earmarked project implementation; 2) the relocation of the GoT's administrative capital from Dar Es Salaam to Dodoma; and 3) the COVID-19 pandemic, which restricted frequency of coordination meetings and direct engagement between partners.

Mobilization and budgeting of only 47 percent (approximately $1.53 billion) of WSDP II's budgeted $3.3 billion, combined with an execution/absorption rate of 59 percent of the amount budgeted during the program, resulted in WSDP II missing most performance targets. While the challenge of not being able to fully mobilize the funds envisioned may have negatively affected the achievement of key targets, particularly for WRM, the budget expenditure data showing low absorption of the already approved budgets compounded the low achievement of key targets, This presents a missed opportunity by the MoW to use the funds available by improving disbursements rates and developing internal organizational capacity to ensure maximized utilization of the already obligated funds.

Failure to implement the unified, integrated Water Sector Monitoring and Evaluation Framework (WSMEF) throughout the WSDP II period resulted in ineffective and uncoordinated monitoring of WSDP II performance. This contributed to significant data gaps, particularly for the rural water supply, observed by the ET.

EQ 3: What are the key lessons learned, enabling factors, and risks in sustaining WSDP II Program outputs which should inform the design of WSDP III?

The following are the key conclusions made related to the sustainability risks of WSDP II outputs.

Innovative funding mechanisms such as the United Kingdom's Department for International Development's (UKAID) Payment by Results (PbR) and the World Bank's Payment for Results (PfR) have helped address the persistent sustainability challenge of rural water points. However, their operation was encumbered with perceived lengthy and burdensome results-verification processes. The lack of a clear GoT commitment to expand adoption of these approaches could erode gains made during the WSDP II period. A lack of a system and capacity for regulating rural service delivery poses a risk to maintain the

WSDP II-achieved levels of water access. If this happens, RUWASA's substantial investment in rural areas could be wasted.

The inadequate human capital at the BWBs, coupled with underfunding WRM activities, jeopardizes the significant gains made in improving WRM, as cashflow shortfalls from a combination of GoT budget and abstraction fees (including water-user fees) stymie the execution of IWRMDPs and technical capacity-building support to WUAs to implement adaptive water conservation measures at the local level.

According to the majority of MoW respondents interviewed during the evaluation, the initial conceptualization was that SWAP would support a single-expenditure program controlled by the GoT and rely on government procedures for disbursement and accounting for all funds. However, during WSDP II, difficulties with timely disbursement of funds to implementing agencies and concerns raised by some DPs about the difficulty of receiving full accountability for procurement and fund deployment caused them to revert to earmarked projects. Additionally, the MoW raised concerns about directly attributing WSDP II results to earmarked projects undertaken by DPs such as USAID and SNV Netherlands Development Organization (SNV) that do not typically channel their funding through the common government pool.

The key lessons learned regarding the utility of SWAP are:

1. The need for an expanded view of SWAP that goes beyond a sole reliance on government procedures to disburse and account for all funds to one centered on its broad application focused on aligning individual WASH investments, even by non-pooling DPs;
2. A clear government policy and investment program vision for the sector;
3. A broader funding base that accounts for non-pooled investment projects; and
4. A jointly developed monitoring framework (beyond a dialogue mechanism) that accounts for both direct GoT implemented investments and non-GoT WASH investments in the WASH sector.

The absence of a well-defined gender mainstreaming strategy or performance indicators precluded measurement of the WSDP II impact on women's empowerment and gender equality.

The capacities of both the GoT and the private sector to identify, prepare, tender, and supervise specific PPPs need to be enhanced. The private sector needs to move beyond being merely input suppliers and become partners, and the GoT needs to accept them in that capacity.

Key informants reported district-level coordination between ministries and with local government became weaker, with district managers reporting centrally to MoW through RUWASA and not participating in council water and sanitation teams (CWSTs).

Recommendations

Based on the ET's findings across the three EQs and the above conclusions, the following recommendations identify areas for the MoW to give priority consideration while designing Phase 3 of WSDP.

1. **Recommendation 1:** MoW should prioritize updating its National Water Sector Development Strategy (NWSDS) with an accompanying National Water Sector Investment and Financing Plan prior to rolling out the design of WSDP III. This should be designed to address gaps for WRM and sanitation, which are currently underfunded and under-capacitated with sufficient human resources. Supply funding should be rebalanced with a sufficient investment in maintenance to ensure greater sustainability.
2. **Recommendation 2:** Financing for urban sanitation should be more targeted by adopting a CWIS approach during Phase 3 of WSDP in close coordination with WSSAs. Through this

approach, the WSSAs, while planning for their sanitation expansion strategy, will consider solutions beyond just increasing sewer lines to also plan for and invest in other non-sewered solutions that ensure the off-grid informal and less planned areas/zones of cities/towns have access to safely managed sanitation. This would be needed to ensure improved coverage of sewerage and proper treatment to avoid contamination of water supply and natural resources.

3. **Recommendation 3:** Under Phase 3 of WSDP, MoW should have a focused strategy on improving its operational efficiency to reduce NRW and commercial efficiency through leveraging innovative metering and billing technologies to be financially self-sustaining to reduce the burdens it currently imposes on public funding when it can actually be self-financing. This could be accomplished by scaling up the innovative performance-based contract approach for NRW management (currently under pilot testing in DAWASA with support from the World Bank); providing human resources for monitoring activities; and increasing capacity for enforcement and permitting under the new regulations and fee schedule.

4. **Recommendation 4:** RUWASA should explore alternative outsourcing models for supporting rural water services delivery organizations such as bundling several rural schemes and contracting out major maintenance tasks to specialist private operators. This should include the adoption of a hybrid regulation model featuring compacts between RUWASA (technical and financial supporter and regulator) and CBWSOs (service provider and asset owner), and should include strengthening RUWASA's capacity to regulate water services and quality standards in closer cross-agency collaboration with EWURA.

5. **Recommendation 5:** MoW and its DPs should take deliberate measures to increase targeted investments for water resources management (WRM) through local adaptive resource management approaches involving WUAs in addition to providing more funding to strengthen staffing and the technical capacity of BWBs. Capacity development support and working tools should be provided by government and DPs to onboard and scale up staff at the basin level to enable them to perform their roles and strengthen technical abilities of existing BWB staff. Additionally, MoW should undertake a detailed analysis to establish the primary underlying reason for the low absorption rates of the approved budget. The analysis would provide the specific levers for change for increasing the budget absorption rate.

~~6.~~ **Recommendation 6:** MoW should develop strategies that encourage community mobilization to harness flood and drought risks exacerbated by increasing populations and climate change. Households should be encouraged to harvest rainwater to reduce demand on water supplies; communities should be encouraged to plant trees and grasses to reduce erosion; and unsubstantiated plans to improve water catchments should be prioritized by BWBs in WSDP III. Concomitant improvements in waste management should be undertaken with continued support for campaigns such as "*Nyumba ni choo*."

7. **Recommendation 7:** MoW should partner with the DPs to scale up NWF as an innovative sector-financing model that blends public grant and loan financing, channels DP resources, and preferably incorporates a MoW-developed performance-based mechanism such as those applied under PBR and PFR to incentivize institutional strengthening and capital efficiency.

8. **Recommendation 8:** Review the structure of the GoT–DP joint planning and coordination framework to align and focus it specifically to facilitate the joint planning and design of the NWSDS and implementation of the National Water Sector Investment and Financing Plan and WSDP III, and establish a national M&E system for all water sector interventions, including earmarked projects directly implemented by DPs, from the onset of WSDP III.

9. **Recommendation 9:** RUWASA should formalize arrangements for its district managers to be active on CWSTs along with district-level representatives of the Ministries of Health and

Education, local governments, and BWBs. Even though they report centrally to MoW, much of the actual water supply investments/activities overseen by the District Managers (DMs) are at the district level, which should be coordinated with the other relevant departments such as the Ministries of Health and Education. As such, the DMs should commit to participating in the CWSTs to facilitate joint planning, design, implementation, and monitoring/results sharing with the other WASH-relevant GoT agencies operating at the district level. The formalization should be done through a joint memorandum of understanding (MoU) between the different agencies based on a clearly agreed-on WSDP III program of activities/investments.

10. **Recommendation 10:** Introduce a gender-mainstreaming framework with monitoring indicators across all project components. This entails providing equitable services at a basic level, but also ensuring equal participation of women in the predominantly male sector. WSDP III should aim to increase participation of women in the program and water sector at the national, regional, and local levels. This should include participation in the CBSOs that collect fees and provide maintenance on rural water schemes. Training and reinforcement of equal participation in the WSDP III should be reinforced. The program should further promote gender equality and equal opportunity in the sector, as well as fair service provision to women and children.
11. **Recommendation 11:** PPPs should be an integral part of water development. Not only should the private sector be encouraged to invest, but it also needs to be made aware of the opportunities within the sector. MoW needs to identify areas where PPPs could be effective tools to extend water sector reach and improve access and accountability. Examples of areas of potential involvement are in the expansion of water and sewerage access within DAWASA, with involvement in the continued reduction of NRW to assist in funding the PPP, but also in the maintenance of water access through RUWASA funded through, for example, the NWF.

1.0 EVALUATION BACKGROUND, OBJECTIVES, QUESTIONS, AND SCOPE

1.1 EVALUATION BACKGROUND

The Government of Tanzania (GoT), through the Ministry of Water (MoW), is implementing the Water Sector Development Program (WSDP) for the period of 2006–2025. Phase 2 (WSDP II) of the program started in 2014 and was slated to end in 2019. Following the Phase 2 midterm evaluation, it entered an extension period lasting through June 2021. The planning and design of Phase 3 is underway at the time of this Phase 2 evaluation. The program follows a Sector-Wide Approach to Planning (SWAP) in water resources management (WRM), water supply, and sanitation services. Under MoW's leadership, in coordination with the international development partners' (DPs) working group, it is simultaneously implemented by all water-sector stakeholders across Tanzania's regional and local government entities.

According to its design document,[3] the WSDP II's development objective is to strengthen sector institutions for Integrated Water Resources Management (IWRM) and improve access to water supply and sanitation services. The total WSDP II estimated costs at design was $3.3 billion, and the program was implemented across all Local Government Authorities (LGAs), Basin Water Boards (BWBs), and Water Supply Sanitation Authorities (WSSAs) in Tanzania.

WSDP II's implementation started in July 2016, with the following five components:

1. WRM;
2. Rural Water Supply and Sanitation;
3. Urban Water Supply and Sanitation;
4. Sanitation and Hygiene; and
5. Program Management and Delivery Support.

1.2 EVALUATION OBJECTIVES

The Tanzania MoW, with support from the United States Agency for International Development (USAID)/Tanzania, commissioned the Data for Development Project to conduct a final evaluation of WSDP II. The evaluation's primary objective was to assess the level of achievement of program objectives and outcomes as specified in the WSDP II program document, sectoral policies and strategies, national frameworks, and global commitments (*e.g.,* Sustainable Development Goals [SDGs]). Based on findings, challenges, experiences, and lessons learned from implementing WSDP Phase II, this evaluation provides recommendations for the design and implementation of WSDP III.

1.3 CORE EVALUATION QUESTIONS

Based on the Terms of Reference provided to the evaluation team (ET) (Annex 1), the ET (listed in Annex 5) formulated the following Evaluation Questions (EQs), which were then approved by MoW to guide the structure of the evaluation, its instruments for primary source data collection, and the document review.

1. To what extent have the design and objectives of the WSDP II program components been created to meet the needs and challenges it sought to address among target beneficiaries? To what extent has it achieved expected results according to its results framework and Key Performance

[3] Government of Tanzania, July 2014. *Water Sector Development Program Phase 2 (2014–2015 to 2018–2019)*, p. 1.

Indicators (KPIs)? The ET conducted detailed analysis of each of the three major program components and the extent of integration across these three components:

- Water supply and sanitation (includes both urban and rural);
- WRM; and
- Sanitation and hygiene (urban and rural).

2. How effective and efficient was the WSDP II's SWAP, financial management, Monitoring and Evaluation (M&E), coordination, and program implementation at the national, regional, and local-level structures (including all program management and delivery support)?
3. What are the key lessons learned, enabling factors, and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

The formulation of the above core EQs was guided by the following specific evaluation investigation areas:

- ***Relevance***: The extent to which WSDP II objectives and design were consistent with the challenges and concerns in the sector and the needs and priorities of its beneficiaries.
- ***Effectiveness***: The extent to which the products, outputs, and activities under WSDP II achieved the intended objectives.
- ***Efficiency***: The extent to which the impacts and benefits arising from WSDP II activities were commensurate with the level of effort and resources deployed.
- ***Sustainability*** of program outputs: The extent to which the program strategy/approach, coordination, and support were the most appropriate for the long-term sustainability of WSDP II outputs.

2.0 EVALUATION DESIGN

2.1 EVALUATION METHODOLOGY AND APPROACH

To comprehensively answer the research questions, the ET adopted a three-part approach involving:

1. Review and analysis of existing WSDP II program design documents, monitoring data, and reports to highlight key observable trends of existing WSDP II results indicators.
2. Structured, systematic desk review of other water-sector documents to provide a systemic/holistic sector history, current context, and expected trends.
3. Undertaking 44 key informant interviews (KIIs) (Annex 2) with stakeholders across the water sector including: MoW staff, international government agencies, national-level ministries and GoT authorities, Non-Governmental Organizations (NGOs), and private-sector actors.

The ET purposefully selected the WSDP II final evaluation sites. Initially, the ET built from the 2018 Mid-Term Review (MTR) regional selection and added geographic coverage. The six regions selected for the WSDP II final evaluation included Dar es Salaam, Dodoma, Morogoro, Kilimanjaro, Njombe, and Mwanza. In addition to the regional selection, the sampling focused on urban WSSAs supported under Component 3 of the program and water basins supported under the WRM in Component 1. The ET selected four out of nine water basins in the country (Wami-Ruvu, Rufiji, Lake Victoria, and Pangani) to be part of the evaluation. Further WSSAs from the six regions were considered as the regional sampling

selection, with the addition of the Moshi urban WSSA.[4] Table 1 shows the distribution of KIIs across the sampled regions.

Document Review

The ET used document reviews to obtain quantifiable and qualitative data to address EQs about the actual performance of the WSDP II program.

The ET conducted a comprehensive review of:

- Relevant water and sanitation programmatic and policy documents, annual progress reports, sector reports, budget and expenditure planning reports, the MTR report, M&E reporting (by program component), *etc*.
- Relevant external literature on the Tanzania water and sanitation sector to situate, refine, and illuminate the analysis of program activities and results in their proper context. Particular emphasis was given to the review of equity reports produced by the Tanzania Water and Sanitation Network (TAWASNET) given its overarching umbrella role for local water and sanitation NGOs to give a deeper perspective of the local civil society organizations (CSOs)/NGOs operating in the water sector.

Semi-Structured Interviews

Interviews with key informants served as the primary data collection method for this evaluation. The ET sought to capture a diverse range of perspectives and inputs through interviews, while maintaining a focus on the need for rigor and reliability in the findings. The interview format consisted of one-on-one, semi-structured discussions conducted virtually via Zoom and Microsoft Teams.

The ET conducted 44 KIIs with respondents who were purposefully chosen and aligned with WSDP II activities. Interviewees included staff representing DPs in the WSDP II thematic groups; other multilateral and bilateral donors, based on their investment scope and duration of involvement in the sector; GoT officials with representatives from the MoW's internal departments, national ministerial agencies, key service delivery agencies, key water resources management (WRM) agencies, and departments within partner ministries directly responsible for implementing WSDP II; and selected CSOs, private-sector actors, and community groups in the sector.

A semi-structured interview protocol was developed in accordance with the EQs and customized to the intended key informant group. The guides served to standardize the information gathered during each interview while allowing freedom to delve deeper into specific topics as needed.

[4] This WSSA was proposed by MoW officials to be included during the inception period with the intention of capturing its unique experiences of WSDP II implementation.

Table 1: Planned Distribution of KIIs Across the Regions Sampled for the WSDP II Evaluation

Interviewees	DSM	Morogoro	Dodoma	Kilimanjaro	Njombe	Mwanza	Total
GoT National (MoW internal departments and units, including WRM, Water Supply [WS], Sewerage and Sanitation [SS], Water Quality [WQ], Planning/Public-Private Partnership [PPP] Unit, and Coordination Unit)			**6**				**6**
National Ministerial Agencies (Water Fund, Water Institute, and Water Regulatory Board)	**2**		**1**				**3**
Key Service Delivery Agencies for Water Supply, Sanitation, and Hygiene Sector • Rural Water Supply and Sanitation Agency (RUWASA) – National and Regional Level • Select Urban Water Supply and Sanitation Authorities (UWASAs) – MORUWASA, DOWASA, MWAUWASA, and MUWSA[5]	**1**	**2**	**2**	**1**	**1**	**2**	**9**
Key WRM Agencies, *i.e.*, Select BWBs – purposefully selected and representing basin nature vis-à-vis geographical coverage • Wami Ruvu, Rufiji, Pangani, and Lake Victoria							**4**
WSDP II Partner Ministries Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDGEC); Ministry of Education, Science, and Technology (MoEST); Ministry of Finance; and the President's Office–Regional Administration and Local Government (PO-RALG) (*Health Coordination Unit, Regional Secretariat)*			**4**				**4**

[5] Morogoro Urban Water supply and sanitation authority, Dodoma Urban Water supply and sanitation authority, Mwanza Urban Water supply and sanitation authority and Moshi Urban Water supply and sanitation authority.

Interviewees	DSM	Morogoro	Dodoma	Kilimanjaro	Njombe	Mwanza	Total
DPs – Counterpart's thematic working group representatives: • Thematic group 1 – Financing and Planning, Institutional Capacity development and Performance Monitoring • Thematic group 2 – WRM • Thematic group 3 – Water Supply and Sanitation Service Delivery • Thematic group 4 – Sanitation and Hygiene • (USAID, German Development Cooperation Agency (GIZ), United Kingdom Department for International Development (UKAID) and German Development Bank KfW	**4**						**4**
Other Bilateral and Multilateral DPs (World Bank, African Development Bank [AfDB])	**2**						**2**
NGOs (SNV Netherlands Development Organization [SNV], Bremen Overseas Research and Development Association [BORDA], Project Clear)	**3**						**3**
Private-Sector Actors • Services/financial institutions (Tanzania Investment Bank [TIB] and Cooperative Rural Development Bank [CRDB]) • Large-scale water users/water-intensive companies (World Bank–Water Group)	**3**						**3**
LGAs; RUWASA District and in-the-council officers, including RUWASA Manager, District Coordinator for School Water, Sanitation, and Hygiene (SWASH), and District Health Officer for Community Sanitation and Hygiene – Group Interview	**1**	**1**	**1**		**1**	**1**	**5**
Community Water Users' Representative Groups, *e.g.,* Community Based Water Supply Organizations (CBWSOs), Water User Associations (WUAs) – Group Interview		**1**		**1**		**1**	**3**
TOTAL							**46**

Source: ET Team

Collaboration During the Evaluation

The final evaluation of WSDP II was conducted in close collaboration with the Secretariat of the Development Partners Group (DPG) on Water (the DPG Water Secretariat) and MoW counterparts.

The ET actively engaged ten GoT counterpart staff, strategically chosen from across all WSDP II components, including those representing internal MoW departments and others from partnering ministries and agencies. Their contributions included reviewing the inception report, reviewing and approving data collection instruments, assisting in the organization of meetings during the data collection process, and sharing existing performance data with the ET for the WSDP II KPIs and targets. To ensure an independent review of WSDP II's performance, only the ET conducted the review of background documents, data collection, processing, and analysis.

2.2 DATA ANALYSIS

Analyzes and interpretations of data were made for the guiding evaluation EQs, using a mix of qualitative and quantitative methods. To identify emerging themes relevant to each EQ, the ET conducted content and thematic analysis of documents and interview transcripts. They transcribed the interviews' audio recordings and subjected them to a qualitative review before being coded using Dedoose software. The coding was guided by an ET-developed common coding framework.

The ET analyzed quantitative performance data in comparison to the initial program design document and the program's KPIs. The use of data visualization and Geographical Information System (GIS) mapping aided the development of synthesized findings from varying data sources. The ET triangulated these quantitative findings with qualitative analysis from document review and KII responses.

2.3 EVALUATION LIMITATIONS

The following limitations affect the evaluation results shared in this report:

- **Coronavirus Disease 2019 (COVID-19) restrictions**: The ongoing requirement to adhere to COVID-19-related safety protocols resulted in significant delays and precluded the use of traditional face-to-face data-collection methods. This limited the ET's direct engagement with communities and households to ascertain program impact at household levels. To address this constraint, the team made efforts to conduct virtual group interviews with Water User Associations (WUAs) and Community-based Water Supply Organization (CBWSOs) facilitated through Rural Water Supply and Sanitation Agency (RUWASA) DMs and LGA representatives. COVID-19 restrictions also meant the team was unable to conduct observational fieldwork to witness implementation, physical water infrastructure, community use of sanitation, or availability of water supply firsthand. Evaluation of performance relied on performance monitoring data from MoW across component areas. However, qualitative approaches were used to mitigate overreliance on these data to capture views from a wide range of program stakeholders.
- **Accuracy of qualitative responses**: Throughout the evaluation process, interviewers stressed the importance of maintaining confidentiality and anonymity to protect respondents and encourage candid and accurate responses. Nonetheless, some respondents' responses may have been biased. The ET mitigated any such bias during the analysis process by triangulating the responses with other data sources.
- **Recall bias**: Because several questions posed during the interview pertain to historical events, recall bias may have influenced respondents' responses. Also, the ET noted not all respondents interviewed had been with their organizations for the entire duration of WSDP II. In these instances, the team initiated a follow-up interview with referred respondents who had been more actively involved from the start of the WSDP II.

- **Access to WSDP II performance data**: In some instances, the team could not obtain monitoring data for WSDP II's KPIs and targets across all component areas. This was in part due to the multiple changes to indicators and the M&E plan over the WSDP II period of performance. The report highlights instances where data gaps were observed.

3.0 EVALUATION FINDINGS

3.1 EQ 1: TO WHAT EXTENT HAVE THE DESIGN AND OBJECTIVES OF WSDP II PROGRAM COMPONENTS BEEN DESIGNED TO MEET THE NEEDS AND CHALLENGES THEY SOUGHT TO ADDRESS AMONG TARGET BENEFICIARIES? TO WHAT EXTENT HAVE THEY ACHIEVED THE EXPECTED RESULTS ACCORDING TO THEIR RESULTS FRAMEWORK AND KPIS?

The overall Project Development Objective (PDO) for the Water and Sanitation Development Program, which was planned to be executed in three phases within the period 2006 to 2025, was to strengthen the institutions for integrated WRM and improve access to water supply and sanitation services in Tanzania. Phase 2 of the program (WSDP II) began in July 2016 with the intention of operating for five years in all LGAs, sector ministries, BWBs, and WSSAs in the country. To achieve the overall development objective for Phase 2, the GoT set out to finance and implement specific interventions organized along five program components and sub-components, as shown in Table 2.

Table 2: WSDP Phase II Program Components and Performance Targets

Component	Sub-component	Performance Targets
Component 1: WRM	Sub-component 1.1: WRM	Operational capacity of BWBs strengthened through targeted training in areas of operational hydrology, financial management, human resources management, hydrogeology, establishment and strengthening of WUAs; assessments on climate change vulnerability conducted.
		- Water resources research center established and functional
		- 30 catchment areas gazette
		- 56 sub-catchment areas gazette
		- 18 catchment committees established and functioning
		- 36 sub-catchment committees established and functioning
		- 170 new WUAs established
		- 90 existing WUAs strengthened and capacitated
		- National water resources database established and operational
		- Functional Decision Support System database strengthened for all 9 BWBs and at DWR HQ
		- 1,000 staff in various technical disciplines (hydrologists, hydrogeologists, environmental engineers, water resource engineers, economists, community development officers, chemists, *etc.*) recruited for deployment to MoW, basins, and water laboratories.
		- Hydro-meteorological and hydro-geological monitoring stations increased from 410 to 600
		- Developed and disseminated 9 Integrated Water Resources Management and Development Plans (IWRMDPs)
		- 30% of the IWRMDPs implemented
		- 3 multipurpose dams constructed
		- 20 medium-sized dams rehabilitated in dry areas
		- 150 groundwater monitoring and exploratory wells drilled and/or rehabilitated
	Sub-component 1.2: Water Quality Management (WQM)	- Implementation of climate change adaptation strategy action plan
		- Comprehensive fluoride database and maps in fluoride belts developed
		- Water safety plans implemented
		- Integrated mathematical water-quality modeling tool to predict the future and analyze site-specific scenarios developed
		- Capacity development plans (CDPs) for all water quality laboratories implemented
		- 9 existing laboratory buildings rehabilitated
		- 8 new water laboratories constructed and equipped
		- 5 water quality laboratories accredited
		- Laboratory Information Management System (LIMS) and water quality map developed

Component	Sub-component	Performance Targets
Component 2: Rural Water Supply and Sanitation (RWSS)	Sub-component 2.1: Capacity Strengthening and Sustainability	- 386 engineers and 3,338 technicians recruited for deployment up to the ward level
		- 38,759 new water points constructed in rural areas
	Sub-component 2.2: Infrastructure Investments	- 19,889 nonfunctioning water points rehabilitated
	Subcomponent 2.3: Rural Sanitation	- 17,686 water points installed from extension of existing infrastructure
Component 3: Urban Water Supply and Sanitation	Sub-component 3.1: Water Supply and Sanitation Improvements in Dar es Salaam, Kibaha, and Bagamoyo.	- 212 km of transmission main constructed
		- 2,000 km of distribution water supply network laid
		- Water production increased from 300 million liters per day to 756 million liters per day
		- 11 water storage tanks constructed
		- 26 boreholes drilled and 10 kiosks constructed in low-income areas
		- Non-revenue water (NRW) reduced from 55% in 2013 to 25% in 2019
		- 500,000 household connections installed
		- 7 water treatment ponds constructed
		- 156 km of public sewer lines constructed
		- 15,000 households connected to the conventional public sewer system
		- 76 km of access road to Kidunda dam constructed
		- 22 treatment plants constructed
		- 330 km of new transmission main constructed
		- 2,111 km of pipes laid for water supply distribution network
		- 44 water storage tanks constructed
		- 200,000 new house connections installed
		- 60 wastewater treatment ponds constructed
		- 887 km of sewer lines constructed
		- NRW reduced from 37% to 25%
		- Recruitment of 260 engineers and 1,040 technicians
		- 37 treatment plants constructed
		- 1,091 km of new transmission main constructed
		- 3,518 km of distribution network expanded
		- 306 storage tanks constructed
	Sub-component 3.2: Water Supply and Sanitation Improvements in 23 Regional WSSAs	- 110,000 household water connections installed
	Sub-component 3.3: Water Supply and Sanitation Improvements in National Project Areas, District Headquarters (HQs) and Small Towns	- Provide water supply services to 1,100,000 new beneficiaries in district HQ, townships, and areas served by National Projects through 110,000 household water connections—thereby increasing the access percentage from 53% in 2013 to 65% by 2019.

Component	Sub-component	Performance Targets
Component 4: Sanitation and Hygiene (National Sanitation Campaign [NSC]):	Sub-component 4.1: Rural Household Sanitation and Hygiene	- Increase the proportion of the population that uses improved sanitation facilities from 2.2 million households (25%) in 2013 to 7.8 million households (75%) by 2019, while instituting measures to eradicate open defecation.
		- Latrines in 3,500 primary schools rehabilitated, including hand-washing facilities and menstrual facilities
		- Latrines in 700 secondary schools rehabilitated
		- Water, Sanitation, and Hygiene (WASH) rehabilitated in 1,000 health facilities
	Sub-component 4.2: Urban Sanitation and Hygiene	- 25% of households provided with water treatment and safe storage facilities
	Sub-component 4.3: WASH in public institutions (schools, health facilities, and other public areas)	- 8 WASH facilities constructed in highway bus stops
Component 5: Program Management and Delivery Support	Sub-component 5.1: Fiduciary Management	
	Sub-component 5.2: Program Coordination and Performance Monitoring	
	Sub-component 5.3: Capacity Development	
	Sub-component 5.4: Social and Environmental Safeguard	

Source: Government of Tanzania, July 2014. *Water Sector Development Program Phase 2 (2014–2015 to 2018–2019).*

The ET considered the first part of EQ 1, which relates to the program's relevance, *i.e.*, how well the program's objectives and design align with the sector's challenges and concerns, national development priorities, and the needs and priorities of its beneficiaries. The following findings were made:

Key Challenges for the Tanzania Water Sector

According to the ET's review of key background documents provided by the MoW—especially the WSDP II design document, the Water Sector Status Report 2015–2020,[6] and other recently published relevant documents, such as the *USAID Tanzania Water Sector Assessment for Strategy Development*[7] published in February 2020—the primary contemporary challenges confronting the water and sanitation sector in Tanzania can be categorized in two interrelated ways: 1) governance issues related to supply and sanitation service delivery; and 2) risks to water availability and quality.

Governance of service delivery: In the broadest sense, this refers to the administration of water and sanitation services—including, but not limited to, implementing necessary institutional reforms; formulating and implementing sector policies and strategies; investments and financing; and sustainable last-mile service delivery. The evaluation term "governance" is used in this context to refer to the processes of establishing roles, responsibilities, coordination, and relationships within the water and sanitation sector to improve access and provide high-quality service to citizens. The water sector still faces coordination challenges among government authorities and between GoT authorities and external actors such as DPs, the private sector, and CSOs; it also faces a scarcity of resources to finance capital infrastructure, service delivery, human resources, and organizational capacity to intervene in the sector.

Water resource availability risks: A significant challenge is the increased risk and vulnerability of socioeconomic development due to projected declines in water resource endowment. These declines are expected to result from rapid catchment degradation caused by long-term structural poverty factors, rapid urbanization, increasing industrial growth, and mining sector expansion—all of which are exacerbated by climate change effects. Key among the long-term structural poverty factors identified by community-based WUAs include insecure land tenure among smallholder agricultural families, lack of awareness/education on water resource conservation, and lack of environmentally safe alternative livelihood activities to support populations in catchment areas.

Addressing these twin risks of challenges in governance of water services delivery and declining water resources endowment is critical for achieving water security in Tanzania.

All stakeholders interviewed—including the DPs, civil society, and community-level water user groups—concurred that WSDP II's objectives and design were generally consistent with Tanzania's primary water and sanitation challenges, aligned with national priorities, and responsive to the needs of the targeted beneficiaries. The following examples demonstrate the extent of WSDP II's alignment with several sectoral challenges and priorities:

- **Low levels of investments and inadequate focus on sanitation**: Both GoT staff and DP respondents interviewed agreed that the inclusion of sanitation and hygiene as a standalone component under WSDP II—as opposed to WSDP I, where it was hidden within other program components—demonstrates the GoT's commitment to sanitation through increased policy and investment. This is a critical shift considering its lack of emphasis before Phase 2 of the program. However, the sanitation components were largely implemented under the National Sanitation Campaign (NSC), which focused on behavior change communication as opposed to sanitation

[6] Government of Tanzania, June 2020. Water Sector Status Report 2015–2020, https://www.maji.go.tz/uploads/publications/en1593170637-WSSR%202015%20-%202020.pdf.
[7] USAID Data for Development, February 2020. USAID Tanzania Water Sector Assessment for Strategy Development, https://pdf.usaid.gov/pdf_docs/PA00WH9Z.pdf.

infrastructure development in rural areas. RUWASA did not make any direct infrastructure investments in rural sanitation.

- **Focus on catchment degradation**: Interviews with leaders of community-based WUAs revealed a significant improvement in coordination between BWBs and beneficiary communities/WUAs. This helped build WUAs' capacity for adaptive local WRM in the effort to contain the rapid degradation of key catchments due to human activities. BWBs provided technical support to WUAs in developing catchment conservation plans that are contextualized to the specific major degradation issues facing individual catchment areas, as well as facilitating WUAs to improve their governance structures. As one WUA leader commented: "*Through this program we have seen changes, which mean the basin office itself has been following us regularly. [T]hey have done training seminars for us in our communities, they have visited us regularly and, if there is a problem, they have helped us, so we have seen a change compared to the beginning. And now we are close to them and when a problem arises, they come and we solve it.*"
    - Also, MoW and BWBs have taken specific actions under WSDP II to first understand the salient characteristics of water resource risks and then apply well-developed evidence to take context-appropriate remedial action. These activities include conducting a comprehensive assessment of the water resources in the nine basins, which served as the basis for the subsequent development of Integrated Water Resources Management and Development Plans (IWRMDPs) and watershed conservation interventions funded through the program.
- **Low rates of access to urban sanitation**: Most DP respondents expressed concern that the WSDP II did not adequately address the expansion of safe, managed sanitation services to urban populations in off-grid areas. Additionally, while RUWASA's mandate covers both water supply and sanitation in rural areas, it did not make any direct investments in sanitation facilities in rural areas. Much of the rural sanitation in rural areas was observed to be "self-supply" where households build their own individual latrines resulting from behavior change communication done through the NSC. The low urban sanitation coverage, particularly for off-grid areas, is partly due to investments in urban sanitation under WSDP II focusing on expanding sewer lines. These have improved marginally due to the limited financing available to meet the high capital costs required. This strategy, however, failed to address the needs of most urban residents who live in off-grid areas.[8]
- **Increased attention to the functionality of rural water supply systems**: The establishment and operationalization of RUWASA within the rural water and sanitation component of WSDP II was cited by most stakeholders as a significant institutional undertaking aimed at ensuring the post-construction sustainability of service delivery from rural water systems. The inclusion and implementation of specific sub-components focused on sustainable operation and maintenance (O&M) of rural water systems by providing for a technical backstopping mechanism between RUWASA and CBWSOs was mentioned as a well-appreciated investment under WSDP II, particularly by the CBWSO leaders interviewed.

Alignment with National Development Priorities

Stakeholders interviewed during the evaluation confirmed that the WSDP II programming was well designed with a clear aim to address national development priorities. WSDP II is inextricably linked to the Tanzania Development Vision (TDV) 2025 development strategy, which aims to transform the country's economy from a low-productivity agricultural economy to a semi-industrialized one driven by modernized and highly productive agricultural activities. As part of its interventions to expedite the implementation of

[8] Exceptions to this are in Mwanza and Dar es Salaam where projects have been introduced to reach off-grid communities.

TDV 2025, the GoT launched the Big Results Now (BRN) initiative for the water sector, with the specific goal of reaching 67 percent rural water coverage by 2015. MoW, through the interviews and as spelled out in various GoT documents, confirmed that the development of WSDP II objectives of increasing urban water coverage to 95 percent and rural water coverage to 85 percent by 2020 through investments in new infrastructure, expansion, and rehabilitation of existing rural infrastructure was largely informed by the BRN, which focused largely on capital infrastructure investments for rural areas. This is reflected in the WSDP II spending patterns where the largest allocations by the GoT were on the rural water supply component.[9] The BRN's focus on supply and new infrastructure rather than scheme O&M may expose these investments to sustainability risks.

The second part of EQ 1 relates to the program's effectiveness, *i.e.*, the extent to which the program's intended activities, outputs, and outcomes are achieved according to the results framework.

The following were the findings about the level of achievement of intended performance targets as per the program components detailed in the design document:

Component 1 – Water Resources Management

This component was designed to provide several specific interventions, including: 1) institutional strengthening and improvement of the operational capacity of BWBs; 2) establishment and strengthening of WUAs; 3) gazettement of water catchment and sub-catchment areas, including establishment of catchment management committees; 4) improving the systems for water resources conservation, monitoring, allocation, regulation, conflict resolution, and demand management; 5) investments in protection and pollution control of water resources; 6) construction of a mix of large, medium-sized, and small water reservoirs, and development of Dam Safety Management guidelines; 7) drilling and rehabilitation of exploratory and monitoring wells; 8) enhancing Transboundary WRM; 9) developing Integrated Water Resources Development Projects (IWRDPs) for the nine BWBs; 10) implementing a Water Quality Management (WQM) and pollution control strategy; 11) developing and implementing a Climate Resilient Water Safety Plan; 12) developing a water-quality data-management framework including a Laboratory Information Management System (LIMS) and water quality map; 13) increasing the number of hydro-meteorological and hydro-geological monitoring stations from 410 to 600; 14) rehabilitating existing water laboratory buildings and constructing new laboratories in regions that do not have them; and 15) procuring operational equipment, chemicals, and necessary installations for WRM.

The objective of financing the above interventions was to ensure availability of water for socioeconomic development and environmental sustainability.

Status of Water Resources Endowment

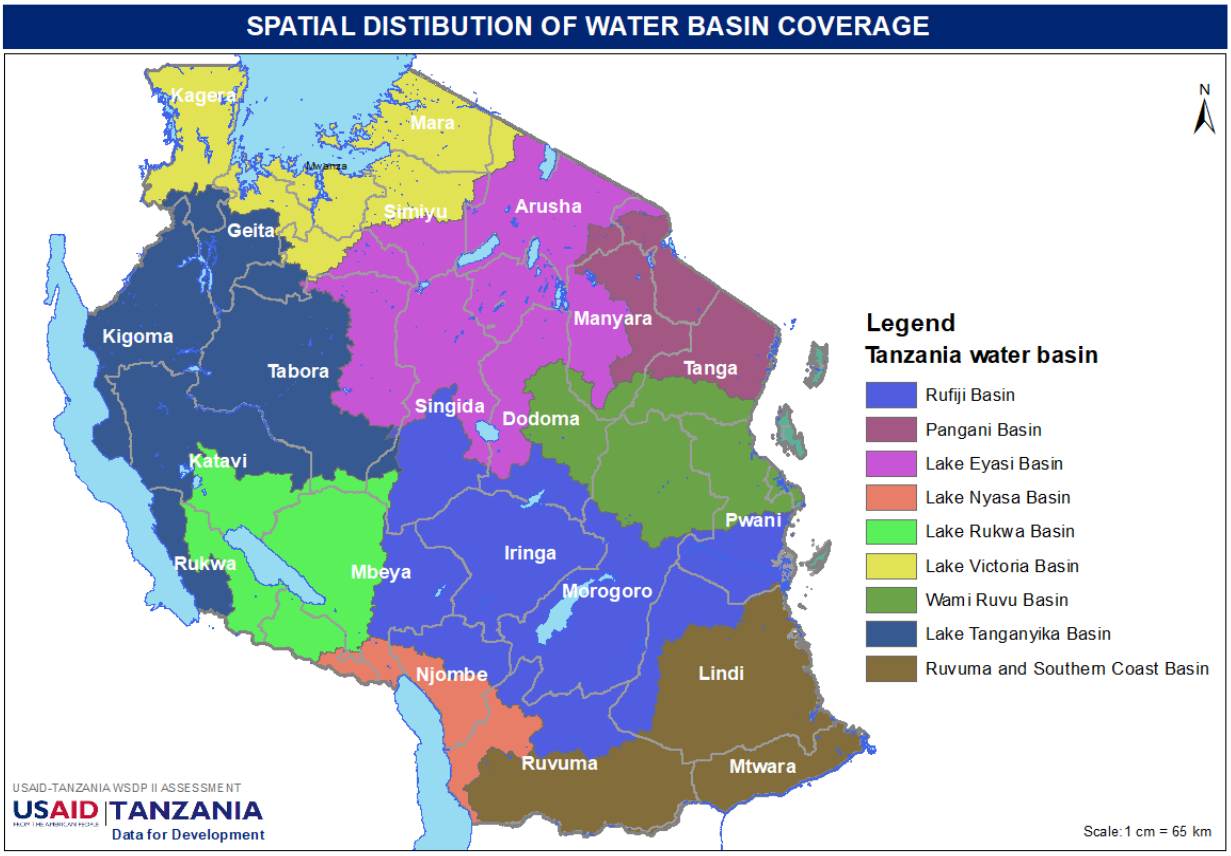
Water is a critical input for the majority of socioeconomic activities, including energy, tourism, agriculture, mining, and manufacturing, as well as for society and the environment. Adequate water resources are also critical for the survival of the majority of the population's agriculture-based livelihoods. According to the Tanzanian government, approximately 89 percent of water withdrawals are for agricultural purposes, compared to a global average of 70 percent; approximately 10 percent are for domestic consumption (which is comparable to global averages), and approximately 1 percent are for industrial purposes (low by global standards).[10]

[9] Ministry of Water and Irrigation; Vote 49: Medium Term Expenditure Framework forward budget for 2016–2017 to 2018–2019. February 2016; Ministry of Water. July 2014. Water Sector Development Program Phase II (2014–2015 to 2018–2019); Ministry of Water. June 2020. Water Sector Status Report 2015–2020.

[10] The World Bank Group (2018). Tanzania Economic Update: Managing Water Wisely. The Urgent Need to Improve Water Resources Management in Tanzania.

Tanzania's WRM is organized around nine basins (Figure 1) based on natural water drainage patterns and the receiving water body. Each basin is divided into a number of catchments and sub-catchments by smaller rivers and streams.[11]

Figure I: Nine Water Basins and Catchment Areas in Tanzania



Source: Adapted by Data for Development from Tanzania Water Sector Assessment for Strategy Development Report (2020) – USAID.

Tanzania has approximately 126 billion cubic meters (m^3) of annual renewable water resources, according to recent data.[12] In 2019, the annual average available water per capita was estimated to be 2,300 m^3, exceeding the globally accepted threshold of 1,700 m^3 per capita per year. However, because of rapid population growth and expanding economy,[13] the country is expected to become water stressed by 2035 when the anticipated annual per capita available water will be 1,605 m^3. The population is expected to double in the next 25 years from approximately 59.7 million people in 2020[14] to 118 million in 2045.[15] Additionally, Tanzania's economy has more than tripled in size, formal and informal irrigation have expanded, all of which rely on increased use of rapidly dwindling water resources. Dry season water demand has exceeded supply by 150 percent.[16] On the other hand, water demand for socioeconomic activities is expected to increase from 47 billion m^3 currently to 57 billion m^3 by 2035.[17] The anticipated

[11] Tanzania Water Sector Assessment for Strategy Development Report (2020) – USAID.
[12] United Republic of Tanzania (URT), 2019: Consolidation of Data, Information and Models from the Integrated Water Resources Management and Development Plans; Water Sector Status Report, (2015–2020), 2020.
[13] Falkernmark et al. 1987; Tanzania Water Sector Assessment for Strategy Development Report (2020).
[14] World Bank Group Data.
[15] United Nations. World Population to 2300.
[16] World Bank (2020): Tanzania Water Security for Growth.
[17] URT, 2019: Consolidation of Data, Information and Models from the Integrated Water Resources Management and Development Plans.

demand is expected to accelerate the decline in renewable energy per capita in Tanzania, bringing it to 1,605 m^3 by 2035 (well below the 1,700 m^3 threshold for water stress) and possibly as low as 434 m^3 by 2050 (absolute water scarcity).[18]

Additionally, a variety of factors such as climate variability and climate change, insufficient water security infrastructures, unequal distribution of water resources, disjointed sectoral development plans, catchment degradation, and water use conflicts are expected to exacerbate the situation, resulting in severe and widespread water shortages.[19] Climate change is already having an effect on Tanzania's water resources, as evidenced by increasing temporal and spatial variability in rainfall and temperature. According to a recent economic update, Tanzania's agricultural sector suffers an estimated $200 million in annual losses on average due to weather-related events, primarily drought.[20] Climate change projections in IWRMDPs for five basins indicate a significant decline in annual runoff rates.

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

WRM remains an important component—one that is key to ensuring water security across multiple sectors, including domestic supply, agriculture, energy, sanitation, disaster and risk management, and sustainable cities. Increasing water security against the backdrop of high extremes, growing uncertainty, water scarcity, and fragmentation challenges called for MoW to invest in institutional strengthening.

In bolstering WRM institutions and strengthening the operational capacity of BWBs, water laboratories and the entire DWR, it was anticipated that 1,000 staff from a variety of technical disciplines would be recruited during the program's cycle for deployment to MoW's DWR, water quality laboratories, and BWBs. However, only 98 staff in various positions were recruited, implying that only 9.8 percent of the target was met—further highlighting the acute shortage of staff to fully implement the program's WRM component. This underperformance in staff recruitment against the target derailed the implementation of the program—particularly limiting MoW's DWR, water quality laboratories and the BWBs' ability to offer consistent extension services and capacity-building support to community-level WUAs and perform routine duties in ensuring sustainable WRM in the country. As a respondent from MoW observed: *"Numbers are not very good; we have very good staff, but they are few, so we need to improve on the numbers and that means employment of new staff."* The shortage of staff in the entire water sector was also highlighted by the Minister of Water in the 2021–2022 budget speech where they insisted that a total of 1,547 new staff will need to be recruited to fill the gap.[21]

Some of the BWB respondents also attributed the lag in implementing the developed basin IWRDMPs to this acute staff shortage. The ET observed that the effects of this staff shortage were further exacerbated by low funding for the WRM component. While the planned activities to be implemented under Component 1 were budgeted at about $804 million, funds committed through GoT and earmarked projects by DPs (including USAID) amounted to about $129 million (16 percent of target[22]). This is further exacerbated by low budget absorption rates. For example, in Fiscal Year (FY) 2020–2021, a budget of $28 million was approved for the WRM component, but only about $10 million was actually spent, which is around 35 percent of the approved budget.[23] The lack of attention as far as WRM is concerned is not only on the part of the GoT, but also on the DPs who put focus on water supply. This was echoed by a key informant from the DP community: *"I think in WSDP II this component was not well addressed. We did our own internal budget analysis as to how much has been planned to go to the water resources management and*

[19] Tanzania Water Sector Assessment for Strategy Development Report (2020) – USAID.
[19] Tanzania Water Sector Assessment for Strategy Development Report (2020) – USAID.
[20] World Bank, November 2017, Tanzania Economic Update,10th Edition.
[21] Ministry of Water, 2021. Minister's Budget Speech 2021–2022.
[22] This is according to a respondent from the MoW-DWR during the interviews, though reports validating this were not provided to the ET.
[23] MoW, 2021. Minister's Budget Speech 2021–2022.

how much has been disbursed, and we see a very big gap, and here it is not only for the resources coming from the government of Tanzania, even from the other development partners."

Fees on issued user permits are one strategy for financing and enabling basins to maintain liquidity to meet recurring costs and ensure financial sustainability. The ET noted some successes, including BWBs more than doubled their fee collections from an average of TZS 3.7 billion in FY 2016–2017 to approximately TZS 7.047 billion in FY 2019–2020.[24] Although data for FY 2020–2021 were not available, a key informant within MoW's DWR reported fee collection has steadily increased for several basins noting that, *"fees collection in all basins was approximately TZS 7 billion in fiscal year 2019–2020, increased to approximately TZS 10 billion in fiscal year 2020–2021, and we predict that it will reach approximately TZS 15 billion in fiscal year 2021–2022*."

While water user fees contribute significantly to the financing of BWBs, they are not uniform across basins. Interviews with BWB respondents revealed difficulties in collecting fees from water users, particularly the Urban Water Supply and Sanitation Authorities (UWSSAs), which are reported to be hesitant to pay their user fees and, in most cases, do not pay on time. This, in turn, delays disbursements needed for activity implementation. The trend in user fees in the nine basins from FYs 2016–2017 to 2019–2020 is shown in Table 3. Only two of the nine BWBs (Lake Victoria and Wami/Ruvu) met their collection targets for FY 2019–2020. Key BWB respondents observed that the successful water permit fees collection in the two well performing basins was primarily due to the presence of a large number of private-sector water abstractors, as opposed to basins with a large number of government entities acting as large water abstractors and small-scale water users. Some BWB officials revealed that to ensure financial sustainability, some BWBs entered into Memoranda of Understanding (MOUs) with WUAs to collect water user fees. This is viewed as a win-win situation since approximately 20 percent of collected fees are retained for WUA operations. Some WUAs in the Pangani, Rufiji, Lake Victoria, and Wami Ruvu basins have already implemented this. It is critical that efforts are directed toward effectively collecting fees from all abstractors, including government entities such as UWSSAs and other institutions.

Additionally, to increase financing water resource conservation, some BWBs have leveraged the private sector to fund certain conservation efforts. According to key informants interviewed, engagement via multi-stakeholder forums such as the World Bank-hosted 2030 Water Resources Group (2030 WRG)

Table 3: Estimates and Actual Collection of Water User Fees in the Nine Basins

Basin	FY 2016–2017			FY2019–2020		
	Estimates	Actual Collection	% Collected	Estimates	Actual Collection	% Collected
Pangani	500,000,000	407,561,909	82	850,000,000	743,046,088	87
Wami/Ruvu	670,000,000	452,892,301	68	1,400,000,000	1,416,432,628	101
Rufiji	916,000,000	793,673,114	87	1,350,000,000	649,921,647	48
Ruvuma and Coast	180,000,000	320,268,790	178	400,000,000	183,146,793	46
Lake Nyasa	390,000,000	184,074,194	47	420,000,000	49,011,608	12
IDB	300,000,000	250,838,369	84	500,000,000	204,881,976	41
Lake Rukwa	350,000,000	504,385,591	144	520,000,000	221,464,678	43
Lake Tanganyika	100,000,000	286,070,760	286	550,000,000	86,641,970	16
Lake Victoria	400,000,000	525,294,924	131	1,057,501,000	3,499,702,217	331
TOTAL	**3,806,000,000**	**3,725,059,952**	**98**	**7,047,501,000**	**7,054,249,605**	**100**

Source: MoW Ministerial budget books

[24] MoW Budget Books (2016–2017 to 2019–2020).

has mobilized the private sector toward greater engagement in WRM activities at the basin level. Successful initiatives were noted in the Pangani Basin where efforts by Coca Cola, Serengeti Breweries, and Tanganyika Plantation Company (TPC), in partnership with BWBs and WUAs at the community-level, have led to increased water conservation.

Under WSDP II, investments were directed toward construction of eight BWB Headquarters (HQs) (against the target of five BWB HQs). It was reported that three of the BWB HQs have been completed (Lake Victoria, Lake Nyasa, and Lake Tanganyika), and five are close to completion (the Internal Drainage Basin [IDB], Wami-Ruvu, Ruvuma, Lake Rukwa, and Rufiji). This shows significant progress in meeting the target, however shortage of staff continues to constrain BWBs' performance.

Other activities to enhance the operational capacity of BWBs included establishing a functional Decision Support System Database in each of the nine basins and at DWR HQ to disseminate information to stakeholders and assisting MoW and BWBs in quality assurance and data validation. The AQUARIUS hydrological software was acquired through USAID/Tanzania's Water Resources Integration Development Initiative (WARIDI). It started with Rufiji and Wami-Ruvu basins but later extended to all nine basins. Each basin received at least three fast processing computers to facilitate data storage and processing. A KII with the MoW informant revealed 50 MoW and BWBs staff received training on the use of AQUARIUS and issues related to quality assurance, including rating curves validation.

The ET noted that none of the planned 27 catchment and sub-catchment committee offices have been built, and only 11 of the planned 18 sub-basin water offices (sub-BWOs) have been rehabilitated/constructed. During interviews with basin staff, the need for such offices was strongly expressed. Additionally, only four out of the planned 130 WUA offices were constructed or rehabilitated. Lack of WUA offices has emerged as a bottleneck in their performance and limits their ability to be taken seriously and receive support from other organizations. As one WUA key informant said: *"…[W]e are beginning to become known, but not having an office limits us, and we feel like we have no legitimacy and people take that we are doing work that has no office, so I see it as a challenge that having an office will continue to make us credible and to be seen to be true to what we do."*

A key informant from another basin added: *"If you have an office, people will be assured that what these guys are doing is a serious business, that they even have an office here. So, it should keep being a norm. We should also add motorbikes."*

Gazettement of water catchment areas and sub-catchment areas, including establishment of catchment management committees: To facilitate protection and conservation of water catchment and sub-catchment areas, the program plan stipulated 30 catchments and 56 sub-catchments would be gazetted by the end of WSDP II.[25] According to key informants at the MoW, however, no catchments were gazetted during the WSDP II period. Instead, the total gazetted catchments remained at four as it was in 2014–2015. Key informants at the Lake Victoria Basin noted six catchments are at various processes of gazettement within the basin. Of the planned 56 sub-catchments, three were gazetted during the WSDP II period.[26] BWB and MoW DWR respondents cited receiving inadequate funding for demarcation and gazettement of the catchments as the main reason behind the suboptimal performance on catchments gazettement. Similar observations regarding the low level of catchments gazetting of catchments were also made during the WSDP II midterm review in 2019[27] and the Tanzania Water Sector Assessment Report in 2019.[28] Further, only six sub-catchment committees were established—three in

[25] Government of Tanzania, July 2014. *Water Sector Development Program Phase II (2014–2015 to 2018–2019).*
[26] According to data provided to the ET by MoW DWR.
[27] UNICEF Tanzania, September 2018. Mid-Term Review of the Water Sector Development Program Phase II (WSDP II) and Review of the Water Dialogue Framework.
[28] USAID Data for Development, February 2020. USAID Tanzania Water Sector Assessment for Strategy Development, https://pdf.usaid.gov/pdf_docs/PA00WH9Z.pdf.

each of the two basins of Rufiji and Wami-Ruvu. The BWB officials interviewed indicated that the sub-catchment committees established are still not fully functional as they lack adequate resources and sufficient staff. Thus, the BWBs are still performing most of the functions.

Establishment and Strengthening of Water User Associations

Only 44 new WUAs were established to enhance WRM through a participatory process out of the 170 planned under WSDP II.[29] However, 134 WUAs (44 new and 90 existing) were strengthened by adding support for transportation infrastructure (100 motorcycles and 100 bicycles). As one WUA put it, *"Success is real because we started without an office, but now we have an office that the water board has already built and continues to build. Also, another achievement is that we have a means of transport which the basin and the Ministry have bought for us."*

The WUAs interviewed expressed satisfaction with the quality of support they have received from BWBs under WSDP II. However, evaluation findings indicate that several established committees and WUAs are still not fully operational or are not contributing as expected due to a lack of necessary resources and staff. The WUAs do not collect user fees unless expressly contracted by BWBs to do so on their behalf. They are in a way independent community-based organizations. But they still need trainings and technical support to set up and be operational. Their function is largely local-level community-led activities focused on catchment conservation based on conservation plans prepared with technical support from BWBs. Funding of these catchment activities is largely from BWBs, which are supposed to give back to WUAs part of the water user fees collected for catchment conservation activities. In essence, while they are sort of independent, they depend a lot on external support from BWBs and other external partners. The existence of non-functional WUAs and catchment committees indicates an inadequacy in the availability of the technical and financial support necessary to facilitate these critical watershed management institutions' daily operations.

Improving the Systems for Water Resources Monitoring and Allocation

While monitoring and assessment of water resources are critical, findings indicate that support for BWBs' monitoring plans was limited. As a result, hydrometeorological, hydrogeological, and water-quality station installations and monitoring were not adequately implemented. Despite planned increases for water resources monitoring through strategic hydrometric monitoring stations and observation wells, there has been no significant change in the number of hydrometric stations in Tanzania over the last decade.

Based on data provided to the ET by the MoW DWR, only 18 of the planned 150 observation or monitoring wells were drilled. The number of operational observation holes reached 82. Respondents from the KIIs at the MoW and basin levels attributed this to inadequate allocation of funds to support the activity. Also, only two monitoring boreholes out of the 120 planned for rehabilitation were rehabilitated. By the end of WSDP II, 794 monitoring stations were available and operational, including 330 river gauging stations, 189 rainfall stations, 152 weather stations, 95 groundwater stations, 17 stations for lakes monitoring, and 11 stations for monitoring dams (Table 4). Most stations are found in three basins, with Wami-Ruvu having the highest number (139), followed by Rufiji (137) and Pangani (136).

Table 4: Water Resources Monitoring Network Status for 2021

Basin	River Gauging	Rainfall (automatic)	Rainfall (manual)	Weather	Ground-water	Lakes	Dams	Total
Pangani	60	5	41	13	11	3	3	136
Wami/Ruvu	45	11	31	32	19	0	1	139

[29] Ministry of Water, June 2020. Water Sector Status Report 2015–2020.

Basin	River Gauging	Rainfall (automatic)	Rainfall (manual)	Weather	Ground-water	Lakes	Dams	Total
Ruvuma	28	5	5	17	7	0	0	62
Rukwa	23	2	9	6	0	2	0	42
Tanganyika	32	3	8	14	0	1	2	60
IDB	36	3	8	8	31	3	2	91
Nyasa	28	4	10	5	0	3	0	50
Victoria	20	2	32	18	0	5	0	77
Rufiji	58	7	3	39	27	0	3	137
TOTAL	330	42	147	152	95	17	11	794

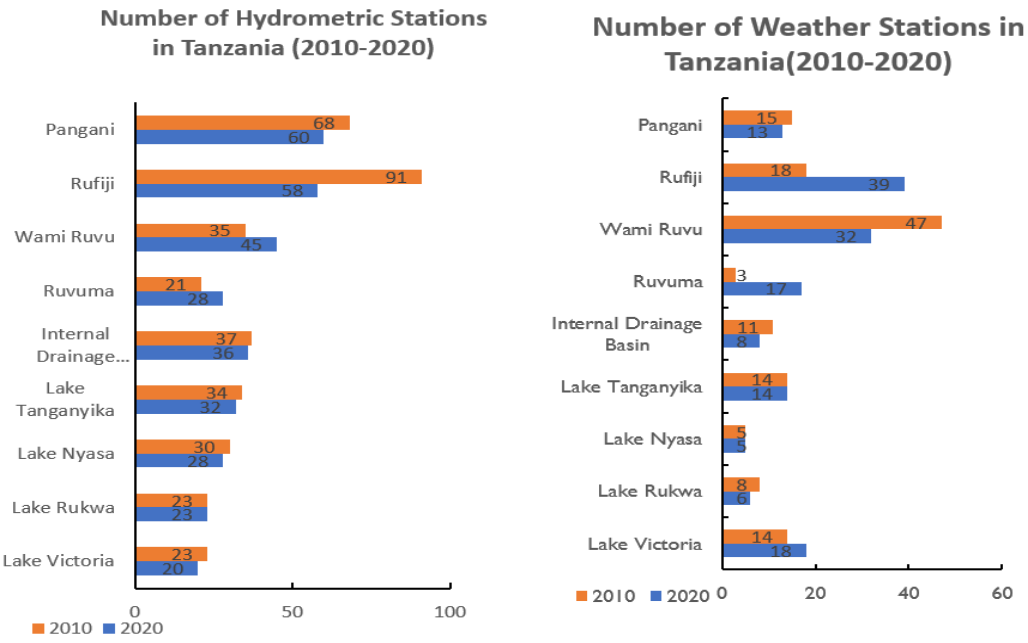
Source: Water Sector Status Report (2014–2020) and MoW.

The pace of monitoring station construction and rehabilitation has been slow under WSDP II, as evidenced by the small number of stations installed between 2010 and 2020. The number of hydrometric stations in the basins decreased in seven out of the nine basins, except for the Wami-Ruvu and Ruvuma basins. Six out of the nine basins show a decline in the number of weather stations (Figure 2). According to GoT and DP stakeholders interviewed, the decline was attributed to poor maintenance of existing stations, acts of vandalism, and lack of new installations.

According to interviews with BWB staff, implementation of conservation, monitoring, allocation, and regulation are constrained by a lack of data and investment. In 2020, MoW published its first hydrological yearbook since 1980, containing data from 2010 to 2019.[30] The publication was a milestone for data quality improvement as it was preceded by a robust data quality check and validation of the data. The availability of data in the hydrological yearbook helped provide wide access to the data by other people, including researchers. Also, in 2020, during WSDP II, MoW published its first Water Resources Atlas.[31] The publication of the atlas and hydrological yearbook are critical water resource endowment data inputs to the development of IWRMDPs under WSDP II. Another noteworthy accomplishment was the issuance of 7,623 water-use permits (ground and surface water) across all basins, compared to the target of 6,000 by 2019—a 127 percent success rate. There is no information available on progress toward the goal of having 100 percent of eligible enterprises obtain water discharge permits by 2019. This was primarily due to the target's lack of a measurement mechanism regarding wastewater discharge and inadequate staffing.

[30] https://www.maji.go.tz/uploads/publications/sw1589377248-Hydrological%20Year%20Book%20%202010%20-%202019.pdf
[31] https://www.maji.go.tz/announcements/tanzania-water-resources-atlas

Figure 2: Distribution of Monitoring Stations in Tanzania for 2010–2020



Source: Ministry of Water, June 2020. Water Sector Status Report 2015–2020.

Water Resources Conservation and Climate Change Mitigation

Degradation of the landscape and catchments, as well as water pollution caused primarily by human activities, have remained major threats to Tanzania's WRM. Most key informants expressed grave concern about the deteriorating state of water catchments and the increasing demand for water due to the growing population. Data provided by MoW and BWBs show 52 catchments were demarcated with clear catchment boundaries and limits to enable the design and preparation of catchment conservation activities. The target was 161 water sources, signifying a 32 percent achievement.

Climate change continues to be a major threat to the long-term viability of water resources. Adaptation and mitigation efforts such as increasing capture and storage of flood water, increased groundwater recharge infrastructure, reducing production water footprint through various water-use efficiency measures are critical for the water sector because they ensure the long-term sustainability of water resources. Evaluation findings show that a template for a Water Safety Plan (WSP) was prepared and published by MoW as part of the (United Kingdom) Department for International Development (UKAID)-funded project on "Building adaptation to climate change in health in least developed countries through resilient water, sanitation, and hygiene (WASH)."[32] The MoW supported the development of three Water safety plans (WSPs) for the Dar es Salaam, Songea, and Kahama-Shinyanga water utilities. This included training 104 staff from the regional water utilities on the use of the guidelines. Pilot tests for urban utilities were carried out at Kigoma Water Supply and Sanitation Authority, and pilots for CBWSOs were carried out at Mbande CBWSO in Kongwa District and Mkambarani CBWSO in Morogoro District. Specific projects such as Sustainable Land Management (SLM) and the Simiyu Climate Resilience projects were highlighted by MoW staff as commendable efforts to train basin staff and practitioners on climate-resilient WRM. However, there appears to be no long-term strategy for continuing the activities beyond the project's completion.

[32] https://wsportal.org/resource/water-safety-plan-template-including-climate-considerations-for-rural-water-supplies-united-rep-of-tanzania/.

As a mitigation measure to alleviate pressure on existing water resources, BWBs made investments under WSDP II to assist communities in establishing income-generating activities (IGAs) such as beekeeping and tree planting around identified potential water sources, thereby ensuring water availability for multiple uses and increasing income. However, they implemented these activities at such a small scale that their overall contribution to reducing pollution in terms of reduced siltation into water sources has been minimal. Although these are considered practical lessons for WRM conservation activities and a way to increase the operating funds for WUAs on a daily basis, the extent of their full institutionalization as part of the basin-wide IWRDPs could not be established.

Also, the GoT adopted several critical regulations as part of its efforts to improve water resources conservation, protection, and pollution control—and to disseminate information and raise stakeholder awareness (Table 5).

Table 5: Water Resources Regulations Adopted During WSDP II

SN	Regulation	GN and Date
1	WRM (Fee Setting) Regulations	GN. No. 825 of 08/11/2019
2	WRM (Control and Management of Stormwater) Regulations	GN.No.153 of 20/04/2018
3	WRM (Transfer of Water Use, Discharge, and Groundwater Permits) Regulations	GN.No.157 of 20/04/2018
4	WRM (Water Resources Classification System) Regulations	GN. No.156 of 20/04/2018
5	WRM (Water Well Quality Monitoring) Regulations	GN.No.155 of 20/04/2018

Source: Ministry of Water Directorate of Water Resources Management (2021).

These regulations, coupled with increased enforcement and expansion of protected areas and enforcement of permits, helps reinforce changes in farming and other practices to reduce their impact on catchment areas.

Climate Change Adaptation and Mitigation Measure – Water Reservoirs and Dam Safety Management

By the end of WSDP II, the goal was to construct three strategic multipurpose dams and 20 medium-sized dams in dry areas, and initiate studies for five multipurpose dams for water security and flood control. According to data obtained from MoW and interviews with key informants at MoW and basins, none of the strategic dams were built. Key informants from MoW attributed the failure to implement these planned multipurpose dams to concerns raised by environmental activists about their environmental impacts. However, MoW indicated that studies for the Kidunda, Farkwa, Ndembera, and Lower Songwe dams were completed. While the Kidunda and Farkwa projects have partially paid for compensation to affected communities, no further interventions were carried out and the plans appear to be delayed. During the discussions, respondents explained they are awaiting allocation of funding to undertake the actual construction activities. Respondents further emphasized the importance of these water storage facilities to ensure water security by providing water supply during the dry season.

The construction of the Julius Nyerere Hydroelectric Power Plant (JNHPP) was one of the plans earmarked in the Rufiji Basin IWRMDP for ensuring water security along the Rufiji Basin and contributing to the production of hydroelectric power, which is essential for socio-economic activities. Furthermore, only one of the planned 20 medium-sized dams (Leken-Monduli) was rehabilitated, according to MoW. However, feasibility studies for the remaining 19 dams were initiated and reported to be at different stages, and surveys for 54 new dam sites were reported to be at different stages (feasibility study or detailed design phase). Also, none of the planned studies for the five multipurpose dams were carried out. According to MoW and BWB staff interviewed, MoW conducted surveys and designs for 54 new dam construction sites. However, the actual construction has not started due to the limited allocation of funding under WSDP II.

MoW indicated BWBs implemented pilot projects for flood management and early warning systems in the Pangani and Ruvuma basins. BWBs established 20 meteorological and 15 hydrological stations, registered four Tailing Storage Facility (TSF) dams,[33] registered 28 Approved Professional Persons (APPs) authorized to deal with all aspects of dam safety, and issued 11 construction permits for ten TSFs. In addition, MoW conducted a flow forecasting study in the Lower Mara River and developed national dam safety guidelines. Other notable achievements under WSDP II related to investment in water reservoirs and dam safety management include development of strategic action plans for the construction of 225 charco dams in arid areas between 2021 and 2023 and completion of bathymetric surveys in five dams against the target of conducting bathymetric survey in all strategic dams.

Nonetheless, several planned activities under WSDP II were not implemented, including conducting economic assessments of the existing large dams to ensure dam safety and advice on remedial or intervention measures; procuring and installing dam monitoring instruments in large dams; developing design manuals for small dams; and conducting research on dam failure assessment and maintenance for sustainable dam construction. Respondents from MoW and BWBs emphasized that although most of the activities are still relevant and important, these activities were not fully implemented due to limited funding allocation to Component 1 and capacity of MoW and BWB staff.

The ET noted that underperformance against targets for these activities can have a significant impact on WRM and the long-term viability of structures and the communities that surround them. Dam safety is intended to protect and ensure the resilience of downstream communities, assets, and infrastructure, as well as to secure the water and services for which the dam was built. Because large dams are reliant on a diverse range of people and economic sectors, it is critical that they are structurally sound and have fundamental dam safety management measures in place, as their failure would result in an economic and social disaster. The assessments would provide guidance on dam safety and maintenance plans, as well as critical advice on interventions in light of the increasing level of degradation and climate extremes. The absence of monitoring equipment restricts the availability of critical information on structural changes and effectiveness of mitigation measures.

Enhancing Transboundary Water Resources Management

Sustainable development and management of transboundary water resources require understanding, agreements, and cooperation among the riparian countries for the water to be equally beneficial to the shared countries. Including rivers and lakes, Tanzania has 14 transboundary water bodies. Each transboundary water source is part of one of the nine available lakes/river basins in the country—and seven out of the nine water basins are transboundary. MoW implemented several initiatives aimed at ensuring regional cooperation in transboundary WRM during the WSDP II period. Most notable include:

1. The development of joint management mechanisms for each shared water body to address IWRM, including the promotion of collaborative interstate catchment management and protection.
2. Integrating IWRMDPs for the Lake Nyasa Basin into the Zambezi Watercourse Commission (ZAMCOM).
3. Establishment of the Songwe River Basin Commission with a full-functioning secretariat; MoW is currently implementing the Strengthening Transboundary Cooperation and Integrated Natural Resource Management in the Songwe River Basin Project from 2019–2023. The key successes realized so far include completion of detailed designs for the construction of the Lower Songwe Dam and Hydropower Plant with a capacity of 180.2 megawatts; the establishment of the Lower Songwe Irrigation Scheme covering approximately 3,150 ha; completion of various water supply projects benefiting approximately 22,000 people; the establishment of Lower Songwe River

[33] TSF is a structure made up of (one or more dams) built for the purposes of storing the uneconomical ore (ground up rock, sand, and silt) and water from the milling process.

management strategies; and the construction and improvement of social infrastructure such as roads, schools, and hospitals in the project area

4. Developing and implementing training on transboundary WRM for relevant BWBs and MoW staff; signing of the MoU on Transboundary Integrated Water Resources Management and Development in the Kagera River Basin between Tanzania, Burundi, Rwanda, and Uganda.
5. Under the Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU), one of two investment programs of the Nile Basin Initiative (NBI), Tanzania benefited from support provided to national initiatives in the investment areas of power development and trade, and natural resources management and development. Between 2016 and 2019, the NELSAP pipeline water resources projects completed feasibility studies and detailed designs that will benefit Tanzania $382.6 million, which is less than the $746.9 million required for regional member countries.

Other key achievements in enhancing transboundary water management and other regional water governance initiatives during WSDP II include: 1) signing of a bilateral cooperative agreement between the GoT and the Democratic Republic of Congo's government on the management of the Lake Tanganyika basin and the construction of a barrage on the Lukuga River to regulate the lake's water levels; 2) Tanzania serving as Chair of the African Ministers' Council on Water (AMCOW) (2016–2019) and Chair of the African Water Facility of the AMCOW; 3) establishment of management mechanisms in the Ruvuma, Mara, Kagera, and Chala-Jipe-Umba ecosystems to collect data and information and conduct research on transboundary waters in collaboration with riparian countries to foster technical collaboration; 4) the development of an electronic register of all international and regional agreements governing the use and management of transboundary waters to which it is a party; 5) completion of the Nile River flow forecasting for flood and drought in 2020; and 6) implementation of the Biodiversity Conservation and Utilization of Transboundary Ecosystem Services in Kagera's Minziro Wetland.

Several development partners complimented MoW's efforts at enhancing transboundary water management through earmarked projects. Under the USAID-supported Tanzania-Kenya MOU on the Management of Transboundary Water Resources in the Mara River Basin within the Sustainable Water Partnership for the Mara River project, local institutions and community organizations have mobilized to advance water security, strengthen transboundary water governance, and address climate change vulnerability through a variety of interventions including water allocation planning, dialogue, and modeling of water resiliency. The German Development Cooperation Agency (GIZ) conducted and completed environmental flow assessments in Tanzania's Lower Mara River basin. Environmental Flows Assessment is a critical water management tool for determining the required optimal level of river flow at various stages, points, and seasons to sustain downstream water needs for ecosystems, including people, domestic water supply, industrial, and hydropower.

Development and Implementation of Integrated Water Resources Management and Development Plans

IWRMDPs are considered critical road maps for rationally managing and developing river and lake basins' water resources in the medium to long term for multi-sectoral needs while preserving ecosystem integrity. Out of the nine targeted, seven IWRMDPs for Lake Tanganyika, Nyasa, Rukwa, IDBs, Rufiji, Wami-Ruvu, and southern and coastal basins were prepared under WSDP II—including the production and dissemination of simplified Swahili versions of the IWRMDPs for the Lake Rukwa, IDB, and Rufiji basins. While IWRMDPs are in place, BWBs have not fully implemented them.

The ET notes the delay in fully implementing the IWRMDPs is a critical missed opportunity that could jeopardize BWBs' and communities' ability to safeguard water security and ensure sustainable development. As part of ensuring water security, IWRMDPs emphasized the importance of expanding water storage and supply capacity through infrastructure development. Lack of water storage structures

jeopardizes the country's ability to strategically store water to meet the demands of various sectors even during prolonged dry periods, as well as to regulate floods, making it vulnerable to the effects of climate change. The irrigation infrastructures proposed would reduce the unregulated abstractions and practices and increase water use efficiency and maintain environmental flows for other ecosystems.

The evaluation findings indicate MoW and BWBs made significant efforts to ensure stakeholder engagement at the national and catchment levels through multi-stakeholder forums. According to MoW data, cross-sectoral coordination and collaboration forums reached 3,040 stakeholders (353 at the National Forum and 2,687 at the Basin and Catchment Forums). Also, a novel collaboration between MoW and 2030WRG, a public-private partnership (PPP) platform for water security hosted by the World Bank, was instrumental in promoting dialogue between the GoT and key water-use and other relevant private-sector stakeholders during WSDP II. The partnership brought together several key water users from the private sector, government, DPs, and civil society stakeholders to engage in dialogue and develop collaborative actions aimed at uniting diverse groups with a shared interest in water resources sustainability.

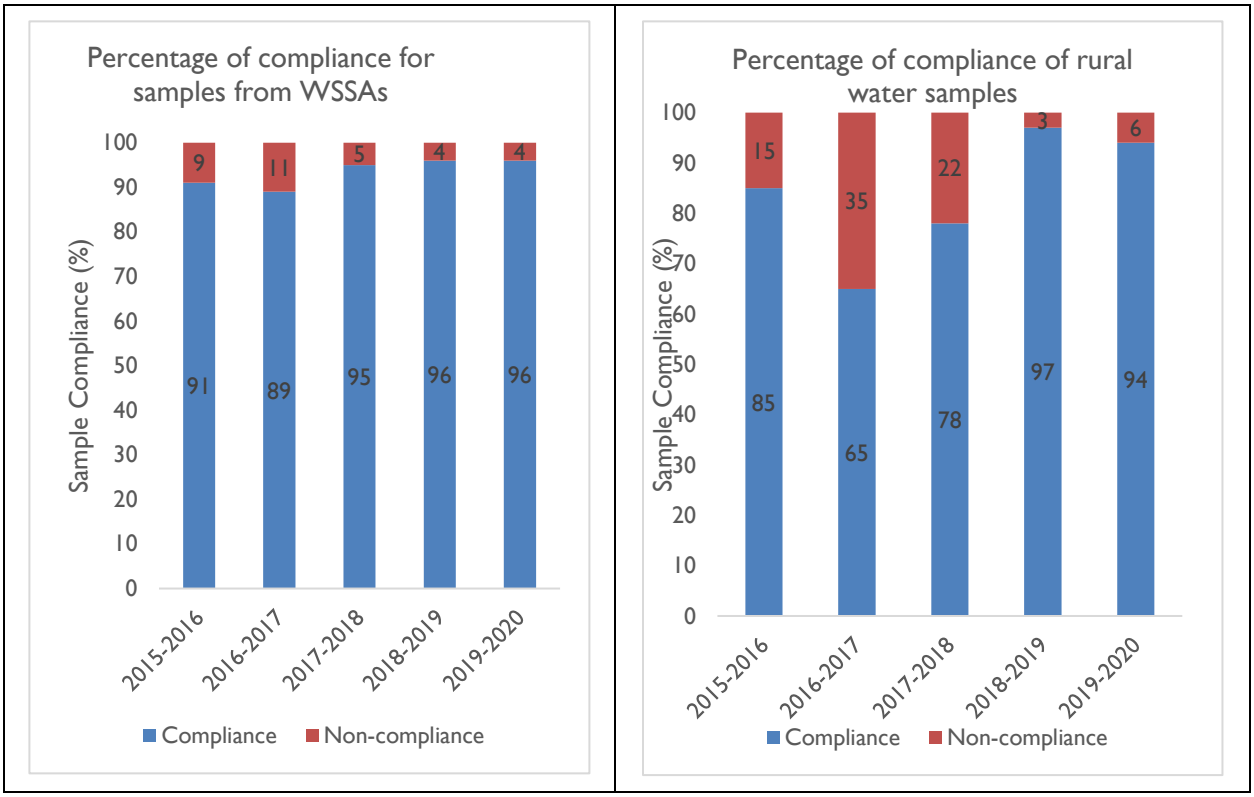
Water Quality Subcomponent

The major objective of this subcomponent was to safeguard and enhance public health, conserve ecosystems to improve ambient water conditions as the basis for informed management throughout the decision-making process, build the capacity of water quality laboratories, and enhance institutional collaboration to sustain water quality management. According to the WSDP II design document, two major interventions implemented were water quality management (WQM) and capacity development to support WQM systems—with each of the interventions having sub-interventions.

Water Quality Management Measures to Safeguard Public Health

Based on data collected from MoW, which included a total of 19,339 water samples from WSSAs and rural supply systems that were tested in compliance with the Potable Water Specialization (TZS 789:2018–EAS 12:2014), the compliance level of the samples from the WSSAs and from rural water supply was around 93.5 percent and 83.5 percent, respectively. Non-compliance was reported to mainly originate from the high levels of chemical and bacteriological parameters. Data showed that the main concern about the rural water supply is high levels of salinity, chloride, acidity, nitrate, manganese, and fluoride. Figure 3 shows the trend of compliance of water samples for both the WSSAs' water samples and the rural water samples. Results show that the compliance level in urban WSSAs and rural areas is improving—implying an improvement in water quality supplied in general. This was attributed to the technical support provided to WSSAs and rural water supply schemes to establish efficiency of water treatment chemicals in relation to the quality of water sources. MoW reported 235 projects were supported to install simple water chlorination systems. The trend is almost the same in the rural water samples, but it has been stable in the last two years.

Figure 3: Compliance Levels of Water Samples Taken from WSSAs and Rural Water Supplies



Source: Ministry of Water Directorate of Water Resources Management (2021).

Evaluation revealed MoW has an elaborate mechanism to monitor the quality of water sources and implement pollution control measures that protect aquatic ecosystems and improve ambient water conditions countrywide. MoW and BWBs respondents asserted that water quality was monitored in 50 strategic water bodies, and a total of 1,540 water samples were collected and analyzed. According to MoW, the analysis results indicated that water quality varies significantly between locations. These variations are caused by a variety of factors, including the state of natural rocks and human activity. In general, the ambient water quality of surface water is more susceptible to contamination by high levels of nitrogen, phosphorous, and turbidity, which can occur naturally or as a result of human activity. Groundwater quality is extremely vulnerable to high salinity, acidity, nitrate, and minerals such as fluoride, iron, manganese, and chloride.

By the end of WSDP II, MoW expected to rehabilitate nine laboratory buildings and construct and equip eight new water laboratories. Data provided by MoW indicate it rehabilitated and furnished one laboratory and constructed, furnished, and equipped six laboratories (in the regions of Singida, Mwanza, Kigoma, Shinyanga, Kagera, and Mara) to replace destroyed and obsolete structures. Additionally, all seven laboratories that were renovated and/or built were furnished. Additionally, MoW DWR indicated that as of 2021, the following laboratories were under construction: Mtwara (95 percent complete), Sumbawanga (75 percent), Mbeya (65 percent), Morogoro (65 percent), Iringa (35 percent), and Songea (45 percent).

Additionally, the Southern African Development Community Accreditation Services (SADCAS) accredited seven existing water laboratories (surpassing the target of five). Other significant accomplishments cited by officials from MoW and the laboratory under WSDP II for improving WQM include the dissemination of findings and raising of awareness about the use of bone char defluoridation technology. According to reports, the GoT distributed 1,695 household defluoridation units and constructed 15 Community

Defluoridation Plants in the Arusha and Manyara regions, which are particularly susceptible to fluoride contamination. According to MoW, the technology has benefited 14,975 citizens by providing them with clean, safe drinking water. According to RUWASA officials interviewed by the ET, RUWASA assisted 235 rural water supplies in installing simple water chlorination systems. A reconnaissance survey of fluoride levels was conducted by RUWASA in the regions of Arusha, Kilimanjaro, Singida, Shinyanga, Mwanza, Manyara, Geita, and Mara where previous water testing had shown higher levels of fluoride as compared to other regions. The survey sampled 2,594 water sources and generated data that was used to develop the fluoride database and map.

One BWB respondent cited several factors as contributing to the underperformance against water quality targets, including inadequate funding and lack of recognition of water quality activities in the country:

> *"The biggest challenge that I see for water quality management is the low profile of water quality management activities in the country. There is a lot about the low water quality management, first the environment is not conducive, second is about the policies and legal framework. We are now in the process of reviewing the legal framework so that issues related to water quality can be addressed comprehensively. As currently, the funding mechanism for water quality is low compared to other aspects*."

Component 2 – Rural Water Supply and Sanitation

The component was designed to finance several specific interventions, including: 1) construction of 38,759 new water points in rural areas; 2) rehabilitation of existing 19,889 non-functioning water points to full functionality; 3) expansion of the infrastructure for 17,686 water points to reach more households; and 4) recruitment and deployment of 386 engineers and 3,338 technicians up to the ward level. The overall aim was to reach 80 percent of the rural population with clean and safe water by 2019 through these interventions.

Key Findings

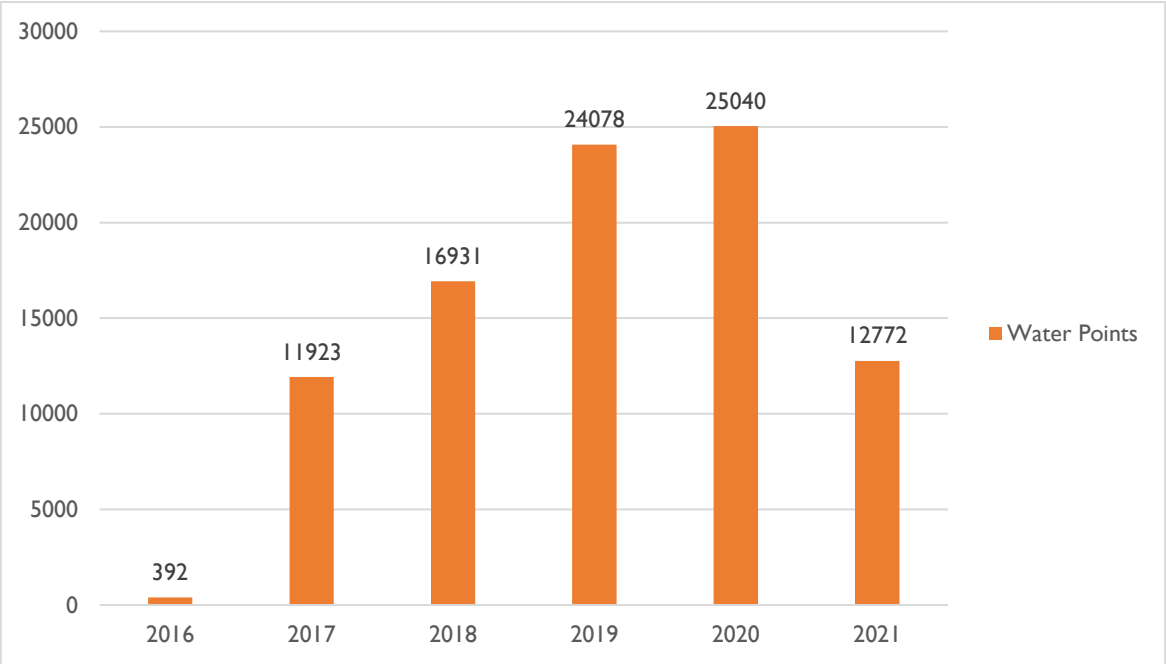
The following are the key findings from the evaluation on the performance against targets and key issues related to the rural water supply component of WSDP II.

At the beginning of WSDP II, the rural water supply and sanitation component activities were designed to be implemented largely through the regional secretariats and LGAs with the technical lead of the then District Water Engineers (DWEs). However, following the GoT's decision to establish a standalone agency (RUWASA) in July 2019 with a mandate for managing rural water supply and sanitation projects and service delivery, the delivery of the activities under this component shifted from the LGAs to RUWASA. Under the new structure, the former DWEs, now called District Water Managers (DWMs), were redeployed as RUWASA staff—reporting to the regional RUWASA manager who, in turn, reports to MoW through the Director General of RUWASA (whereas earlier where they reported to President's Office–Regional Administration and Local Government [PO-RALG] through the District Executive Directors [DEDs]).

There Has Been an Increase in the Number of Rural Water Supply Points

The overall aim of WSDP II was to achieve 80 percent rural water access coverage by 2019. This is yet to be achieved; however, WSDP II made significant progress increasing the number of functional rural water points. The Minister for Water, in his March 2021 budget address to Parliament, reported the sector achieved 72.3 percent rural access rates, compared to 86 percent urban access rates. According to RUWASA, by the second quarter of FY 2021, there were 91,136 rural water points serving 5,986,751 people (Figure 4). This represents a 23-fold increase in the number of water points built since 2016. Out of these, 77 percent (70,175) are new water points, while 23 percent (20,961) are rehabilitated or expanded existing waterpoints (Figure 4). This represents an overachievement against the WSDP II target of 76,334 water points.

Figure 4: Total Number of Water Points in Tanzania Per Year 2016–2021

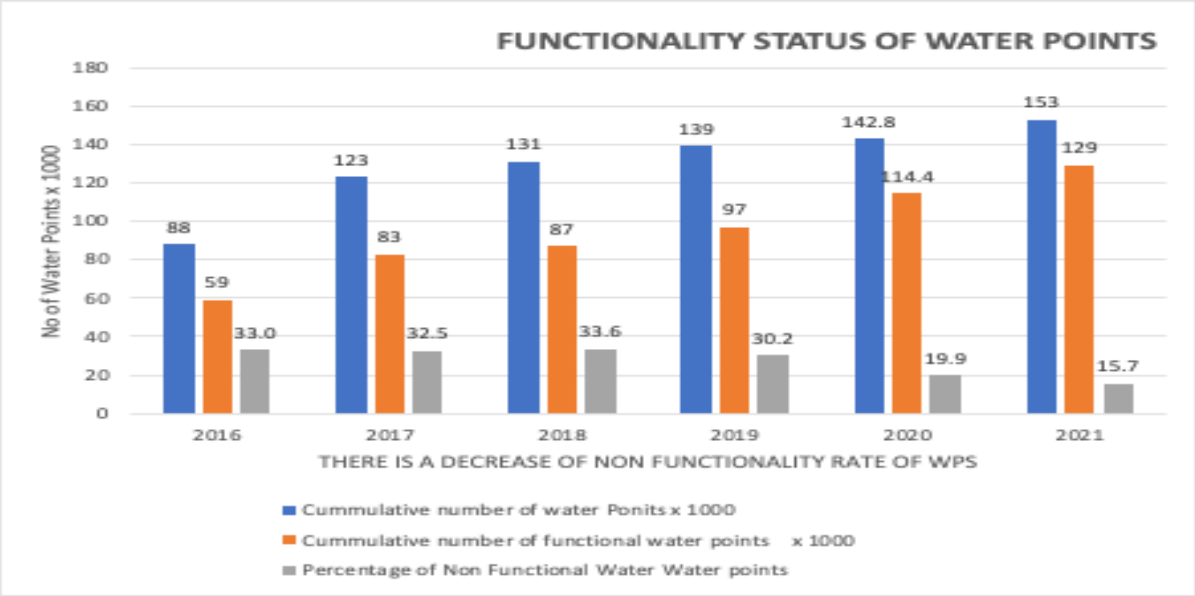


Source: RUWASA. Note: The 2021 data show reporting for the first quarter, not full-year data.

The distribution of water points per district shows a large disparity between the districts—with some districts having nearly 1,000 water points while others have fewer than 100 (Figure 6). The data available from RUWASA on the distribution of water points across the districts did not provide detailed descriptions of the key factors causing the variation. From interviews with RUWASA regional and district managers, much of this is attributed to weakness in the existing M&E process—which they posited is not comprehensive enough to capture the full range of existing water systems in rural areas. Functionality remains a challenge. Data from the World Bank show an average national non-functionality rate of 15.5 percent in 2021, which is a considerable reduction from a non-functionality rate of 30 percent reported in 2019.[34] The reasons for the non-functioning of systems during the period under review included cases of low water quality harmful for humans (high salinity, turbidity, and other minerals), high water tariffs, destruction of the pipelines due to road construction, and non-rehabilitation of deteriorated infrastructures, *etc.* RUWASA leadership interviewed during the evaluation attributed the reduction in non-functionality rates to the formation of RUWASA, operationalization of the National Water Fund (NWF) and the adoption of the performance-based investment approaches supported by World Bank and UKAID.

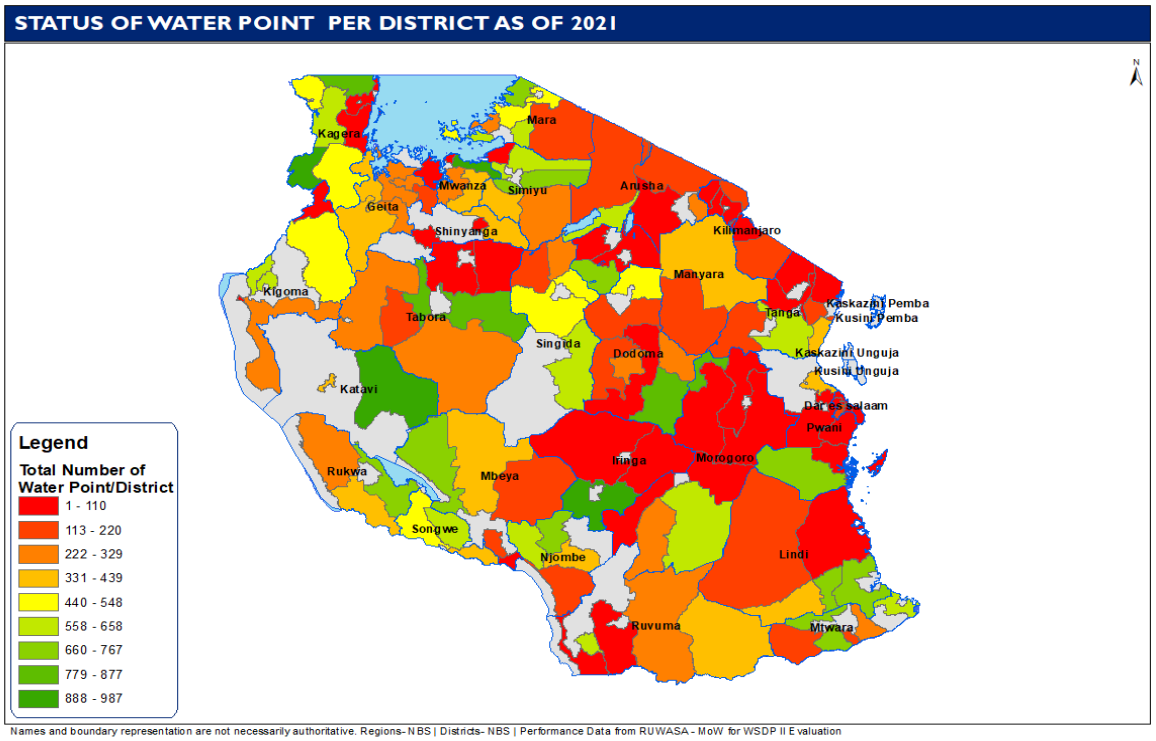
[34] World Bank, February 2019. Why Do So Many Water Points Fail in Tanzania? An Empirical Analysis of Contributing Factors. Policy Research Working Paper. https://openknowledge.worldbank.org/bitstream/handle/10986/31233/WPS8729.pdf-?sequence=1&isAllowed=y.

Figure 5: Functionality of Water Points 2016-2021



Source: World Bank.

Figure 6: Status of the Distribution of Water Points Across Districts in Tanzania in 2021[35]



Source: RUWASA data on water points distribution.

[35] The ET observed gaps in available water points in some districts.

Sustainable Functionality of Rural Water Schemes Remains a Concern for Most Stakeholders

The rural water supply and sanitation component of WSDP II has performed considerably well meeting the infrastructure development targets established at design. However, several stakeholders interviewed expressed concern about the long-term O&M of the installed facilities. While it was not possible to determine whether increased investments in rural water supply infrastructure benefited local communities and people directly through household interviews, all RUWASA, civil society stakeholders, and CBWSO representatives interviewed asserted that project impacts are only likely to be sustained with the required technical support and strengthening of the CBWSOs responsible for service delivery.

Most development partners believe the current RUWASA model for cost recovery is inadequate to provide sufficient funding for continuous maintenance of water points post-construction. An additional concern expressed by some DPs is the GoT's commitment to continued support for rural service delivery is not accompanied with a clear budget allocation given that much of the allocation still goes to capital infrastructure development. On a more positive note, both government and non-government stakeholders agreed the World Bank and UKAID's results-based financing approaches resulted in significant improvements in the functionality of rural water systems in the areas where the projects were implemented. However, some expressed concern about the GoT's commitment to scale up and mainstream results-based financing as a funding model for rural water service delivery with no clear policy and plan for continuing its use.

Rural Water Clustering and Multi-Village Schemes

A critical approach identified by several stakeholders as a possible path forward for improving rural water system service delivery and sustainability is clustering of individual villages into multi-village piped schemes under a single CBWSO. RUWASA management concurs that this is the model they prefer going forward. The necessity of this approach, which was also emphasized by the water sector's regulator, the Energy and Water Utilities Regulatory Authority (EWURA), stems from there still being an enforcement gap for effective regulation of rural water service delivery quality, standards, or tariffs. The Water Supply and Sanitation Act (2019) assigns RUWASA the functions of monitoring, regulating, and technically backstopping CBWSOs that are responsible for operating and maintaining water systems. RUWASA's role in regulation has gaps in implementation, including enforcing effective O&M of installed infrastructure.

Some DPs proposed developing a hybrid regulatory structure for rural water services, with much of the performance monitoring occurring at the regional level as part of the service provision agreement between the RUWASA regional office and CBWSOs. EWURA confirms it does not have direct regulatory oversight of CBWSOs. The proposed structure is for each CBWSO to obtain an operator's license from RUWASA that assigns operational responsibilities to the CBWSO and technical support, backstopping, and regulatory oversight responsibilities to RUWASA. EWURA can use its well-developed knowledge of regulation to assist RUWASA to implement its regulatory functions.

While CBWSOs expressed a high demand for the formal linkages with RUWASA through a form of contract to receive continuous technical backstopping, there seems to be a challenge on the supply side of RUWASA in meeting that expectation. The RUWASA regional and district managers interviewed attributed this to inadequate staffing, equipment, and funding for extension support for O&M beyond the infrastructure development rehabilitation budgets. One district water manager interviewed mentioned only having one vehicle and few technicians to provide the expected technical support on O&M to over 100 CBWSOs within their district.

There is increased importance of enhance coordination between RUWASA and BWBs to develop water sources for infrastructure projects. Lake Victoria BWB highlighted the success of an ongoing interagency collaboration with RUWASA to identify and develop water sources for new projects. This collaboration ensures new water supply delivery projects include clear WSPs and catchment conservation interventions.

Component 3 – Urban Water Supply and Sewerage

The component was designed to finance a number of specific interventions including: 1) increasing main water supply transmission lines by up to 500km and water distribution networks by up to 10,000 km; 2) increasing water production and construction of storage reservoirs through construction of up to 50 new water treatment plants and 11 new reservoirs for Dar es Salaam and 300 reservoirs for district HQs and small-town utilities; 3) construction of up to 15,000 water access points (kiosks) in off-grid, low-income areas and increased household connections by up to 500,000 in regional WSSAs and 200,000 for district HQs and small towns; 4) reducing non-revenue water (NRW) to the national target of 25 percent for all water authorities by 2019; 5) construction of up to 156 km of new public sewer lines and 60 wastewater treatment ponds for National Project Areas, district HQs, small towns, and regional WSSAs; and 6) provision of water supply services to up to 1,100,000 new beneficiaries in district HQs, townships, and areas served by National Projects through 110,000 household water connections.

The provision of water supply and sanitation services in major cities, district HQs, and townships in Tanzania is organized through publicly owned Urban Water Supply and Sanitation Authorities (UWSSAs). These authorities are registered as limited liability companies where the government holds 100 percent of shares. These UWSSAs are regulated by a national state agency, EWURA, which groups UWSSAs into two broad categories: Regional and National Project UWSSAs (larger cities and towns) and District and Township (councils) UWSSAs (district HQs and small townships). These are further classified into four categories based on their financial capabilities: 1) Category AA: Water utilities with water service coverage of more than 85 percent and that meet operation, maintenance costs, depreciation, and return on investment; 2) Category A: Water utilities with water service coverage of more than 75 percent and that meet all operation, maintenance, and depreciation costs; 3) Category B: Water utilities with water service coverage of more than 65 percent and meet all O&M costs; and 4) Category C: Water utilities with water service coverage of less than 65 percent and meet O&M costs except part of plant electricity costs as shall be determined in the MOU.[36]

Performance Against WSDP II Targets

Dar es Salaam Water Supply and Sewerage Authority

Serving Dar es Salaam and its neighbors, Dar es Salaam Water Supply and Sewerage Authority (DAWASA) used support from WSDP II to achieve the program's target for expanding the water network, build more boreholes (Kimbiji boreholes project) than anticipated, and install over 900 kiosks—more than the initial target of just ten. Also, DAWASA had over 170,000 additional house connections in 2019–2020 (despite purging many erroneous connections from the customer base), fewer than the WSDP II target of 500,000 new connections. These measures expanded direct access to water services to an additional 24 percent of the population, providing 86 percent direct access by 2019–2020, slightly below the target of 95 percent. See Table 6 below for the performance of DAWASA against WSDP II targets.

DAWASA increased accessibility to water despite adding only about one-third of the targeted increase in water production. This was made possible in part by lowering NRW from 57 percent in 2014–2015 to 40 percent in 2019–2020, half the reduction needed to reach the national target of 25 percent. However, continuity of water supply remains a challenge with a reported average of 18 hours for FY 2019–2020 as compared to the WSDP II target of 24 hours.[37]

[36] EWURA.

[37] EWURA, March 2021. Water utilities performance review report for FY 2019–2020 – Regional and national project water utilities.

Table 6: Water Supply and Sanitation Improvements in Dar es Salaam, Kibaha, and Bagamoyo – Intervention Areas

Area	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020	Total Growth[38]	WSDP II Targets
Transmission main (km)	-	-	-	-	-	-	-	-212 km transmission main constructed
Water network (km)	1,862	2,625	2,884	2,969	3,220	3,866	2,004	-2,000 km of distribution water supply network laid
Water production (million liters/day)	242	285	339	419	401	407	165	-Water production increased by 456 million liters/day (300 to 756)
Water storage tanks (No.)	-	-	-	-	-	-	-	-11 water storage tanks constructed
Boreholes (No.) drilled	-	20	-	-	-	56	36	-26 boreholes drilled
Water kiosks (No.)	223	249	371	389	510	1,150	927	10 kiosks constructed in low-income areas
NRW (%)	57	53	46	47	48	40	(16)	-Reduce NRW from 55% to 25%
Household connections (No.)	137,679	150,778	256,290	211,043*	254,018	309,638	171,959	-500,000 household connections installed
Proportion of population directly served (%)	62	65	75	75	76	86	24	-Increase access from 68% (2013) to 95% (2019)
Proportion of population living in the area with water network (%)	46	55	68	85	85	89	43	-Increase access from 68% (2013) to 95% (2019)
Wastewater treatment ponds	-	8	-	-	-	8	-	-7 wastewater treatment ponds constructed
Public sewer line (km)	-	189	189	189	195	201	12	-156 km of new public sewer line
Household conventional sewer connections	16,987	16,620	17,089	18,781	19,806	19,913	2,926	-15,000 households connected to the conventional public sewer system
Build 76 km access road to Kidunda dam	-	-	-	-	-	-	-	-76 km access road constructed to proposed site for Kidunda dam
Management support that entails capacity strengthening	-	-	-	-	-	-	-	No clear targets set

Source: Water Utilities Performance Reviews, EWURA

[38] The total growth is the difference between the 2014–2015 figure and the 2019–2020 figures.

DAWASA generally recorded good performance against some targets set under WSDP II. Investment in increasing the water distribution networks surpassed the set target of 2,000 km by achieving 2,004 km, and investments in water kiosks in low-income areas surpassed the target of constructing ten kiosks by constructing up to 927 kiosks. However, the utility missed some critical targets. For example, water production increased by 165 million liters per day against the 465 million liters per day target. Furthermore, DAWASA minimally expanded conventional sewerage coverage during WSDP II. Approximately 3,000 of the 15,000 targeted new sewer connections were established. Additionally, none of the seven expected wastewater treatment ponds were constructed during WSDP II, resulting in no change in the 10 percent sewer coverage reported at the start of the program. However, DAWASA officials report that they have completed designs and are currently in the process of procuring contractors to undertake major expansions of the treatment plans and also investments in off-grid sanitation systems that will improve the sewer coverage proportions. These could not be reported as part of WSDP II since the actual construction and benefits to the population will accrue beyond the time period for WSDP II. Key informants believe WSDP III should place much more emphasis on urban sanitation, including both conventional sewerage and improved on-site installations with improved and expanded off-grid sludge collection services and treatment facilities.

Regional Water and Sanitation Authorities

The data in Table 7 provide an overview of the situation and achievements in aggregate of the 23 regional WSSAs in relation to WSDP II performance targets. These vary greatly among the WSSAs. Unless noted, the data exclude DAWASA.

Through WSDP II support, the utilities expanded their water networks by 5,820 km, over double the original target. The 239,500 additional house water connections also are more than the target of 200,000. Direct access to water rose by 11 percent from 57 percent to 68 percent, and the portion of people living in network areas rose 13 percent, from 72 percent to 85 percent. Although substantial, these improvements in access to water fell short of the WSDP II target of 98 percent. WSDP III will need to continue expanding access to water for growing urban populations.

Table 7: Water Supply and Sanitation Improvements in 23 Regional Water Supply and Sanitation Authorities

	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020	Total Growth	WSDP II Targets
Treatment plants (No.)	-	-	-	-	-	-	-	-22 treatment plants constructed
Transmission main (km)	-	-	-	-	-	-	-	-330 km new transmission main constructed
Water supply distribution network (km)	6,799	7,245	7,780	8,760	9,523	12,619	5,820	-2,111 km of pipes for water supply distribution network laid
Water storage tanks	-	-	-	-	-	-	-	-44 water storage tanks constructed
House connections (No.)	357,208	390,625	427,337	467,841	509,749	596,709	239,501	- 200,000 new house connections installed
Proportion of population directly served (including DAWASA) (%)	57	64	71	69	69	68	11	Increase access from 80 percent in December 2013 to 98 percent by 2019
Proportion of population living in the area with water network (including DAWASA) (%)	72	75	79	84	85	85	13	Increase access from 80 percent (2013) to 98 percent (2019)
Wastewater treatment ponds (No.)	-	-	-	-	-	-	-	-60 wastewater treatment ponds constructed
Sewer lines (km)	554	569	598	630	666	697	143	-887 km of sewer lines constructed
NRW (including DAWASA) (%)	43.6	41.6	38.4	40.5	40.6	36.6	(7)	-Reduce NRW from 37 percent to 25%
Management support that entails capacity strengthening	-	-	-	-	-	-	-	No clear targets set

Source: Water Utilities Performance Reviews, EWURA.

Regional WSSAs extended conventional sewer networks just 143 km, only 16 percent of the target of 887 km. As one key informant noted: *"Only 11 out of the 26 regional WSSAs have sewerage systems, and none of the districts and townships have sewerage systems. In addition, coverage of the sewerage systems is still very low."*

Most key informants interviewed recognize that while a success, the priority on expanding access to water is creating a huge lag in managing increasing quantities of wastewater. However, WSSA technical leaders mainly refer to conventional or simplified sewers and centralized treatment as the solution, without citing much less costly off-grid solutions. WSDP III will need to develop and share knowledge and implement methods to improve latrines and management of sludge for most of the urban population that will continue using on-site latrines and septic tanks for the foreseeable future.

For the regional water and sanitation authorities, NRW fell 7 percent in aggregate (including DAWASA), about half of the 12 percent targeted, to arrive at 37 percent compared with the national target of 25 percent, which is comparable to the international best practice NRW level of 25 percent.[39]

National Projects, District Headquarters, and Small-Town Water Supply and Sanitation Authorities

The merger of several WSSAs, including placing some towns under neighboring regional WSSAs, created a discontinuity in the trends in the following table beginning in 2017–2018. The clustering of small WSSAs in district HQs and small towns to be aggregated under larger regional WSSAs to improve urban WASH services delivery is a key structural reform driven by MoW during WSDP II. This was done to improve revenue collection, enable sharing of experiences in management and technical operations, and reduce operating costs. Pilot clustering during WSDP II was undertaken in Tanga, Morogoro, Mbeya, and Moshi.

The 15,462 new household connections made by the combined National Project Areas, district HQs, and small towns' water utilities were far fewer than the target of 110,000 (Table 8). The proportion of the population with direct access to water grew 2 percent in districts and towns, while there was a more notable 11 percent growth of the proportion of population living close to water networks according to EWURA,[40] about reaching WSDP II's target of 12 percent access. Data made available to the ET by MoW and EWURA indicate that WSDP II focused on water supply without programming interventions in sanitation in these towns.

[39] https://www.ib-net.org/

[40] EWURA. March 2021. Water Utilities performance review report for FY 2019/20: District and township water utilities.

Table 8: Water Supply and Sanitation Improvements in National Project Areas, District Headquarters, and Small Towns

	2014–2015	2015–2016	2016–2017	2017–2018*	2018–2019	2019–2020	Total Growth	WSDP II Targets
District Headquarters and Small Towns								
Treatment plants (No.)	-	-	-	-	-	-	-	-37 treatment plants constructed
Transmission main (km)	-	-	-	-	-	-	-	-1,091 km of new transmission main constructed
Water distribution network (km)	-	-	-	-	-	-	-	-3,518 km of distribution network expanded
Storage tanks (No.)	-	-	-	-	-	-	-	-306 storage tanks constructed
Household water connections	93,874	101,829	110,555	89,061	98,081	109,336	15,462	-110,000 household water connections installed
Active kiosks (No.)	1,596	1,534	1,757	1,192	1,503	1,496	(100)	
Proportion of population directly served (%)	41	41	43	43	46	43	2	-Increase access percent from 53% (2013) to 65% (2019)
Proportion of population living in area with water network (%)	59	58	58	63	65	70	11	-Increase access percent from 53% (2013) to 65% (2019)
Management support that entails capacity strengthening	-	-	-	-	-	-	-	No clear targets set
National Project Areas								
Treatment plants (No.)	-	-	-	-	-	-	-	
Transmission main (km)	-	-	-	-	-	-	-	
Water distribution network (km)	3,549	3,662	3,910	3,911	3,942	4,278	729	
Storage tanks (No.)	-	-	-	-	-	-	-	
Household water connections	15,713	18,074	21,410	23,168	25,647	24,719	9,006	
Public water kiosks (No.)	1,750	1,718	2,399	2,321	2,356	1,850	100	
Proportion of population directly served (%)	42	50	52	55	42	34	(8)	
Proportion of population living in the area with water network (%)	71	75	74	72	71	67	(4)	
Management support that entails capacity strengthening	-	-	-	-	-	-	-	

Source: Water Utilities Performance Reviews, EWURA.

*From 2017–2018 onward, excludes 17 district WSSAs and nine towns.

Key Issues on the Management of Water Supply and Sanitation Authorities

WSDP II provided limited funding to strengthen management for all water services providers, although without clear targets. This section on utility management synthesizes progress in overall utility management based on the key performance indicators published by EWURA.

Most operational indicators for regional WSSAs show improvements during the WSDP II period (Table 9). Water quality indicators, checked at the water treatment point, are approaching full compliance and metering is nearly universal. Average hours of service have improved modestly from 16 to 18, but remain well below the goal of continuous 24-hour service. The productivity of staff improved in the first years then remained steady, arriving at 4.3 persons per 1,000 connections.

Table 9: Operational Indicators for Regional Utilities During the WSDP II Period

Regional WSSAs (incl. DAWASA)	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Water Quality Compliance (%)						
E-coli	-	85	92	97	99	98
Turbidity	-	90	93	97	92	92
Residual chlorine	-	86	99	91	98	93
pH	-	91	93	97	98	98
Wastewater Quality Compliance (%)						
Biochemical Oxygen Demand (BOD	-	66	55	72	66	68
Chemical Oxygen Demand (COD	-	66	66	73	62	69
Metering						
Metering ratio (%)	95	99	97	97	100	100
Service Hours						
Hours	16	17	17	18	18	18
Staff Productivity						
Staff per 1000 connections	5.7	5.3	4.5	4.0	4.0	4.3
Revenue Collection Efficiency						
Revenue collected (%)	86	87	91	94	96	95
Working Ratio						
Ratio	1.0	1.0	1.0	1.1	1.0	1.0
Operating Ratio						
Ratio	1.3	1.2	1.3	1.4	1.2	1.3

Source: Water Utilities Performance Reviews, EWURA.

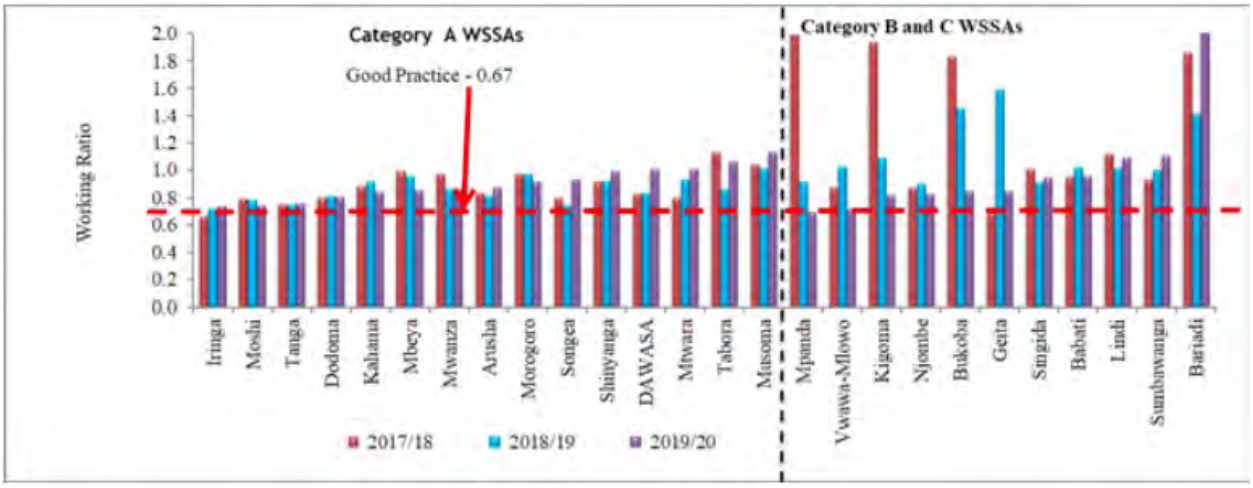
Only 11 regional WSSAs have sewers, connecting 12 percent of the population in the service areas of all the regional WSSAs. There is capacity to treat just 1.8 percent (10.5 million m^3) of the 572.2 million m^3 of wastewater generated annually from the entire WSSAs population coverage area.

Concerning financial sustainability, the regional WSSAs in aggregate consistently bill sufficient revenue collectively to pay their cash operational expenses (working ratios being 1 or below) but not their depreciation and interest on debt (operating ratios below 1).[41] Revenue collection has improved to above 95 percent of the amount billed. WSDP III should continue to support financial and operational management for all WSSAs to cover their operational costs, and contribute to their capital expenditures. Currently, much of the infrastructure financing for urban area is funded either through GoT budget allocation or external donor funds either as grants or sovereign loans to the GoT. There are significant

[41] The issue of WSSA debt is complex. MoW has not taken a detailed debt study to have a clear picture of debts owed by WSSAs since the debts are directly given to the national treasury then passed on to WSSAs. A more detailed study would be needed to fully understand this. The evaluation could not establish the WSSA debt situation.

differences in the level of financial sustainability among WSSAs—several showing significant improvement, as shown in Figure 7.

Figure 7: Working Ratios[42] for Regional Water Supply and Sanitation Authorities



Source: EWURA Water Utilities Performance Review Report for FY 2019–2020, Regional and National Project Water Utilities.

District and Township Water Supply and Sanitation Authorities

Operational indicators for district and township WSSAs consistently improved during the WSDP II period (Table 10). Water quality improved in 2018–2019, then fell in 2019–2020. The level of metering is consistently improving but remains more than 15 percent below being universal. Hours of service have increased considerably, reaching 14, which remains much below the goal of 24-hour service. Staff levels per connection fell dramatically from 25 persons per 1,000 connections to eight, still leaving room for improvement. WSDP III should continue providing support to improve the operations of district and township WSSAs.

The financial position of these WSSAs is improving. Beginning with recovering only about two-thirds of cash operational costs, billed revenues recovered most of these costs for the past three years (working ratios of 1 or lower). There is considerable opportunity to improve their cash flow by reversing the recent decline in revenue collection (83 percent in 2019–2020 compared to 86 percent in 2017–2018).

Table 10: Operational Indicators for District and Township Water Utilities

District & Township WSSAs	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Water Quality Compliance (%)						
E-coli	-	-	74	92	94	89
Turbidity	-	-	86	99	94	78
Residual chlorine	-	-	75	79	87	82
pH	-	-	90	93	97	88
Metering						
Metering ratio (%)	63	66	72	81	82	83
Service Hours						
Hours	9	9	9	11	12	14
Staff Productivity						

[42] Working Ratio compares the operating expenses of the utility to its revenue. It is calculated by dividing total annual operating expenses by annual gross revenue. If the ratio is less than 1, it implies the utility business can recover its operating expenses. A ratio of greater than 1 indicates the company cannot be profitable without significant changes to its cost structure and/or pricing. Good practice of 0.67 is the global benchmark set for a well performing water utility.

District & Township WSSAs	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Staff per 1000 connections	28	25	22	16	10	8
Revenue Collection Efficiency						
Revenue collected/billed (%)	-	84	86	86	82	83
Working Ratio						
Ratio	-	1.5	1.2	1.0	1.1	1.0

Source: Water Utilities Performance Reviews, EWURA.

For the National Project Areas, operational indicators generally showed improvements (Table 11). NRW fell consistently from 48 percent until reaching the national goal of 25 percent. Water quality improved but remains well below standard. About 15 percent more households with water connections now have meters, within 10 percent of the desired universal metering. The number of staff per connection fell by half but remains well above the global benchmark of 8.5. [43] However, the level of service decreased from 16 to 13 hours per day due to increased demand as the population increased without an attendant increase in water production capacity.

The cash operating costs of National Project WSSAs are consistently more than double the amount of billed revenues without considering depreciation and replacement (working ratios being well above 1). Revenue collections at first fell, then slowly recovered—but remain 10 percent below their optimum.

Table 11: Operational Indicators for National Project Area Water Utilities During the WSDP II Period

National Projects WSSAs	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Non-Revenue Water (%)						
NRW (%)	48	39	33	27	24	25
Water Quality Compliance (%)						
E-coli	53	45	69	72	60	76
Turbidity	66	87	67	69	79	77
Residual chlorine	52	60	60	67	67	46
pH	38	67	69	84	84	100
Metering						
Metering ratio (%)	75	73	79	82	98	91
Service Hours						
Hours	16	16	13	13	14	13
Staff Productivity						
Staff per 1000 connections	29	25	24	24	19	14
Revenue Collection Efficiency						
Revenue collected (%)	87	74	76	76	84	87
Working Ratio						
Ratio	2.1	1.6	2.2	2.5	2.6	1.8
Operating Ratio[44]						
Ratio	2.9	2.0	2.7	2.8	4.3	2.8

Source: Water Utilities Performance Reviews, EWURA.

[43] https://www.ib-net.org/

[44] Operating ratio is calculated by dividing operating revenues by operating expenses, consisting of O&M expense and depreciation. An operating ratio of 1.0 or greater indicates the utility is generating sufficient revenues to cover the O&M expenses and some portion of capital investment/reinvestment.

Other Key Issues on Urban Water and Sewerage Components

Commercial financing

During the WSDP II period, commercial financing of WSSAs increased due to a partnership facilitated by German development bank KfW in collaboration with MoW. The program enabled WSSAs to borrow at slightly lower commercial rates against projected cash flows (for example, the Cooperative Rural Development Bank [CRDB] loaned to the Kahama Shinyanga Water Supply and Sanitation Authority [KASHWASA] at a rate of 12.5 percent, compared to the market rate of 14.5 percent). The use of cash flows of WSSAs to guarantee loan repayment achieves the goal of true utility-based lending, which is needed globally to supplement insufficient public financing for public utilities.

The commercial financing approach has an institutional strengthening effect on the WSSAs because it requires an approved business strategy, cash flow projections, and a defined project scope—including a well-defined target market for proposed infrastructure improvements to maximize capital expenditure efficiency. The processes of supporting WSSAs to develop these enhance their operational efficiency/capacity by ensuring that the utilities manage their non-revenue levels at economically acceptable levels, increasing billing and collection efficiency as well as improving their metering infrastructure to maximize billing. Commercial lenders, WSSA management, and KfW all agreed that this course of action will enhance the long-term viability of WSSAs.

According to the commercial banks interviewed, consideration should be given to the banks obtaining lines of credit (including bond financing) or credit guarantees from DPs to finance WSSAs, which would be less expensive than obtaining funds from the banks' typical commercial sources. Strengthening the nascent market for WSSAs and others to issue bonds is one area that requires additional investigation and, possibly, an adjustment to government policy. Government and development partners also can blend non-repayable grants with commercial loans. In addition to making the overall financing affordable, blending loans with grants from GoT or donors will reinforce the focus on the creditworthiness of WSSAs. WSDP III should help the GoT operationalize such blended financing, starting with a shadow credit rating exercise early in the program. Technical assistance to assist WSSAs in developing sound capital investment programs, prioritizing and documenting projects, and preparing loan applications were highlighted as critical success factors in facilitating access to commercial financing. However, the challenges utilities face in obtaining necessary government approvals prior to accessing commercial loans continue to be impediments. Under current regulations, utilities must obtain approval from MoW, the Treasury, and the Tanzania Revenue Authority. The utilities indicated that such approvals can take up to one year, significantly delaying project implementation. WSDP III should continue providing WSSAs with technical support in project preparation and loan applications, while MoW and other government authorities help speed approval processes.

Urban sanitation issues

The inclusion of non-sewered sanitation (NSS) options, although occurring slowly, presents an opportunity to scale up improvements in urban sanitation where this is more feasible than traditional sewers. For instance, in Dar es Salaam, DAWASA is investing in off-grid sanitation solutions such as decentralized wastewater treatment systems. Also in Mwanza, the WSSA's investments in condominial sewers as an alternative to more expensive conventional sewer lines have attracted visitors from various countries on benchmarking trips. This demonstrates the importance of considering more than just conventional sewer lines as a sanitation option, given the cost and extremely slow rate of sewer network expansion in major cities (*e.g.*, the Morogoro WSSA leadership confirmed it has only increased sewer connections from 2 to 6 percent within the five years of WSDP II implementation). Already, a nascent market for private-sector sanitation service providers has emerged to fill this service void. However, it continues to operate on a small scale independent of the public utility. Although the business case is still small for private sludge collection and treatment, it can be scaled up to serve a larger number of households through collaboration

with utilities. The financial implication of adding NSS to the remit of WSSAs will need to be documented and managed, competing with the existing cost to consumers of emptying their household septic facilities. WSSAs also need funding to invest in wastewater treatment facilities and to operate them properly, a likely candidate for PPPs funded by a combination of GoT and commercial loans, grants, and private equity. The DPs indicate that Tanga city, for example, collects household wastewater into sewers and then discharges it out to sea untreated. This is not sustainable.

Component 4 – Sanitation and Hygiene

The focus of Component 4 was to scale up the NSC through further financing to increase the proportion of the population that uses improved sanitation facilities from 2.2 million households to 7.8 million households (75 percent) nationally by 2019; construction and rehabilitation of latrines in 3,500 primary schools; rehabilitation of hand-washing facilities, menstrual facilities, and latrines in 700 secondary schools; rehabilitation of WASH facilities in up to 1,000 health facilities, and the construction of at least eight WASH facilities in highway bus stops.

Key Findings

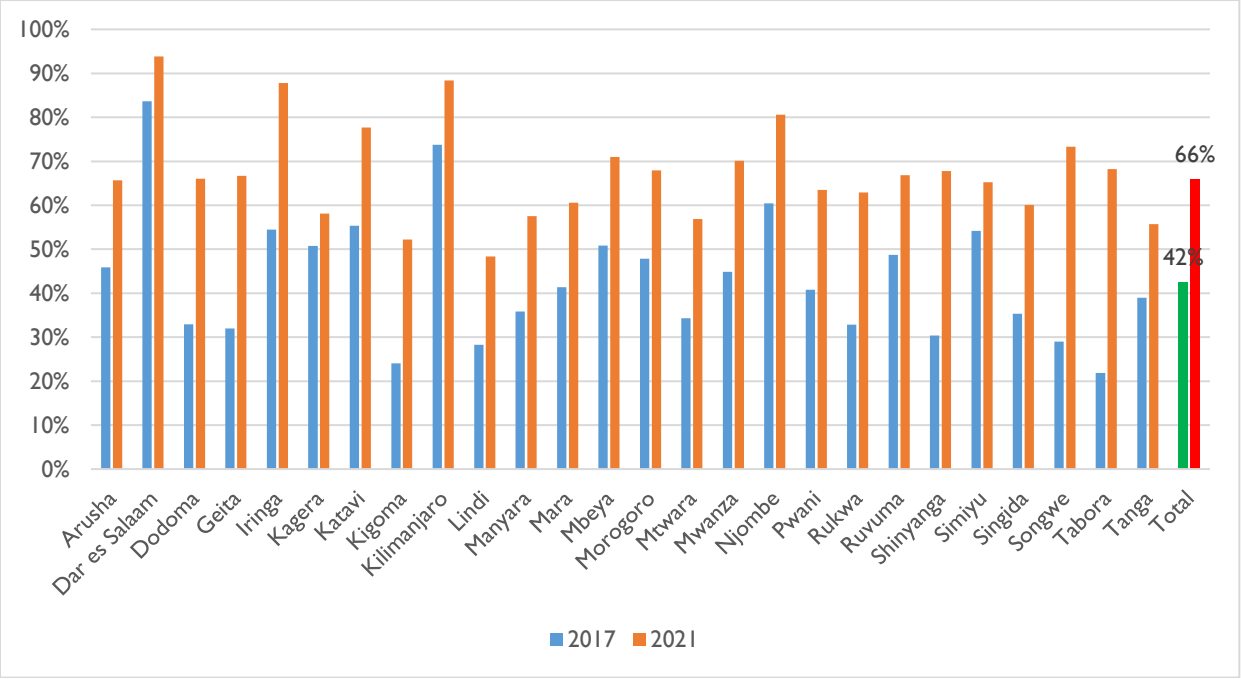
The following are the key findings from the evaluation of the performance against targets and key issues related to the sanitation and hygiene component of WSDP II.

Most regions recorded significant increases in the number of households using improved latrines and hand-washing facilities. Figure 8 compares the proportions of households with improved toilets in the region in 2017 and 2021, while Figure 9 compares the proportion of households with installed handwashing facilities in Tanzania's regions in 2017 and 2021. On average, the access rates to improved latrines at the household level increased from 42 percent in 2017 to 66 percent in 2021, and installed handwashing facilities from 14 percent in 2017 to 40 percent in 2021, respectively. For instance, the Morogoro WASH team reports that the region increased sanitation coverage from 34.6 percent in 2016 to 69.5 percent in 2021 under WSDP II but fell short of the 75 percent target. This information is then presented for all regions of Tanzania showing that the improvements are occurring in all parts of the country. Figure 10 shows the increase in toilet facilities and Figure 11 shows the improvement in handwashing.

Although the zero (0) percent Open Defecation Free (ODF) target was not met, it saw a significant improvement, falling to 1.3 percent in 2021 from 6.5 percent at the start of NSC. The key underlying reasons behind the still-existing ODF include most households still practicing ODF are socially and geographically isolated, requiring concerted efforts in monitoring and follow up, behavior reinforcements, re-awareness, and demonstrations of different sanitation technology options, coupled with community-led regulations and sanctions.

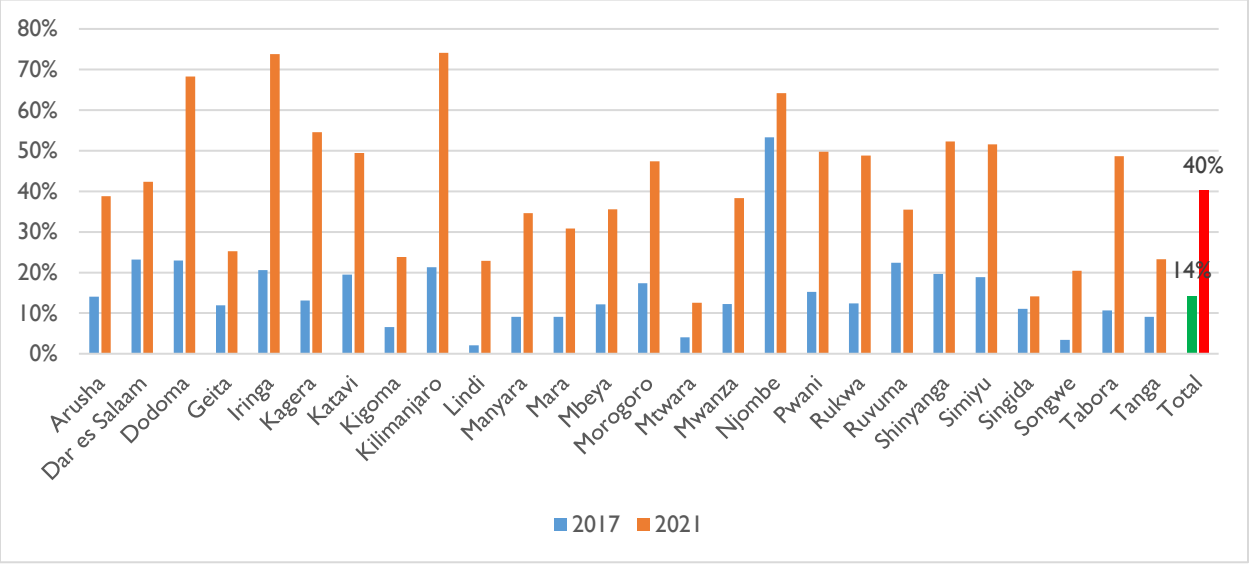
While the scope of this performance evaluation did not include an analysis of the impact of these improvements on household health indicators, district and regional health teams asserted that concerted investments in NSC have resulted in significant improvements in health indicators reported at local health facilities and school attendance across their regions and districts.

Figure 8: Proportion of Households with Improved Toilets Across the Regions in Tanzania in 2017 and 2021



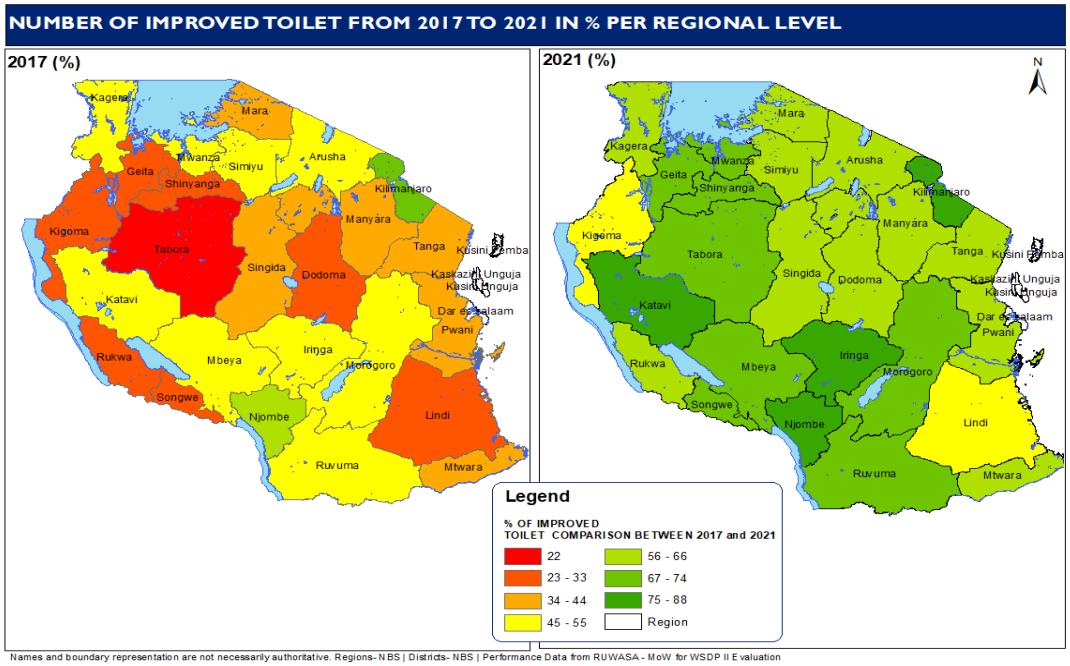
Source: Data provided to the ET by the Coordination or the National Sanitation Campaign.

Figure 9: Proportion of Households with an Installed Handwashing Facility Across the Regions in Tanzania in 2017 and 2021



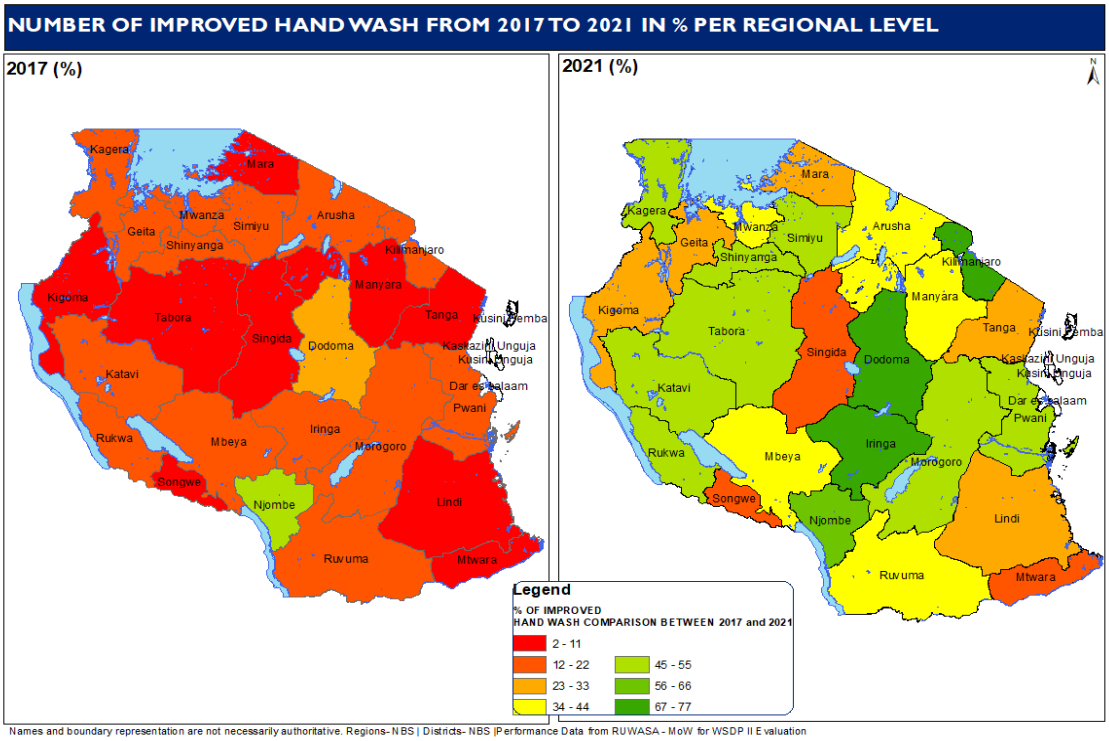
Source: Data provided to the ET by the Coordination or the National Sanitation Campaign.

Figure 10: Comparison of the Variations in Access to Improved Toilets Across Tanzania Regions in 2017 and 2021



Source: Data provided to the ET by the Coordination or the National Sanitation Campaign.

Figure 11: Comparison of the Variations in Installation of Improved Handwashing Facilities Across Tanzania Regions in 2017 and in 2021



Source: Data provided to the ET by the Coordination or the National Sanitation Campaign.

According to the National Coordinator of School Water, Sanitation, and Hygiene (WASH), most funds allocated to sanitation during the WSDP II period were donor-funded. For WSDP III, Increased government funding for sanitation is necessary. Numerous stakeholders agree that separating sanitation from other components was a critical step toward increasing funding for sanitation and hygiene as it ensured the establishment of appropriate sanitation-specific objectives and a monitoring and assessment system. As a DP pointed out in an interview, *"If I compare Phase 1 and Phase 2, I believe this is the first time in the sector here in Tanzania that sanitation has been given the amount of attention that it deserves in terms of finance."*

Key sanitation stakeholders pointed out that while having sanitation as a standalone component was a positive step toward increasing funds allocation, there was still inadequate funding which affected full achievement of the set performance targets. Out of the $150 million needed for sanitation, less than half was mobilized over the program period. A consequence of this cited by the Morogoro regional team was that they reached only 500 of the 1,000 health centers targeted to be improved under the program. The Morogoro NSC coordinator said: *"I can say that the program has been extremely successful, especially when compared to the amount of resources committed."*

Most stakeholders credited the NSC's success under WSDP II to the effectiveness of the national behavior change rallying cry—"*Nyumba ni choo"* (loosely translated to mean having a house is only an achievement when the house has a toilet)—through which various actors, including the DPs, CSOs, and NGOs, channeled their funds to support either basket funding or earmarked projects. Changing the behavior of high-level leaders, such as the president and parliamentarian, has also been critical to achieving sanitation coverage. As noted by the national sanitation coordinator:

"The biggest success for me is the change of attitude among national leaders about sanitation, because when it comes to resource allocation, it all starts with the leaders. When leaders buy your agenda, you're in a stronger position when it comes to resource allocation, so when our leaders talk about cleanliness, it means resource allocation becomes much easier, and we've been able to break through that barrier."

However, most sanitation and hygiene stakeholders from the Ministries of Education and Health expressed concern about the dwindling effectiveness of the previously effective district Council Water and Sanitation Team (CWST). This they attributed to the establishment of RUWASA, which resulted in the recentralization of district water engineers from LGAs to the national MoW, while district-level health counterparts continued to report primarily to the DED. This was a cross-cutting concern expressed by all regional WASH teams interviewed during the evaluation—that RUWASA district managers are no longer actively involved in CWST because they are no longer directly accountable to the DED but, rather, to the MoW. This, they observed, harmed the CWST's effectiveness in jointly planning water supply, sanitation, and hygiene promotion activities, and in jointly monitoring progress. They emphasized the importance of a formal MOU between RUWASA leadership and LGAs outlining how the various interrelated WASH tasks will be planned and implemented in a coordinated manner.

3.2 EQ 2: HOW EFFECTIVE AND EFFICIENT WAS THE WSDP II PROGRAM SWAP, FINANCIAL MANAGEMENT, M&E, COORDINATION, AND PROGRAM IMPLEMENTATION AT NATIONAL, REGIONAL, AND LOCAL STRUCTURES?

The second EQ focused on evaluating: 1) the efficiency of the program, *i.e.*, the extent to which the impacts and benefits arising from program activities were commensurate with the level of effort and resources deployed; and 2) how effective the program's management and delivery support was, including application of SWAP, financial management, M&E, and coordination of implementation internally within government agencies and externally with non-state partners.

Effectiveness of Sector-Wide Approach to Planning under WSDP II

According to the long-term WSDP 2006–2025, the primary objective of adopting SWAP was to close the resource gap by increasing resource mobilization through improved sector performance and by improving the planning, implementation, and efficiency of infrastructure and service delivery investments.

At the start of Phase 1 of WSDP, the original structure of SWAP was to pool resources into a common basket fund to support a single-sector policy and expenditure program led by the GoT by adopting common approaches across sectors and progressing toward reliance on government procedures for disbursement and accounting for funds. Most stakeholders believe that the envisioned SWAP approach to planning did not perform as well as anticipated under WSDP II in comparison to WSDP I. Joint committees met less frequently, and monitoring and reporting became less consistent. The reasons that key informants gave for this included, in order of importance: increased motivation to concentrate on individual projects rather than on joint planning and reporting due to shifting from basket funding to earmarked project funding, the GoT moving its offices to Dodoma, and the impact of COVID-19 on formal interactions.

Under WSDP II, the GoT's performance in implementing a SWAP for the water sector has been varied across the three different frameworks shown in Table 12.

Table 12: Core Elements of the Sector-Wide Approach to Planning Framework

Framework	Core Elements
Policy framework	• Enactment of a national sector policy and strategy • Partnership principles (common donor policies) in place • Sector Investment Plan (tool for prioritization) approved
Planning framework	• Sector Information systems – performance monitoring established • Sector Coordination – inter-sectoral, inter-agency, and with external partners • Channels of funding (basket budget support vs. earmarked funding)
Funding framework	• Financial management (transparency, accountability, value for money) • Resource mobilization – using SWAP to bridge funding gaps

Source: Adapted from Boesen, N., & Dietvorst, D. (2007). *SWAPs in motion – Sector-wide approaches: From an aid delivery to a sector development perspective*. European Union.

The GoT has fully implemented the National Water Policy (NAWAPO), which was approved in July 2002 to guide reforms in WRM, rural water supply, and urban water supply and sanitation—with the SWAP adopted as a direct response to operationalize the NAWAPO. However, the National Water Sector Development Strategy (NWSDS), which was initially developed for the period 2006–2015, has not been updated to cover the WSDP II period. A national water sector strategy is a critical institutional requirement that outlines the implementation strategy for NAWAPO. Without such a strategy, MoW's medium-term strategic plans and sub-sectoral investment program inputs to medium-term expenditure and financial planning have not been aligned with long-term national goals.

Also, the sector has not adopted a Sector Investment Plan (prioritization tool), which is critical for defining the scope and geographic distribution of investment based on the most pressing needs. Numerous stakeholders identified this as a significant impediment to Tanzania's successful implementation of the SDG's six goals. They agreed that the absence of a Sector Investment Plan through which different partners could align their earmarked funding projects was a missed opportunity to mitigate the effects of a non-functional basket fund.

Basket vs. Earmarked Funding

The basket fund motivated shared perspectives on the development of the WASH sector during WSDP I as well as shared information and responsibilities to monitor implementation. For WSDP II, most donors withdrew from the basket, preferring to directly finance and implement projects following their own policies and procedures.

Key informants from among the development partners offered insights about the motives for this move toward earmarked funding. The main themes they mentioned were:

- Excessively slow disbursements of government funds made planned implementation of initiatives difficult or impossible, while development partners provided much more timely payments through earmarked projects. A key informant said: *"There was a real challenge of the treasury of the government of Tanzania to timely disburse the funds to the implementing agencies."*
- DPs were unable to track the use and impacts of their individual contributions. A donor commented: *"There is the huge problem for the institution that when donors want to show how the money was spent, you couldn't show which schemes were being funded by yourself."*
- Constraints of the basket fund reduced innovation and flexibility. As one key informant said: "*And the scope of innovation and flexibility is quite reduced because of some of the constraints and guidelines for the basket funding."*

Several DP key informants cited benefits from the basket fund that were weakened or lost as donors directly implemented earmarked development initiatives.

- Proponents for change based on the results of joint monitoring had greater influence on decision making under the basket fund because they spoke on behalf of the whole community of development partners: *"When you are going to meet the Ministry as an individual organization and then when you are engaging with the ministry as DPs are totally different [sic]."*
- Pooling of resources through basket funding served to motivate dialogue, coordination, reporting, and joint supervision and monitoring among all stakeholders. One donor opined of the current situation with earmarking: *"Coordination meetings and all that and all this kind of thing in my view these are not working very well. Many development partners do not participate in those coordination meetings…The Ministry of Water I think [is] not active anymore and that let's say [sic] group coordination."*
- Both government and development partners are coordinating less effectively, each focusing more on the efforts of their own institutions rather than on sector-wide matters and collaborative efforts. As the representative of another donor states: *"I used to say okay, this group is going to visit in Mwanza, Shinyaga, and Tabora. And then within that group you are going to find the World Bank is there, maybe UKAID is there, maybe AfDB [African Development Bank] is there, so you see it was a joint one. But right now, it is not like that."*

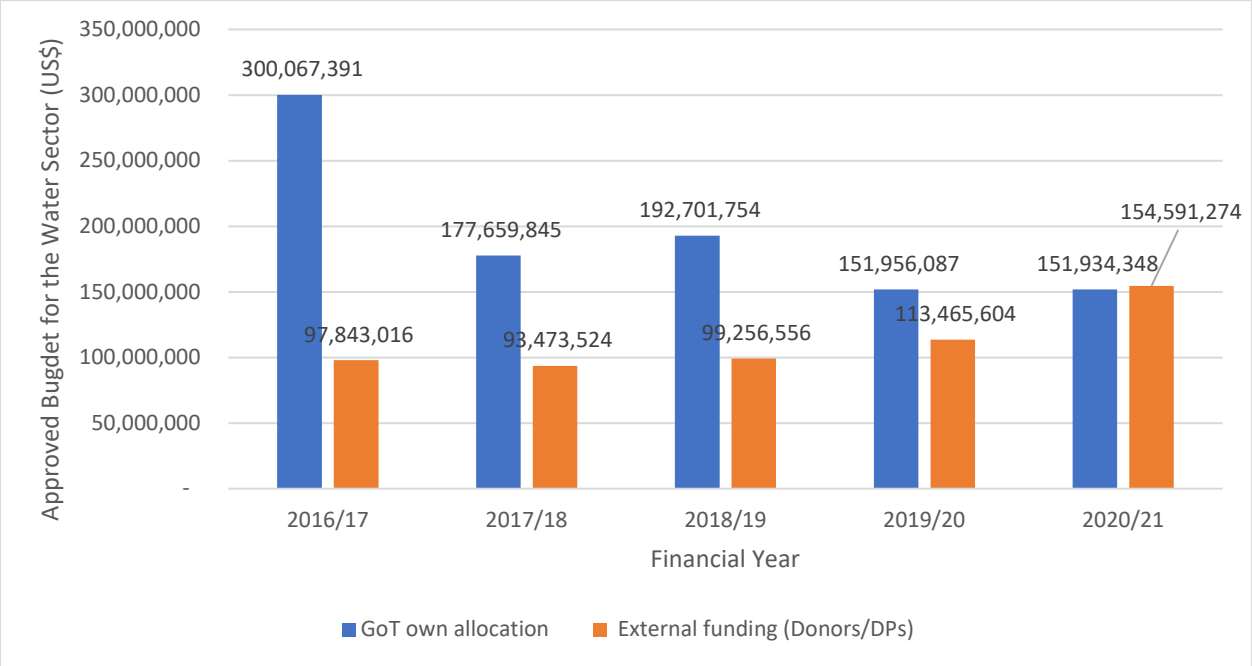
GoT staff in various ministries and agencies generally prefer basket funding versus earmarked projects. As one said: *"When we have only one organization dealing to solve rural areas of Tanzania, to me basket funding is much preferred."* Some other government staff are exceptions, referring to the relative efficiency of implementation under earmarking: *"The earmarked projects, most of them, were successful in the sense that the funding was going straight to…the constructor or the consultant doesn't take long procedures to execute [sic]."*

Financial Management Issues Under WSDP II

A cautionary note regarding the evaluation findings presented herein for financial management and general expenditure patterns under WSDP II is that they serve primarily as a summary of issues identified through data provided by MoW and interviews with key stakeholders. The analysis does not constitute a comprehensive Public Expenditure and Budget tracking exercise, which would be required to substantiate the evaluation's findings. According to financial management data that MoW provided to the ET, only 47 percent, or approximately $1,532,949,400, of the $3,275,386,000 proposed financial requirements for implementing WSDP II was mobilized and budgeted for under the approved budget between 2016–2017 and 2021–2022 (Figure 12). DPs provided just 36 percent of this funding, implying that the GoT provided most of the sector's funding. Although it improved over the years, the overall budget execution/absorption

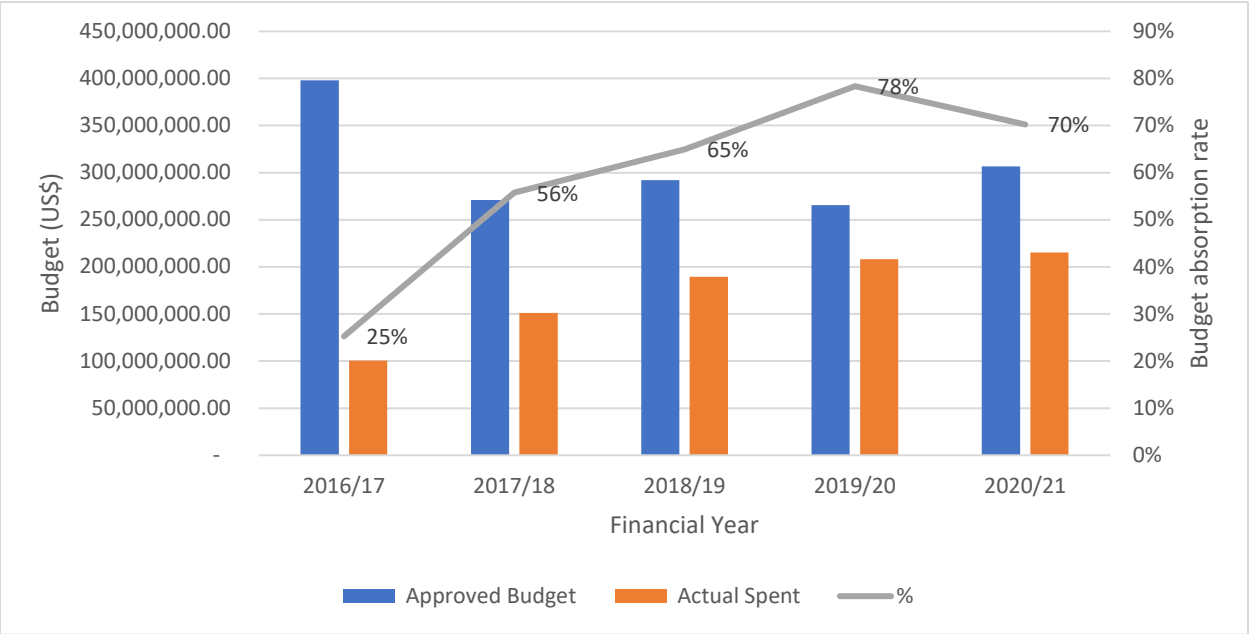
across all project components averaged just 59 percent over the review period (Figure 13). Additionally, key informants from GoT agencies implementing various components of WSDP II identified critical constraints related to delayed funding disbursement, which resulted in project activities being postponed into subsequent years. This also explains why the majority of targets were missed, as agencies were required to clear backlogs from previous years before initiating new activities.

Figure 12: Approved Budget for the Water Sector in Tanzania During the WSDP II Period



Source: MoW.

Figure 13: Water Sector Budget Absorption Rate in Tanzania During the WSDP II Period



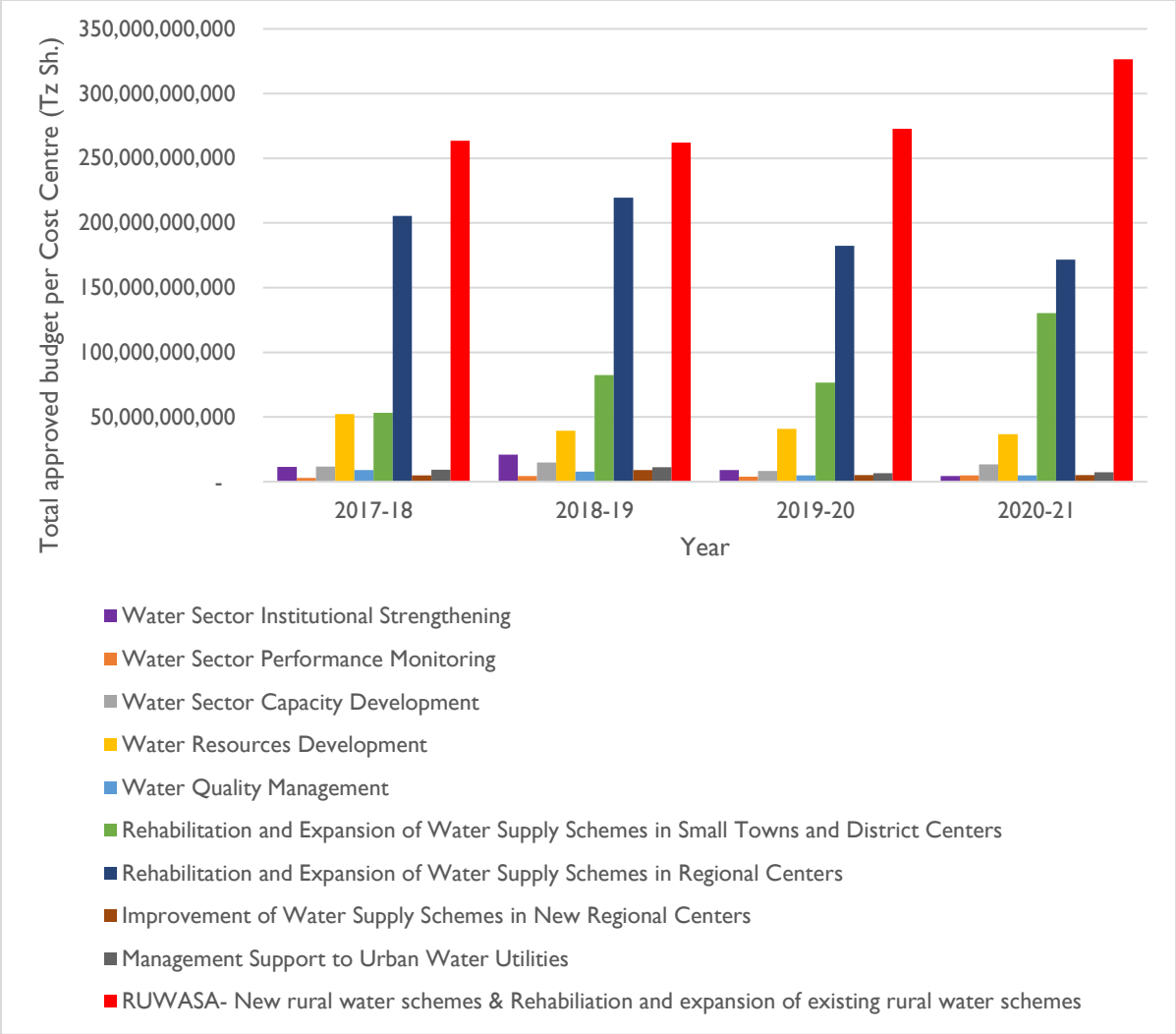
Source: MoW.

In theory, a budget execution rate of 100 percent indicates good costing, budgeting, and resource forecasting and, as such, acts as an indicator for the degree to which these elements of the budget are linked. Reasons provided by several GoT respondents interviewed to explain the low budget execution rate include poor department planning, late requisitions for funds by the vendor, incomplete statutory documentation to facilitate payments for services, and late disbursement of funds, all affecting the payment process.

Overall spending patterns

Even though water sector spending by the GoT remains less than required, there were progressive annual increments in approved budgets under the WSDP II period. Figure 14 shows there has been consistent prioritization and increased annual allocations for the construction or rehabilitation of rural water systems, followed by regional centers, and then small towns/district centers under WSDP II. A key concern highlighted by most stakeholders is the GoT's budgeting system combines data for sanitation with water, masking the low priority given to sanitation even though it is a standalone component under WSDP II.

Figure 14: Distribution of Budget Allocation Across Different Water Sector Components During the WSDP II Period



Source: MoW.

The bulk of actual spending of approved budgets under WSDP II was in building new and rehabilitating existing rural water systems (48 percent) followed by rehabilitation and expansion of water supply schemes in regional centers (37 percent). Since the expenditure data provided by MoW does not separate water supply from sanitation expenses, it was not possible to establish exactly how much was spent on sanitation.

A key observation from the financial analysis indicates that while the most of the GoT spending for the water sector under WSDP II was for rural water supply, the funding from donors/DPs was largely focused on urban water services at the regional centers, district HQs, and small towns (Table 13).

Table 13: Actual Budget Expenditures (in $) of GoT Own Funds and External Donor Funds During WSDP II Period

Water Sector Budget Line	2016-2017 to 2020-2021				
	GoT Own Funds ($)	Percent	Donor Funds ($)	Percent	Total per Category
Water sector institutional strengthening	2,648,498	93%	196,227	7%	2,844,725
Water sector performance monitoring	620,146	43%	827,176	57%	1,447,322
Water sector capacity development	3,431,380	46%	4,044,771	54%	7,476,151
Water resources development	9,281,389	34%	17,773,521	66%	27,054,910
WQM	1,195,117	43%	1,591,222	57%	2,786,339
Rehabilitation and expansion of water supply schemes in small towns and district centers	30,491,103	36%	53,976,495	64%	84,467,598
Rehabilitation and expansion of water supply schemes in regional centers	75,587,731	24%	242,164,278	76%	317,752,009
Improvement of water supply schemes in new regional centers	3,469,986	100%		0%	3,469,986
Management support to urban water utilities	2,692,515	88%	351,050	12%	3,043,565
RUWASA- New rural water schemes & rehabilitation and expansion of existing rural water schemes	359,700,637	87%	54,414,409	13%	414,115,046
Totals	489,118,503	57%	375,339,147	43%	864,457,651

Source: MoW, 2021.

Results-based financing approaches

Several key stakeholders from the GoT and DPs concurred that innovations in the deployment of funds through UKAID's payment by results (PbR) and the World Bank's payment for results (PfR) have addressed the non-functionality of rural water points by ensuring there are sufficient incentives for service providers to sustainably maintain the infrastructure in the immediate post-construction period. Also, the KfW-financed Output Based Aid for urban water authorities has not only increased funding but also facilitated organizational capacity-building through targeted training of WSSAs on business development, capacity-building for projects preparation, and monitoring. However, MoW staff cited the lengthy and burdensome results verification process as a key program constraint. They asserted that across all the key results-based financing investments, *i.e.*, KfW's Output Based Aid, PbR, and PfR, verification tended to be burdensome in terms of time, cost, and complexity, and sometimes there were disagreements regarding the accuracy of the data presented by the verification agents.

The semi-independent verification process might present one potential unintended consequence related to disbursement pressures on the side of the donors. If results for donor-verified (Disbursement Linked Indicators [DLIs][45]) are not achieved, then the donor group might still feel tempted to disburse funds, and technically they would be free to make this decision. Interviewees moreover expressed the expectation that, on the government's side, no senior officials or ministers would be fired if the results were not achieved.

[45] DLI is a financing modality where disbursement (fund release) is made on the achievement of an agreed-upon set of results, and not inputs (expenditures).

Creation of the National Water Fund

The creation of NWF to apply revenue from the levy of petroleum sales and to mobilize additional financing for all the segments of the sector (rural, urban, water resources, institutional, *etc.*) has been cited as a significant innovation to bridge the water-sector financing gap. The NWF CEO asserts that over the two years since its inception in 2019, the fund has mobilized and disbursed grants totaling TZS 780 billion ($338 million). The fund provides resources to RUWASA for rural water infrastructure development, to urban water utilities for the purpose of implementing urban water supply services, and to the nine BWBs for water catchment management projects. It has drafted guidelines for accessing its resources, and requests technical support from DPs regarding its procedures.

According to NWF leadership, the fund's current law does not permit it to support post-construction operations associated with water schemes. NWF leadership is currently considering the possibility of disbursing funds on a PfR model based on the perceived benefits of this approach. Current NWF regulations include a performance agreement with the implementing agency to which the board distributes funds for the execution of water projects, but this appears to be limited to the extent to which the implementing agency enacts critical national policies. The discussion extends to the inclusion of specific technical results, such as those used in UKAID PbR or World Bank PfR projects, as performance indicators. NWF also is considering creating a lending window for bankable projects in coordination with commercial banks. Care is needed for this activity to build in opportunities for commercial lending rather than to displace them.

General Effectiveness of Monitoring and Evaluation

Respondents from MoW headquarters indicated that its Directorate of Policy and Planning developed and used several M&E frameworks during the implementation of WSDP II, including the development of the Central Data Management Team (CDMT) at RUWASA and the preparation of a unified Integrated Water Sector Monitoring and Evaluation Framework in line with the cross-cutting, government-wide Utumishi M&E Framework. Under the PbR program, the initial CDMT was transferred from MoW to RUWASA. The CDMT—which is staffed with a manager, system administrator, and three technical personnel—continues to monitor and report on the status of rural water points. However, the unified Integrated Water Sector Monitoring and Evaluation Framework was just recently approved by MoW, thus was not fully applied during the implementation of WSDP II.

As the head of M&E at MoW stated:

"Unfortunately, the Integrated Sector Monitoring and Evaluation Framework was not officially used in the Ministry, although we used it only partially on a pilot basis during WSDP II implementation. But coming to the end of the WSDP II implementation, we found there are gaps. The good news is that the 'Utumishi' has given out the framework for all the ministries and departmental agencies for the government to use it to develop their own M&E systems. Now we have developed a draft M&E system, though it is not yet in use but hopefully it will be official soon."

One particular challenge that the MoW M&E department pointed out is the difficulties around how to monitor and report on the contributions of earmarked projects to the overall WSDP II targets—because different donors have their own M&E systems, which were not aligned or integrated with the MoW M&E system. As one MoW staff member pointed out:

"Sometimes there [was] confusion, sometimes you find the program is implementing M&E. At the same time the Ministry is implementing M&E. It becomes like fragmented M&E that in this week you will have someone coming to undertake M&E [and] after a week you someone else will come to undertake M&E, [and] after a week someone also is coming from the Ministry to undertake M&E. So, there are something like confusion undertaking M&E [sic]. So, this will be now taken into consideration when we are now preparing for the M&E for the water sector so that we shall not have this double monitoring on the same."

Before the establishment of RUWASA in 2019, M&E data for WASH were collected from implementing districts via the DWEs, who would compile data from water, health, and education departments. They forwarded the data to the Regional Technical Water Advisors, who would then send it to MoW. Most of the regional and district WASH teams, consisting of officials from MoE and MoW, stated that the recentralization of rural water supply from the LGAs back to the national level at MoW through RUWASA, has increased the challenge of collecting integrated WASH data through the CWSTs because RUWASA seems to have stopped its active engagement with other district-level counterparts from MoE and MoH. This implies that the three ministries have different reporting systems, with little information sharing between the GoT agencies that have a mandate for water supply and sanitation.

The M&E system for the sanitation and hygiene component under the NSC was noted to be quite comprehensive, with quarterly data collection at the household level. However, this faced challenges related to adequate financing and insufficient staff to undertake the actual data collection. As some district-level health officials noted:

"Data collection needs resources, we need human resources, and we need financial resources. We do not have adequate human and financial resources; in most cases we had recruited some volunteers at community level, we trained them to do the data collection, we call them volunteers, but we had to find some way of motivating them through a small token so that they collect the right data."

A key respondent from GoT participating in the implementation of NSC noted the existence of different M&E systems for the different WSDP II implementing sectors. This remains the primary concern for harmonizing sector monitoring and reporting:

"Every sector (read component of WSDP) has its own system. For example, when you go to health maybe, they have national information system for sanitation. And when you go to RUWASA, they have their own system. And these systems, they are not working together, and when they do the monitoring, when they run the reports, sometimes each part delivers or produces its own reports on its own way of monitoring. So, I think we're supposed to make sure we strengthen monitoring and evaluation."

Key Issues Observed Related to Joint Sector Reviews and Coordination

According to most stakeholders interviewed, the transition to earmarked projects during WSDP II significantly reduced overall incentives for sector dialogue. As one DP respondent put it,

"...[We] participated but it lacked continuity because when [sic] development partners stopped financing the joint water sector review conferences of the meeting then we did not convene as planned. We are supposed to meet once a year [sic]…so moving forward maybe is to find out the best way of financing the joint water review meeting because these are very helpful when it comes to monitoring the progress of the sector."

Additional factors cited by various stakeholders as contributing to the dialogue mechanism's overall decline included the GoT's relocation to Dodoma (MoW and other line ministries) while DPs remained in Dar es Salaam—resulting complexities of travel logistics and associated costs to conduct regular meetings—and MoW's failure to finance the dialogue mechanism through its own resources. Other DPs noted that they were increasingly dissatisfied with certain meetings that appeared to be too large to be productive and resulted in extremely lengthy and cumbersome-to-read reports.

Between 2016 and 2019, MoW and its DPs conducted three joint supervision missions—comprised of line ministries, departments, agencies, and development partners.

During the WSDP II Mid-Term Review, MoW and its DPs convened a critical roundtable meeting to review the existing dialogue structure, which both actors agreed was ineffective in meeting WSDP II's joint planning and coordination requirements. The existing dialogue mechanisms included Technical Working Groups (TWGs) with a chair and co-chair, as well as a high-profile Steering Committee (SC) chaired by the MOW Permanent Secretary and comprised of the Deputy Permanent Secretary MOW and

the Director of Project Preparation, Coordination, and Delivery Unit (Secretary), as well as other senior government officials, including the Permanent Secretary.

The re-enhanced dialogue framework adopted following the roundtable was aimed at: 1) reducing the burden on MoW's reporting and compliance requirements to realistic levels based on minimum requirements and as closely aligned as possible with the government reporting system; 2) adopting a thematic approach and reducing the number of sector dialogue meetings through structural changes; and 3) establishing a protocol for cost sharing/contribution to the dialogue between the GoT, CSOs, and private-sector actors. The major structural change was the transformation of the existing five TWGs into four Thematic Working Groups – Financing and Planning, Institutional Capacity-Building, and Performance Monitoring; Water Resources Management; Water Supply and Sanitation service delivery; and Sanitation and Hygiene—which would meet quarterly to discuss and agree on strategic sector and program issues, strategies, policy options and choices, and implications, *etc*.; and identify and prioritize sector and program issues. Additionally, to improve coordination, it was agreed that the Joint Water Sector Review will convene once a year beginning in March 2019.[46]

Following these agreements on the re-enhanced dialogue framework, the first Maji Week event was held in March 2019, and a dialogue calendar was developed and distributed. Despite this, very few dialogue meetings occurred following the agreements. The second Maji Week was abruptly canceled due to the COVID-19 pandemic. The ET noted that some respondents continue to value the dialogue mechanism and wish to see it enhanced. According to a key informant from the WSSAs, they are grateful for the joint supervision mission: *"Joint supervision missions were beneficial in several ways, either when the team visited our projects or during some occasions, like Maji Week. We had strong discussions regarding the projects, regarding challenges, and the way forward. How we can improve the performance so that approach somehow was successful."* He also remarked that it can be challenging if, *"[the] majority of the people attending the missions were new to the project."*

Cross-water-sector coordination has generally improved and is evidenced by the number of meetings held in the nine river basins. Data show that 3,040 stakeholders participated in catchment or basin fora to improve cross-sector coordination. As one key informant reported, the 2030WRG started early versions of catchment fora in the Pangani Basin:

"When we formed the KIKULETWA water stewardship forum WSDP II, the integrated forums were not yet established, so through working together with the MoW and through learning and cross learning, the MoW took the idea of establishing the catchment forums, that is what happened. They learned a lot from what happened in the KIKULETWA forum, the KWSP (Kilimanjaro Water Stewardship Program). Through lessons learned there they replicated the same structure to all other basins."

Findings on Coordination Among GoT Agencies

Several stakeholders within the GoT performed different roles during the WSDP II implementation sector. At the national level, implementation was jointly led by MoW for urban and rural water supply and urban sewerage policy and strategy planning; the Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDEC) on sanitation and hygiene planning; the Ministry of Education, Science, and Technology (MoEST) on SWASH; and PO-RALG coordinating planning and implementation support at the local, regional, and district levels.

Most stakeholders, particularly those from WSDP II partner ministries such as the Ministry of Health, countered that the establishment of RUWASA resulted in a lull in coordination at the regional and district levels. Previous coordination appeared to have been more effective as provided by CWST—which was chaired by the District Executive Director, with the DWE as Secretary and members drawn from other

[46] Ministry of Water. November 2018. Enhanced Dialogue Mechanism for the WSDP II; MINISTRY OF WATER. October 2018. Report Of The Roundtable Meeting Between The Government Of Tanzania And Development Partners Group – Water.

sectors. The CWST met on a regular basis to plan for and monitor many WASH-related activities implemented at the district level. Respondents reported that with the move to have district managers report centrally to MoW through RUWASA, the CWST seems to have lost its effectiveness.

According to respondents from health and education agencies, coordination has become more ad hoc in nature, relying on individual goodwill and personal working relationships. On the other hand, interviews with key informants from RUWASA and some basin-level staff revealed a positive perspective regarding coordination, indicating that some basins developed mechanisms and established MOUs to facilitate effective collaboration between RUWASA and BWBs on water source identification and conservation measures.

3.3 EQ 3: WHAT ARE THE KEY LESSONS LEARNED, ENABLING FACTORS, AND RISKS IN SUSTAINING WSDP II PROGRAM OUTPUTS WHICH SHOULD INFORM THE DESIGN OF WSDP III?

EQ 3 focused on sustainability of program outputs, evaluating their strategy/approach and coordination, to develop key lessons learned to inform the design of WSDP III. While the design of WSDP II incorporates clear sustainability strategies for each program component, agencies did not implement all activities designed to support long-term sustainability of its outputs during the review period.

SWAP and its utility in implementing WSDP II: According to the majority of MoW respondents interviewed during the evaluation, the initial conceptualization was that SWAP would support a single expenditure program controlled by the GoT and relying on government procedures for disbursement and accounting for all funds. However, during WSDP II, difficulties with timely disbursement of funds to implementing agencies and concerns raised by some DPs about the difficulty of receiving full accountability for procurement and fund deployment caused them to revert to earmarked projects. Additionally, MoW raised concerns about directly attributing WSDP II results to earmarked projects undertaken by DPs such as USAID and SNV Netherlands Development Organization (SNV) that do not typically channel their funding through the common government pool. The key lessons learned regarding SWAP's utility are: 1) the need for an expanded view of SWAP that goes beyond a sole reliance on government procedures to disburse and account for all funds to one centered on its broad application focused on aligning individual WASH investments, even by non-pooling DPs, with a clear government policy and investment program vision for the sector; 2) a broader funding base that accounts for non-pooled investment projects; and 3) an elaborate jointly developed monitoring framework (beyond a dialogue mechanism) that accounts for both direct GoT implemented investments as well as non-GoT WASH investments in the WASH sector

Establishment of RUWASA was a bold step toward improving rural water services delivery, but post-construction O&M sustainability remains a key risk: While RUWASA has taken steps to improve the capacity of CBWSOs, both GoT and non-GoT interviewees expressed a concern that the preparation of projects overlooks technologies that lower O&M costs (such as solar power), mainstream revenue enhancing technologies (*e.g.,* use of pre-paid meters), and require beneficiaries to commit to pay required tariffs as a precondition. Also frequently cited are inadequate staffing in RUWASA and still-developing operational capacity that remain insufficient to ensure the sustainable functionality of rural water points at a national scale. As one RUWASA official observed, there are cases where a whole district has one vehicle and three technical staff, but they are expected to oversee, monitor, and build the capacity of over 200 rural water supply schemes under their jurisdiction.

Structures are still not in place for regulating rural services delivery: Weak regulation of rural service delivery is a key risk to sustainability. RUWASA needs to build its capacity to regulate CBWSOs, which are the service providers for most Tanzanians living in rural areas. EWURA can potentially assist RUWASA in this task based on its well-developed regulatory processes, with support from DPs. The lack of clear instruments for regulating services delivery by CBWSOs presents a significant risk for maintaining

the water access levels achieved under WSDP II—with a fear among stakeholders that the large amount of investment in rural areas done by RUWASA is unsustainable.

PfR was a key enabling factor of sustainable service delivery but risks not being scaled up independently by the GoT: Many DP representatives interviewed expressed a concern about the continuity of the performance-based financing instruments introduced during WSDP II beyond the end of those programs. They recognized that these approaches incentivized a culture of sustainability in the sector, although the formal evaluation to demonstrate this for UKAID's rural water program is still underway. One key informant expressed a low level of confidence that MoW would independently adopt and scale up these approaches using its own funding after WSDP II. MoW respondents did not express a commitment to scale up these approaches countrywide. There were concerns about lengthy verification processes and delays in fund disbursement after the verification of results is complete. Several stakeholders cited these as risks to the pay-for-performance approach. WSDP III should analyze early on how timing compares between disbursements of GoT and PbR/PfR, the reasons for delay in verification of results, the receptivity of stakeholders to being held accountable for delivery results, *etc.*

The underfunding of BWBs presents a major risk to the significant gains made in improving WRM: The evaluation found that WSDP II financed several interventions aimed at improving the conservation and management of water resources. This included undertaking detailed studies to understand the characteristics of the nine water basins, accounting for the use and allocation of available water resources, establishing a sub-catchment water committee, developing IWRMDPs, and establishing and building capacity into WUAs across all basins. These gains are at significant risk of being eroded if the status quo on the underfunding of basin water offices (BWOs), coupled with severe staff shortages, is maintained—because most BWBs are in precarious financial situations and, thus, not able to effectively complete even basic operational monitoring functions. There is insufficient cash flow to support their operations, which resulted in a consistent failure to execute the development of IWRMDPs or offer support to WUAs to implement local adaptive water conservation measures.

GoT staff cited delays in disbursing funds from the national treasury to different WSDP II implementing agencies; this hindered timely program implementation: Most GoT staff interviewed indicated that release of funds frequently occurred near the end of a financial year, which stymied the achievement of annual targets. In most cases, they had to continue implementing the previous financial year's activities into the next financial year. Their focus shifted to pending projects with little attention paid to the sustainability of the interventions. This challenge was also highlighted by GoT respondents as a contributing factor to low budget absorption rates since the allocated budgets are released much later in the fiscal year in such a manner that the agencies are not able to fully absorb it.

Key issues and lessons learned related to sanitation and hygiene: Facilitating NSC under a collectively adopted, overarching strategic theme of a national behavior change rallying cry—"*Nyumba ni choo*," as well as securing the endorsement of high-level government officials such as the President's Office and Members of Parliament to further support behavior change calls, all contributed significantly to achieving sanitation coverage and hand washing behaviors. Additionally, persistence of ODF in some locations has been attributed to "defiant" households, *i.e.*, households that have resisted calls to upgrade their latrines and have remained stubborn in doing so, as well as the existence of socially and geographically isolated households. This necessitates targeted messaging, re-education, and demonstrations of various sanitation technology options, as well as the enforcement of government regulatory actions in conjunction with community-led regulations and sanctions targeting the stubborn households.

Key issues and lessons learned related to gender and inclusion: From the review of key documents and through KIIs, it was difficult to ascertain the impact of WSDP II on gender inequality in the water sector. The program design lacks clear gender mainstreaming monitoring indicators. This precludes a complete picture of the program's impact on women. BWB stakeholders report that women hold leadership positions in community institutions such as the Pangani and Wami/Ruvu basins' WUAs, as

well as the CBWSOs in Njombe, but their active participation is lacking. They ascribe this to deeply ingrained cultural perceptions and values that limit the roles of women to specific decisions in the household with little opportunity for decision-making outside of the household.

Key issues and lessons learned related to private-sector participation in the water sector: Many officials interviewed from MoW, RUWASA, regional offices, and WSSAs stated that private-sector actors have primarily been input suppliers and contractors providing services to design, supervise, and build water infrastructure. However, the evaluation identified significant positive steps toward increased private-sector engagement in the water sector. The 2030WRG public-private participation platforms, such as those established in the Kilimanjaro Basin, involved private-sector players including Kilimanjaro Water, Coca Cola, and Serengeti Beer in local dialogues, frequently contributing funds and materials to projects aimed at improving WRM that benefited both the community and their businesses. Also, private commercial banks provided significant financing for urban WSSA projects and have indicated a willingness to increasingly do so in the future. Through the KfW-supported, output-based commercial financing program between 2015 to 2021,[47] different banks, including Tanzania Investment Bank (TIB), National Microfinance Bank (NMB), and CRDB, have provided loans of up to $8.5 million to several WSSAs including Songea, Moshi, Tabora, Kahama-Shinyanga, Mwanza, Tanga, Iringa, Morogoro, and Singida. Also, KIIs cited the emergence of a nascent private sector for urban sanitation services in off-grid areas, including emptying household septic systems, as a positive development and an opportunity to expand PPPs to reduce water supply and sanitation service gaps.

Generally, the evaluation found that Tanzania is at an early stage of creating opportunities for private firms to share greater risk with the GoT and invest their own money through PPPs. The World Bank has been supporting PPP initiatives—including private-sector provision of solar power for rural water, performance-based contracts to reduce NRW, and management of a multi-village rural water scheme—but this was fully financed by the GoT through a World Bank grant with the private operator only installing the technology and managing service provision over a period of time (five years). Interest by GoT in using the private sector is increasing. For example, the Ministry of Finance requested support for PPP preparation, and RUWASA has private participation units that seek assistance.

Educating the private sector is also required. A recent forum to advance the PPP agenda had local contractors expressing interest in accessing a larger share of government- and donor-financed work rather than taking risks from investing their own money. GoT officials still largely see private firms as input-based contractors or suppliers rather than potential performance-based project delivery and co-financing partners. As one donor representative succinctly observed:

> *"There has not been much in progress with PPP projects in Tanzania and one reason is because we do not have expertise in the preparation of the PPP. Expertise where? We do not have expertise at the MoW; we do not have expertise at the water and supply and sanitation authorities; we do not have expertise in the consulting industries, in the country....Unfortunately, we have been living with a failure in mind of what happened to the very big project that could not come up positive in Dar es Salaam and as a result we have not developed much in that area."*

Another respondent from the DPs group indicated that a policy constraint limited the success of PPPs in Tanzania's water sector: *"The biggest challenge that I have seen is the policies. If you look at the policy which talks about the water up there, but nobody can do business in water, only the utilities in their area of jurisdiction."*

Another development partner opined that: *"In terms of how to partner with the private sector and getting more involved…[it] still requires more thinking for the private sector to value this kind of engagement [and] to want to be part of the discussions and solutions a little more."*

[47] KfW Investment Financing Facility–Output Based Aid Program. http://iff-oba.org/index.php.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

Following are the key conclusions made from evaluating WSDP II.

EQ 1: To what extent has the design and objectives of WSDP II program components been designed to meet the needs and challenges it sought to address among target beneficiaries? To what extent has it achieved the expected results according to its results framework and KPIs?

The WSDP II objectives and design were generally consistent with Tanzania's primary water and sanitation challenges, aligned with national priorities, and responsive to the needs of targeted beneficiaries. The evaluation found that the program made significant progress in some areas yet fell short of addressing critical persistent sector challenges in other key areas.

The following are the key conclusions of each component of the program:

Component 1 – Water Resources Management

It could be that the design of WSDP II was overly ambitious in setting WRM targets. That said, the WRM investments made during the WSDP II period could not meet several of the key performance targets set for the program. This is particularly concerning given that Tanzania faces an increased risk of a declining water resource endowment resulting from several factors—rapidly increasing populations, continued catchment degradation, and rapid economic development and urbanization increasing demand for water services.

In WRM, good progress was made toward the construction of physical facilities with an emphasis on water supply development. Funds budgeted for long-term issues such as water quality improvements, catchment maintenance and protection, and the ability to monitor water availability and access were not available. Shortages of staff, particularly in BWBs, stymied the realization of the set targets. In particular, shortages limited BWBs' ability to offer consistent extension services and capacity-building support to community-level WUAs and created a lag in implementing the developed IWRDMPs.

A lack of funding—with only 16 percent of the total funds budgeted mobilized to fully implement WRM targets under WSDP II—led to the failure to meet most of the set performance targets. This situation was exacerbated by low budget absorption rates for the approved WRM component budget.

Improvements will only occur if more funding is allocated for WRM and the level of staffing and capacity development across the BWBs is increased. Better resource utilization is required as well as more pragmatic target setting.

Component 2 – Rural Water Supply and Sanitation

The establishment of a specialized rural water services delivery agency (RUWASA) mandated to ensure sustainability has been lauded as a significant positive step by stakeholders from the GoT, DPs, and civil-society actors. WSDP II made significant progress increasing the number of functional rural water points. However, the sustainability of service delivery to rural populations benefiting from the increased number of water points remains a challenge requiring further investment and system-strengthening actions. The agency is still developing operational capacity to ensure timely delivery of technical support to CBWSOs for sustainable functionality of rural water points at a national scale. RUWASA's low funding levels and inadequate staffing are making this more difficult.

RUWASA's plans to implement clustering of rural water points, providing economies of scale, are challenged by CBWSOs generally being poorly equipped, lacking technical skills, and being in need of professional management. Failure to consolidate and protect progress made will increase the risk that the large investment in rural areas may be unsustainable.

Component 3 – Water Supply and Sewerage in Urban Areas

WSDP II made significant progress in providing urban populations with access to water, (*e.g.*, in all categories of WSSAs), hours of service (regional and district and township WSSAs) and quality of water (all categories of WSSAs). However, WSDP II made little progress in providing safely managed sanitation services for the approximate 87 percent of urban residents who have no access to sewers. Pilot tests in Dar es Salaam, where the urban water authority is implementing off-grid sanitation; and in Mwanza, using small-diameter condominial sewers are beginning.

The operational indicators for regional utility, district, and township WSSAs improved consistently over the WSDP II period. Utilities in aggregate bill enough revenue to cover their cash operating costs. They have made significant improvements in lowering NRW levels.

Commercial financing blended with output-based grants improved infrastructure and supported the financial sustainability of WSSAs. This serves as an example for MoW to adopt both output-based funding and blending of grants with commercial financing to make debt financing affordable for WSSAs. It also is piloting testing PPPs for implementing solar-powered pumping and prepaid metering. The newly established NWF can be a vehicle where donors and government pool their resources while distinguishing the application of each donor's funding.

Component 4 – Sanitation and Hygiene

During WSDP II, most regions across Tanzania recorded significant increases in the number of households using improved latrines and possessing handwashing facilities. A success of the sanitation and hygiene component during WSDP II was attributed to the separation of sanitation from other water sector components and good support from high-level political leaders who championed the "*Nyumba ni choo"* campaign to drive behavioral change. GoT mobilized less than half of the budgeted $150 million during the program's duration, which led to a failure to fully achieve the set performance targets. Coordination issues between GoT agencies at the district level became more problematic and urgently need to be resolved.

EQ 2: How effective and efficient was the WSDP II's SWAP, financial management, M&E, coordination, and program implementation at the national, regional, and local-level structures?

Most stakeholders believe that the envisioned SWAP approach to planning did not perform as well as anticipated under WSDP II in comparison to WSDP I. Three factors contributed to this lack of sustained success: 1) the shift of development partner funding from basket funds to earmarked project implementation; 2) the relocation of the GoT's administrative capital from Dar es Salaam to Dodoma; and 3) the COVID-19 pandemic, which restricted frequency of coordination and direct engagement between the partners.

Commitment of only 47 percent (approximately $1.53 billion) of what was budgeted to implement WSDP II, plus an execution/absorption rate of 59 percent, resulted in WSDP II missing most performance targets. Diversified resource mobilization through the establishment of NWF disbursed $338 million to the water sector for the future.

While the challenge of not being able to fully mobilize the funds envisioned to implement WSDP II negatively affected the achievement of key targets, particularly for WRM, the budget expenditure data showing low absorption of the already approved budgets compounded the effect of the funding inadequacy. This presents a missed opportunity by MoW to mitigate the effect of low funding by improving

disbursement rates and internal organizational capacities to maximize utilization of the already obligated funds.

The inability to implement the unified integrated Water Sector Monitoring and Evaluation Framework (WSMEF) throughout the WSDP II period resulted in an uncoordinated monitoring of program performance and significant data gaps.

EQ 3: What are the key lessons learned, enabling factors, and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

The following are the key conclusions made related to the sustainability risks of WSDP II outputs:

- Innovative funding mechanisms such as UKAID's PbR and the World Bank's PfR helped address the persistent sustainability challenge of rural water points. The lack of a clear GoT continued commitment to expand adoption of these approaches could erode gains made during WSDP II.
- Lack of clear structures for regulating rural service delivery poses a risk to maintain the WSDP II-achieved levels of water access. If this happens, RUWASA's substantial investment in rural areas is in jeopardy.
- The inadequate human capital at BWBs, coupled with underfunding of WRM activities, jeopardizes the significant gains made in improving WRM, as cash flow shortfalls stymie the execution of IWRMDPs and technical capacity-building support to WUAs to implement adaptive water conservation measures at the local level.
- The absence of a gender mainstreaming strategy precluded measurement of the program's impact on women's empowerment and gender equality.
- The capacities of both the GoT and private sector to identify, prepare, tender, and supervise specific PPPs need to be enhanced. The private sector needs to move beyond input suppliers and become partners—and the GoT needs to accept them in that capacity.
- Since the formation of RUWASA, district-level coordination between ministries and with local government became weaker, with district managers reporting centrally to MoW through RUWASA and not participating in CWSTs.

4.2 RECOMMENDATIONS

Based on the evaluation findings across the three EQs and the above conclusions, the following recommendations identify areas for MoW to prioritize when designing Phase 3 of the Water and Sanitation Development Program.

Recommendation 1: MoW should prioritize updating its NWSDS with an accompanying National Water Sector Investment and Financing Plan prior to rolling out the design of WSDP III.

MoW should update its NWSDS (which lapsed in 2015) and develop a coherent National Water Sector Investment and Financing Plan that details expenditure levels and access targets for each sub-sector of water and sanitation—including a general framework for funding and capacitation as well as project selection and prioritization to be applied by the GoT, communities, and DPs.

As a precursor to updating the NWSDS and a detailed design of Phase 3 of WSDP, it is recommended that MoW undertakes a quick Analytica work to develop WRM and WSSA service coverage scenarios—*i.e.*, what can be realistically achieved at the national level within a certain period of time, say by 2025 or 2030, under different assumptions of water supply and sanitation service level and WRM investment mix—and estimate the capital and recurrent costs of each scenario. This is particularly important considering the concerns emerging during the WSDP II final evaluation related to whether the targets set for different

components were realistic or overly ambitious. Based on such a scenarios analysis, it would be easier for MoW to develop possible scenarios—*i.e.*, identifying credible sources of financing and the key reforms needed to unlock those financing sources.

Based on the National Water Sector Investment and Financing Plan, specific geographically located earmarked projects can be selected by communities through a bottom-up approach by WSSAs, RUWASA, and DPs for financing through different measures—including applications to the Water Fund or through external grants and aids. This plan would then establish a common investment framework around which all sector actors could align their earmarked projects, while also ensuring that project selection followed a sector-wide planning and monitoring approach as provided for in the National Water Sector Investment and Financing Plan.

A major issue observed during the evaluation is a gap in the coordination of earmarked projects implementation by DPs and the WSDP project management at MoW. To enable a direct attribution of earmarked project's contribution to WSDP II funding and results reporting, there should be a clear MoU between MoW and DPs implementing their projects directly specifying procedures that will be used for data sharing on project spending and results reporting. The development of projects to be implemented through earmarked funding by DPs should also be done in coordination with MoW to ensure that the projects are designed to align to specific aspects of the overall National Water Sector Investment and Financing Plan so that it becomes easier for MoW and DPs to make a direct attribution of the outcomes to the overall outcomes of WSDP.

Recommendation 2: Financing for urban sanitation should be more targeted by adopting a Citywide Inclusive Sanitation approach during Phase 3 of WSDP in close coordination with WSSAs.

The rate of growth of grid-connected conventional sewer lines and central treatment facilities has been extremely slow, putting the sewer connection target way off track. Most of Tanzania's urban population most likely will continue to use on-site latrines and septic tanks for the foreseeable future, with inadequate or no treatment of sludge. Dar es Salaam and Mwanza have already demonstrated the viability of a Citywide Inclusive Sanitation (CWIS) approach to expanding sanitation access, which includes a mix of conventional and condominial sewer lines plus other NSS solutions that orchestrate coordinated roles of WSSAs, LGAs, and private-sector initiatives to collect and treat sludge. The GoT needs to scale up investments in urban sanitation under WSDP III, leveraging these efforts and packaging of sanitation investments to include solutions that best fit specific communities at affordable cost rather than having an increased focus on sewer lines alone.

WSDP III must scale up addressing the unmet needs for safely managed sanitation for urban centers using an appropriate mix of sewer networks with centralized treatment facilities and off-grid systems and decentralized sludge management.

Recommendation 3: Under Phase 3 of WSDP, MoW should have a focused strategy on promoting (or "crowding in") access to commercial financing by WSSAs and on improving their efficiency to be financially self-sustaining to reduce the burdens they currently impose on public funding when they can actually be self-financing.

This could be accomplished by scaling up the innovative performance-based contract approach for NRW management (currently under pilot testing in DAWASA with support from the World Bank); providing human resources for monitoring activities; and increasing capacity for enforcement and permitting under the new regulations and fee schedule.Urban water authorities already have demonstrated significant improvement in operational efficiency indicators over the WSDP II period, with many covering their operational expenses without reliance on the GoT for operational subsidies. Some WSSAs also contribute toward their capital investments. Also, due to the success of the pilot KfW output-based commercial financing program, the utilities have demonstrated an increased

appetite for commercial financing and banks for lending to them. MoW and its DPs should continue to promote access to commercial financing through a variety of measures that can include:

- Providing technical support to help creditworthy WSSAs prepare bankable projects and applications for financing, including smaller projects, and to help weaker WSSAs develop, finance, and implement business and performance improvement plans aimed at increasing operational efficiency and commercial performance toward full creditworthiness.
- Expediting ministerial approvals of commercial and development loans.
- Investigating and promoting the issuance of bonds by utilities and municipalities.
- Providing lines of credit to commercial banks for on-lending to WSSAs.
- Developing national practice guidelines for WSSAs on structuring, applying for, and utilizing commercial financing.
- Managing the persistent and pervasive problem of NRW which, although slowly lessening overall, needs continuing enforcement and management of fee scheduling under the new regulations.

Recommendation 4: RUWASA should explore alternative outsourcing models for supporting rural water services delivery organizations and adopt a hybrid regulation model featuring a partnership between RUWASA, EWURA, and stronger multi-village CBWSOs.

RUWASA should explore different possible options for how the rural schemes can be managed by professional service providers. The options could range from using well-capacitated CBWSOs and private operators on contract with RUWASA for back-stopping and maintenance.

To improve regulation of rural water services delivery standards and revenue collection and maintenance of the water schemes, RUWASA and EWURA should explore piloting a hybrid regulation system for rural water services. RUWASA would get operator licenses from EWURA, then delegate O&M through a service provision contract with a designated O&M service provider. The operator could be a CBWSO or private operator. Like the annual performance reports for urban water authorities, EWURA would produce a performance report for different recognized rural operators overseen by RUWASA.

WSDP III should continue exploring options to strengthen backstopping of rural services providers. This can include assessing and adapting systems in other countries for CSOs and others to take on monitoring and backstopping outsourced from RUWASA. Also, development of a hybrid regulatory structure is possible that includes compacts between RUWASA (technical and financial supporter and regulator), CBWSOs (service provider and asset owner), and EWURA (supporter of RUWASA's regulatory role) to enforce water service delivery standards.

Recommendation 5: MoW and its DPs should take deliberate measures to increase targeted investments for WRM through local adaptive resource management approaches involving WUAs in addition to providing more funding to strengthen staffing and the technical capacity of BWBs.

BWBs are severely understaffed and underfunded to fully implement their mandate. This significantly affects their ability to undertake their functions—including effective water resource monitoring, conservation, and support to community-level water conservation. MoW under WSDP III should first focus on increasing the number and capacities of qualified staff for each BWB. Local community-based WUAs have the potential to collaborate with BWBs to perform various functions related to water resource conservation and monitoring. BWBs can officially sign a performance-based partnership with WUAs in which WUAs are empowered to perform certain conservation and water-use monitoring functions within their local sub-catchment, including monitoring the implementation of IWRMDPs and receive a proportion of water permit fees collected within their sub-catchment of operation in return.

The three objectives of such a performance-based partnership would be: 1) strengthen WUAs' institutional and financial capacity for sustainable water resource use, 2) increase BWBs' efficiency and effectiveness in carrying out their functions, and 3) improve water catchment area management and mitigate water quality degradation.

Recommendation 6: Undertake strategic investments which will reduce flood and drought.

The MoW should develop strategies that encourage community mobilization to harness flood and drought risks exacerbated by increasing populations and climate change. Households should be encouraged to harvest rainwater to reduce demand on water supplies; communities should be encouraged to plant trees and grasses to reduce erosion; and unsubstantiated plans to improve water catchments should be prioritized by BWBs in WSDP III. Concomitant improvements in waste management should be undertaken with continued support for campaigns such as "*Nyumba ni choo*."

Recommendation 7: MoW should partner with the DPs to scale up NWF as an innovative sector-financing model that blends public grant and loan financing, channels DP resources, and preferably incorporates a MoW-developed performance-based mechanism to incentivize institutional strengthening and capital efficiency.

NWF should be supported in its intention of developing its own lending window for financing bankable projects. It can blend public grant financing with these loans and those of commercial banks to make them affordable. NWF can also be a vehicle that channels DP resources in addition to its own revenues since it provides a leeway for DPs to specify the types of projects they finance and to monitor and evaluate the application of their funds to specific projects.

NWF should pilot test and potentially adopt a performance-based approach for disbursing funds where funds are only released based on meeting a set of minimum access conditions (MACs) and achievement of variable performance indicators in a specified funding period. This would apply to all recipients of its funding, including the urban water authorities, BWBs, RUWASA, and expand its scope to include WUAs and CBWSOs for local level WRM and O&M service delivery. The MACs could include a raft of institutional requirements such as fully established/registered WUAs; CBWSOs with requisite organizational units and capacities; approved local water conservation and monitoring plans for a sub-catchment that is consistent with the basin-wide IWRMDPs; approved rural water scheme O&M plan; and financial accountability and transparency measures. The PfR approach for rural water can provide lessons learned as it already applies several such conditions. NWF should take care to avoid the excessively long delays to disburse funds that have plagued the implementation of the basket fund.

Recommendation 8: Review the structure of the GoT–DPs joint planning and coordination framework and establish a national M&E system for all water sector interventions from the onset of WSDP III.

MoW and the DPWG should reflectively review the sources of failure of the current dialogue framework. This could involve adopting a different approach to manage and improve the frequency and nature of interactions, and harmonizing M&E reporting across different interventions including earmarked projects. The dialogue should explore collaboration in design to align with the National Water Strategy, improve the coordination between the different parties, and enhance the effectiveness of the DPWG.

This requires capacity-building and increasing the number of M&E staff responsible for reporting and data management in each component of MoW. It should involve a data coordination mechanism and centralized information management system. DPs could support this kind of GoT-led system strengthening through targeted programs that provide training and consultative services.

Recommendation 9: RUWASA should formalize arrangements for its district managers to be active on CWSTs along with district-level representatives of the Ministries of Health and Education, local governments, and BWBs.

For the implementation of WSDP III on aspects that require inter-organizational partnering between the MoW, Ministry of Health, Ministry of Education, and LGAs, clear MOUs are required detailing roles and responsibilities, expected funds flow, reporting lines of accountability, frequency and nature of coordination meetings, joint planning, and the M&E framework.

Recommendation 10: Introduce a gender-mainstreaming framework with monitoring indicators across all the project components.

The WSDP III design should include a well-defined gender-mainstreaming strategy with performance indicators to mainstream the inclusion of women into decision making for all aspects of the water sector. This includes women's roles in committees and CBWSOs, and include increasing women's roles in decision making for WRM, supply, and sanitation.

Recommendation 11: Undertake research, lesson sharing, training, and technical support in the use of PPPs in the water sector to strengthen the framework for incorporating greater private-sector involvement.

Both GoT and civil society lack experience with structuring PPPs (or private-sector participation) through which the GoT and the private sector share risks and rewards. While PPPs are underway with technical support and financing from the World Bank, WSDP III should provide capacity-building programs to expand the vision of stakeholders on the potentials for PPPs and provide technical assistance to the GoT and the private sector to identify, prepare, tender, and supervise specific PPP projects. These include showcasing the PPPs that are underway, providing technical assistance to WSSAs and RUWASA, training through the Water Institute, and identifying and preparing PPPs for projects such as increasing sewage access within DAWASA and the continued reduction of NRW, which will assist with O&M funding. NWF can play a role in financing PPP projects using an appropriate blending of grants and credit and can support, for example, RUWASA managing water access.

ANNEXES

ANNEX 1: TERMS OF REFERENCE (TOR) FOR THE FINAL EVALUATION

UNITED REPUBLIC OF TANZANIA
MINISTRY OF WATER

WATER SECTOR DEVELOPMENT PROGRAMME

TERMS OF REFERENCE

FOR

CONSULTANCY SERVICES TO UNDERTAKE THE FINAL EVALUATION OF THE WATER SECTOR DEVELOPMENT PROGRAMME II

March 2021

1.0 INTRODUCTION

The Government of Tanzania through the Ministry of Water is implementing the Water Sector Development Program (WSDP) for the period of 2006-2025. The program follows a sector wide approach to planning (SWAP), with an intention to eliminate overlaps and duplication of efforts in water resources management and in the delivery of water supply and sanitation services. Unlike the past, where water sector activities were implemented through discrete projects and sub- program in selected areas, the program is simultaneously implemented by all water sector stakeholders throughout the Country.

The program development objective is to strengthen sector institution for integrated Water resources management and improve access to water supply and sanitation services. By the end of the program, the GoT would have met its Five-Year Development Plan sector targets and be well on the way to meeting the SDGs for improved water supply and sanitation coverage across all segment of the population, as well as have in place a sustainable regulatory framework for comprehensive water resources management and development.

Program implementation is in phases of 5 years whereas implementation of WSDP I had four components and was from July 1, 2007 to June 30, 2016 costing $1.6 billion. The prevailing WSDP II's implementation started on July 1, 2016 with components of Water Resources Management; Rural Water Supply and Sanitation; Urban Water Supply and Sanitation; Sanitation and Hygiene; and Program Management and Delivery Support. The total WSDP II estimated costs are $3.3 billion and is implemented for five years until 2020-2021 in all Local Government Authorities (LGAs), Basin Water Offices (BWOs), and Water Supply and Sanitation Authorities (WSSAs) in the country.

1.1 OBJECTIVES OF THE ASSIGNMENT

The overall objective of the assignment is to conduct a final end evaluation of WSDP II. The end evaluation is expected to provide assessment of achievements towards program objectives and outcomes as specified in the WSDP II Program Document, sectoral policies and strategies, national frameworks (FYDP II) and global commitments (*e.g.*, SDGs) will recommend the design of WSDP III basing on findings, challenges, experiences, and lessons learnt from implementation of WSDP Phase II.

1.2 TASKS AND SCOPE OF ASSIGNMENT

i. Review Phase II documents (Planned activities, budgets, procurement plan, work plan, Program Implementation Manual, all financial agreements, FRUAs, participation agreements, program appraisal document, WSDP Financing Memorandum, guidelines and other documentation, etc.) to understand the objectives and expectations of WSDP Phase II in-line with sectoral policies and strategies, national frameworks and global commitments.

ii. Evaluate design and implementation of program components, objectives, interventions areas, result framework and KPIs and reprioritize them for implementation within WSDP III.

iii. Evaluate sector monitoring and evaluation during WSDP II.

iv. Evaluate the key problem addressed by the program intended to address and the underlying assumptions.

v. Evaluate relevance of the program strategy and assess whether it provided the most effective route towards expected/intended results.

vi. Evaluate how WSDP II addressed national development priorities.

vii. Evaluate WSDP II beneficial development effects on (*i.e.*, income generation, gender equality and women's empowerment, improved governance *etc.*)

viii. Evaluate program management, coordination and support provided as outlined in the Program Document.

ix. Examine the financial management and reporting of the program, with specific to cost-effectiveness of interventions and the shift from basket to earmarked funding.

x. Evaluate the Water Sector Stakeholder engagement during implementation of the of the program.

xi. Assess performance and sustainability of the program in relation to adequacy and competence of staff, legal and institutional framework

xii. Prepare an end evaluation report and outline recommendations for implementation of water sector components during WSDP Phase III.

xiii. Assess effectiveness of the cooperation mechanisms/frameworks with other key sectors (*e.g.*, agriculture, livestock, energy, industries, health, and mining).

xiv. Identify challenges and opportunities during implementation of WSDP II and provide recommendations for the design of WSDP III

1.3 DELIVERABLES AND TIMEFRAME

It is anticipated that the assignment will be undertaken for 120 days. The main output of the consultancy is the WSDP II End Evaluation Report. The final report should be submitted in both hard copies and in electronic form.

i. The Consultant shall Produce an Inception Report within ten 10 days after signing of contract. This report will detail the scope of the work, outline the methodology to be used and timelines;

ii. Provide Draft End Evaluation Report 100 days after signing of contract; and

iii. Provide Final End Evaluation Report which should be submitted 10 days after receiving comments from clients.

iv. Deliverables reports, presentations and policy brief for political decision makers) must be in English and are expected to be submitted/ presented simultaneously to both MoW and DPs.

1.4 QUALIFICATIONS OF THE CONSULTANT

i. The prospective consultant for this assignment may be an Institution, Firm, Company, Group of Individual Experts registered under the Law of Tanzania; must be a blend of local and international consultants or local consultant, must be competent with sufficient domestic and international experience to undertake this assignment within the Terms of Reference.

ii. The Consultant for this assignment must have renowned experience and knowledge in water sector evaluations, water sector, Water Resources Management, Environmental Management, economics, water engineering, and excellent writing and communication skills in English.

iii. Minimum of 10 years working experience in Water Sector related program and projects assessments and evaluations and must understand well the Water Sector context in Tanzania and sub-Saharan Africa.

iv. Sound knowledge in the Tanzanian Water Sector Policy Frameworks, challenges and public and private water sector operation in Tanzania.

v. Be ready to work with MoW counterpart staff during the assignment as part of the national requirement of building capacity to local staff and ownership of the assignment.

1.5 DUTIES AND RESPONSIBILITIES OF THE CLIENT

i. Supervise the work of the consultant.

ii. Provide to the Consultant the required documents and necessary information.

iii. Introduce the Consultant to various institutions and other stakeholders.

iv. Provide a team of counterpart staff.

v. Provision of comments on reports submitted by the Consultant.

1.6 DUTIES AND RESPONSIBILITIES OF THE CONSULTANT

i. Meet all assignment costs including transport, accommodation and the costs of the counterpart staff.

ii. Conduct assignments provided by the client.

iii. Submit inception, draft, and final report within the agreed timeframe.

1.7 REPORTING

- The consultant will report directly to Ministry of Water (MoW) through DPCDU, who will be the contact person for this assignment. The DPCDU will ensure smooth execution of the assignment through provision of agreed facilitation/ logistical arrangements.

1.8 APPLICATION PROCESS

Applications for the assignment are recommended to include:

i. **Brief description of approach to work/technical proposal** of experience in the above-mentioned areas and skills needed, and a proposed methodology on how they will approach and complete the assignment (max 2 pages).

ii. **Financial Proposal** that indicates all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, *etc.*), supported by a breakdown of costs.

iii. **A CV of each expert** to be involved in the assignment.

ANNEX 2: KEY INFORMANT INTERVIEW PROTOCOLS

KEY INFORMANT INTERVIEW PROTOCOLS

INTRODUCTION AND CONSENT

Background

The Tanzania Ministry of Water (MoW) has commissioned the Data for Development Project to conduct a final evaluation of their WSDP II program. The evaluation will assess achievements towards program objectives and outcomes. Based on findings, challenges, experiences, and lessons learned from implementation of WSDP Phase II, the evaluation will provide recommendations for the design and implementation of WSDP III.

Confidentiality

All recordings or notes taken as part of this evaluation are strictly confidential. Only the evaluation team will listen to this recording or read notes taken as part of this KII. The recordings and the notes will be kept in a secure location and all electronic information will be coded and secured. The recordings and notes will be destroyed after the evaluation is completed. Your privacy will be protected; we will not include your name any information in any report that would make it possible to identify you without your consent.

Please note that for Group Interviews, we cannot guarantee full confidentiality because of the group setting, as we cannot ensure that participants will not disclose any information shared during the group interview. We also ask that what we discuss today remains here between us.

Benefits of Participating in this Evaluation.

Although there is no direct benefit to you for being in this evaluation, we hope that the results of this evaluation will help improve the design of WSDP III You will receive no compensation for participating in this interview.

Right to Refuse or Withdraw

Our interview will take approximately one hour. Participation in this discussion is voluntary. You are free to not respond to any question or stop the interview at any time without penalty.

Right to Ask Questions and Report Concerns

You have the right to ask questions about this evaluation and to have those questions answered by us before, during or after the interview. Do you have questions for me at this time?

If you have further questions about the evaluation, please contact the Data for Development Chief of Party David Hughes via E-mail to dhughes@engl.com or via phone to +255 743590813. You can also contact Bahati Tenga, the Evaluation Manager, through btenga@engl.com or by phone at +255 715 463131.

We need your permission to proceed with both the interview and recording the interview.

Do you agree to participate in this study? 1. Yes 2. No

Do I have your permission to audio record the interview? (If Y I will ask for a verbal assent on the recording once turned on) 1. Yes 2. No

Guiding Evaluation Questions:

This Final Evaluation of WSDP II is guided by three principal evaluation questions. These are as follows:

1. *Q1 – To what extent has WSDP II program achieved the expected results according to its results framework and KPIs??*

2. *Q2 – With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?*
3. *Q3 – What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?*

Different specific protocols shall be applied to different stakeholder groups depending on their role in the design and Implementation of the Government of Tanzania's Water Sector Development Program Phase 2 (WSDP II). The key respondents have been organized into the following nine categories:

Category 1 – Ministry of Water (MoW) internal departments

Category 2 – Other GoT National MoW agencies

Category 3 – Basin boards

Category 4 – Other GoT WSDP II Partner Ministries

Category 5 – Development Partners

Category 6 – NGOs, local & international

Category 7 – Private sector

Category 8 – Communities/Water Users, Community Based Water Organizations

Category 9 - Urban water authorities

Category 1 – Ministry of Water (MoW) internal departments

- The following key MoW leadership with responsibility for WSDP II design and implementation are expected to be interviewed under this category:

  (1) Director of Water Resources Division

  (2) Director Water Supply and Sanitation

  (3) Director Sanitation and Hygiene

  (4) Director Policy and Planning (and M&E)

  (5) Director of Project Preparation Coordination and Delivery Unit

Name of Respondent: _____

Date of interview: _____

Name of Interviewers: _____

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 – To what extent has the WSDP II program achieved the expected results according to its results framework?

1. How well do you think WSDP II built on the lessons learnt from WSDP1 in terms of the relevance of WSDP II to the key sector challenges and priorities?
2. To what extent have the MOW and development partners adjusted WSDP II strategy, performance targets and programming to reflect the national vision to achieve the SDGs and the quantity and timing of actual budgetary releases? Does program monitoring and evaluation provide reliable information for managing the program?
3. How successful have the PfR and PbR approaches towards achieving WSDP II objectives? What are the key challenges these approaches have faced?
4. What would you say are the key successes and deficiencies of the WSDP II's engagement of the private sector and communities towards addressing the key sector challenges?
5. In terms of working towards achieving gender equality in the water sector in Tanzania, what do you see as some of WSDP II's greatest successes and deficiencies?

Component specific Questions to be asked separately to relevant MoWSI Departments:

WRM:

6. WSDP II strategic intervention focused on strengthening the institutional capacity for improving the management of water resources and ensuring completion, approval and implementation of the IWRMD plans. What has been the success so far vs component targets? Are there any challenges?
7. How were the issues of Climate Change Adaptation and Mitigation Measures implemented in WSDP II? To what extent has WSDP II achieved to implement the "Strategic Intervention and Action Plan" and "Climate Resilient Water Safety Plan" at the National, Basin, and Local Level as promised in the design of WSDP II?
8. The design of WSDP II targeted monitoring and improvement of Water Quality focusing on reducing pollution, as well as capacity building and coordination and implementation of water quality management interventions for sustainability. What have been the achievements so far?

Have there been any challenges? What do you think can be done to overcome the challenges to inform future designs?

9. What activities were implemented under WSDP II to ensure increased water storage, dam safety management and management of transboundary water resources? What achievements have there been so far? What have been the challenges?

Rural Water Supply:

10. What have been the main achievements of WSDP II towards improvement and sustainability of Rural Water Supply and Sanitation against the targets? What have been the challenges?
11. What do you see as some of the key successes and challenges of the RUWASA model and COWSO/CBWSO model in achieving results in rural water supply?
12. What are the coordination mechanisms implemented under WSDP II to link the efforts taken by RUWASA (ensuring water supply in rural areas) and Water Users Associations/WUAs (ensuring water resources management)? What have been the roles of CBWSOs/RUWASA in water resources management and how have they exercised those roles?
13. Earlier reports indicated that up to 19 percent of rural water schemes fail during the first year of operation due to weaknesses in community-based management. Do you think RUWASA has sufficiently engaged with communities to address this high failure rate under WSDP II? What do you see as the greatest successes and challenges in this regard?
14. What have been the roles, successes, and major challenges in working with the LGAs in supporting CBWSOs and WUAs towards ensuring rural water access and sustainability?

Urban Water Supply and Sanitation:

15. Do you think WSDP II has managed to address the key challenges in urban water supply especially for informal settlements and peri-urban areas? What can you say has not worked well in urban water supply and can be done better in the new WSDP III?
16. What do you think has worked well in ensuring water access to informal settlements (without private connections in urban areas) (e.g., water kiosks Model)? Are these initiatives sustainable? How can they be made sustainable? Can they be replicated in other areas?
17. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban and peri-urban areas and towns? To what extent has WSDP II addressed such issues?

Sanitation and Hygiene:

18. Sanitation investments have often been pushed to the periphery in most countries in Africa. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid areas and strategy towards achieving rural ODF status for communities? Why?
19. What hygiene practices have been introduced as part of WSDP II in urban areas and which ones have shown promise of wide adoption? What hygiene practices have been introduced as part of WSDP II in rural areas and which ones have shown promise for wide adoption? Have there been any challenges in terms of adoption of practices? What lessons can we take into WSDP III?

Institutional WASH:

20. What are some of the successes and challenges of WSDP II with regard to coverage of water and sanitation in schools, health facilities, markets, and other public spaces? What is being done to monitor their functionality and to address deficiencies? What are your suggestions to improve water and sanitation services in public institutions?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

21. What do you see as some of the greatest successes and deficiencies of the SWAP approach in the last 5 years vs. earmarked projects?
22. What have been some of the key challenges in implementing an effective M&E of a national program of such scale as WSDP II? How successful was the Joint Sector Review as a program M&E approach? What challenges did the JSR face? What would you propose to be done differently from an M&E perspective?
23. What factors a) constrained, b) enabled successful implementation of the MoW-DPG Sector dialogue mechanisms and the Memorandum of Understanding between MoW and DPs towards implementation of WSDP II?
24. In terms of coordination of WSDP II implementation within GoT agencies nationally, regionally, and locally (especially in the context of decentralization), what have been some of the key successes and challenges?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

25. What would you draw out as some of the key lessons on the relevance and impact of WSDP II on its key stakeholders and beneficiaries?
26. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
27. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 2 – Other GoT National MoW agencies

- The following MoW national level agencies with responsibility for implementing various aspects of WSDP II are expected to be interviewed:

  (1) CEO of RUWASA

  (2) CEO of EWURA

Name of Respondent:…….....

Date of interview:…….

Name of Interviewers:……..

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how was your organization involved in the design of WSDP II objectives and the implementation of WSDP II activities?
2. How well do you think WSDP II built on the lessons learnt from WSDP I in terms of the relevance of WSDP II to the key sector challenges and priorities?
3. From your organization's mandate in the sector, what do you see as some of the major outputs and achievements of WSDP II?
4. How successful have the PfR and PbR approaches towards achieving WSDP II objectives? What are the key challenges these approaches have faced?
5. What would you say are the key successes and deficiencies of the WSDP II's engagement of the private sector and communities towards addressing the key sector challenges?
6. In terms of working towards achieving gender equality in the water sector in Tanzania, what do you see as some of WSDP II's greatest successes and deficiencies?

Component specific Questions:

Rural Water Supply (RUWASA):

7. What have been the main achievements of WSDP II towards improvement and sustainability of Rural Water Supply and Sanitation? What have been the challenges?
8. What do you see as some of the key successes and challenges of the RUWASA model and COWSO/CBWSO model in achieving results in rural water supply?
9. What are the coordination mechanisms implemented under WSDP II to link the efforts taken by RUWASA (ensuring water supply in rural areas) and Water Users Associations/WUAs (ensuring water resources management)? What have been the roles of CBWSOs/RUWASA in water resources management?
10. Earlier reports indicated that up to 19 percent of rural water schemes fail during the first year of operation. Do you think RUWASA has sufficiently engaged with communities to address this high failure rate under WSDP II? What do you see as the greatest successes and challenges in this regard?
11. What have been the roles, successes, and major challenges in working with the LGAs in supporting CBWSOs and WUAs towards ensuring rural water sustainability?

Urban Water Supply (EWURA):

12. Do you think WSDP II has managed to address the key challenges in urban water supply especially for informal settlements and peri-urban areas? What can you say has not worked well in urban water supply and can be done better in the new WSDP III?
13. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban and peri-urban areas and towns? To what extent has WSDP II addressed such issues?
14. What do you think has worked well in ensuring water access to informal settlements (without private connections in urban areas) (e.g., water kiosks Model)? Are these initiatives sustainable? How can they be made sustainable? Can they be replicated in other areas?

Sanitation and Hygiene (RUWASA):

15. Sanitation investments have often been pushed to the periphery in most countries in Africa. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid areas and strategy towards achieving rural

ODF status for communities? What challenges has RUWASA faced towards ensuring rural sanitation?

16. What hygiene practices have been introduced as part of WSDP II in rural areas and which ones have shown promise for wide adoption? Have there been any challenges in terms of adoption of practices? What lessons can we take into WSDP III?

Institutional WASH (RUWASA):

17. What are some of the successes and challenges of WSDP II with regard to coverage of water and sanitation in schools, hospitals, markets, and other public spaces? What is being done to monitor their functionality and to address deficiencies? What are your suggestions to improve water and sanitation services in public institutions?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

18. WSDP II was designed to be implemented through a SWAP. How has this model worked from a RUWASA perspective versus earmarked project funding? What do you see as some of the greatest successes and deficiencies of the approach towards increasing access to WASH in rural areas?

19. What have been some of the key challenges in implementing an effective M&E of rural water supply activities under WSDP II? How successful was the Joint Sector Review as a program M&E approach? What challenges did the JSR face? What would you propose to be done differently from an M&E perspective to ensure better monitoring of rural water supply?

20. In terms of coordination of WSDP II implementation within GoT agencies nationally, regionally, and locally (especially in the context of decentralization), what are your observations of the major successes and deficiencies in achieving consistent and predictable rural and urban WASH activities design and implementation?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

21. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?

22. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?

23. How do you think the private sector should be engaged to play a bigger role in the proposed WSDP III?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 3 - Basin boards

The following Basin Boards with responsibility for implementing various aspects of WSDP II are expected to be interviewed:

(1) CEO Wami-Ruvu Basin Board

(2) CEO Rufiji Basin Board

(3) CEO Lake Victoria Basin Board

Name of Respondent:…….....

Date of interview:…….

Name of Interviewers:……..

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how have the Basin Water Boards been involved in the design of WSDP II objectives and the implementation of WSDP II activities and what lessons learnt from WSDP1 in terms of relevance of WSDP II to key WRM challenges?
2. How effective are the current basin management structures? What are some of the impediments to their full functionality?
3. How has the private sector been engaged towards WRM under WSDP 2? What would you say are the key successes and deficiencies of the WSDP II's engagement of the private sector and communities towards addressing the key water security challenges in Tanzania?
4. How have women been involved in WRM? What do you see as some of WSDP II's greatest successes and deficiencies in addressing gender equality in WRM under WSDP 2?
5. What are the coordination mechanisms implemented under WSDP II to link the efforts taken by RUWASA (ensuring water supply in rural areas) and Water Users Associations/WUAs (ensuring water resources management)? What have been the roles of Communities (CBWSOs/WUAs) in water resources management?
6. WSDP II strategic intervention focused on strengthening the institutional capacity for improving the management of water resources and ensuring completion, approval, and implementation of the IWRMD plans. What is the current status in your Basin and the success(es) vs component targets in your basin? Are there any challenges?
7. To what extent has WSDP II achieved to implement the "Strategic Intervention and Action Plan" and "Climate Resilient Water Safety Plan" at the Basin and Local Level as promised in the design of WSDP II?
8. The design of WSDP II targeted monitoring and improvement of Water Quality focusing on reducing pollution, as well as capacity building and coordination and implementation of water quality management interventions for sustainability. What have been the achievements so far? Have there been any challenges? What do you think can be done to overcome the challenges to inform future designs?
9. What activities were implemented under WSDP II to ensure increased water storage, dam safety management and management of transboundary water resources? What have been the achievements so far? What have been the challenges?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

10. WSDP II was designed to be implemented through a SWAP? How has this model worked from a WRM perspective? What do you see as some of the greatest successes and deficiencies of using this approach towards better integrated Water Resources Planning and Management?
11. What have been some of the key challenges in implementing an effective M&E of Water Resources planning and Management under WSDP II? What would you propose to be done differently from an M&E perspective to ensure better monitoring of WRM activities?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

12. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
13. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II related to WRM should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?
14. How do you think the private sector can be engaged to play a bigger role in WRM activities under the proposed WSDP III?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 4 – Other GoT WSDP II Partner Ministries

The following GoT Ministries partnering with the MoW for the implementation of various aspects of WSDP II are expected to be interviewed:

(1) Ministry of Health – WSDP II Focal point (TBD)
(2) Office of the President of the Regional Administration and Local Government (PO-RALG)
(3) Ministry of Finance
(4) Ministry of Education

Name of Respondent:…….....

Date of interview:…….

Name of Interviewers:……..

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 -To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how was your Ministry/Department involved in the design of WSDP II objectives and the implementation of WSDP II activities?
2. What are the key WASH challenges/needs/priorities from your Ministry mandate that the WSDP II has failed to address effectively?
3. What do you see as some of the major outputs and achievements of WSDP II for your Ministry?
4. In terms of working towards achieving gender equality in the water sector in Tanzania, what do you see as some of WSDP II's greatest successes and deficiencies?

5. **PO-RALG**: From a Local Government perspective, what do you see as some of the key successes and challenges of the RUWASA model and COWSO/CBWSO model in achieving results in rural water supply?

Sanitation and Hygiene:

1. **MoH**: Sanitation investments have often been pushed to the periphery in most countries in Africa. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid areas and strategy towards achieving rural ODF status for communities? How successful was the cross-ministerial MoW and MoH coordination for Sanitation and Hygiene activities? What challenges did you face in this regard?
2. What hygiene practices have been introduced as part of WSDP II in urban areas and which ones have shown promise of wide adoption? What hygiene practices have been introduced as part of WSDP II in rural areas and which ones have shown promise for wide adoption? Have there been any challenges in terms of adoption of practices? What lessons can we take into WSDP III?

Institutional WASH:

3. What are some of the successes and challenges of WSDP II with regard to coverage of water and sanitation in schools, hospitals, markets, and other public spaces? What is being done to monitor their functionality and to address deficiencies? What are your suggestions to improve water and sanitation services in public institutions?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

7. What do you see as some of the greatest successes and deficiencies of using the SWAP approach towards better coordination and planning across GoT and external partners?

8. What have been some of the key challenges in implementing an effective M&E under WSDP II? How successful was the Joint Sector Review as a program M&E approach? What challenges did the JSR face? What would you propose to be done differently from an M&E perspective?

Ministry of Finance:

4. What have been some of the successes and challenges of the basket fund model versus the earmarked project funding model?
5. What have been some of the challenges in budgeting and resource absorption for the various activities under WSDP II?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

6. From your Ministry's perspective, what do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
7. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 5 -Development Partners

Organization: ……

Name of Respondent:…….....

Date of interview:…….

Name of Interviewers:……..

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how has your organization been involved in the design and implementation of various WSDP II activities?
2. How well do you think WSDP II built on the lessons learnt from WSDP1 in terms of the relevance of WSDP II to the key sector challenges and priorities?
3. To what extent have the MOW and development partners adjusted WSDP II strategy, performance targets and programming to reflect the national vision to achieve the SDGs and the quantity and timing of actual budgetary releases? Does program monitoring and evaluation provide reliable information for managing the program?
4. WSDP II saw the introduction of new innovative program delivery approaches such as World Bank - Payment for Results (PfR) and DFID- Payments by Results (PBR), MoW establishment of RUWASA. Why were these needed and how successful have been these approaches towards achieving WSDP II objectives? What are the key challenges these approaches have faced?
5. Sanitation investments have often been pushed to the periphery in most countries in Africa. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid areas and strategy towards achieving rural ODF status for communities? Why?
6. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban and peri-urban areas and towns? To what extent has WSDP II addressed such issues?
7. From your engagements with the GoT and observations of sector-wide activities, how effective was WSDP II's engagement of the private sector and communities towards addressing the key sector challenges?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

8. Why did development partners return to earmarking project funds approach over the basket fund model?
9. To what extent has reinforcing the framework for dialogue been successful following the return to ear marking projects (focusing dialogue on sector strategy, reformatting of technical working groups, semi-annual joint supervision, annual joint water sector review, and providing resources for these efforts)?

10. What factors a) constrained, b) enabled successful implementation of the Memorandum of Understanding between MoW and DPs participating in supporting and funding arrangements within a SWA under WSDP II?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

11. Overall, what would you draw out as some of the key lessons on the relevance and impact of WSDP II on its key stakeholders and beneficiaries?
12. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
13. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 6 - NGOs, local & international

Organization:……..

Name of Respondent:…….....

Date of interview:…….

Name of Interviewers:……..

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how has your organization been involved in the design and implementation of various WSDP II activities?
2. WSDP II saw the introduction of new innovative program delivery approaches such as World Bank - Payment for Results (PfR) and DFID- Payments by Results (PBR). How successful have been these approaches towards achieving WSDP II objectives? What are the key challenges these approaches have faced?
3. What would you say are the key successes and deficiencies of the WSDP II's engagement of the private sector and communities towards addressing the key sector challenges?
4. In terms of working towards achieving gender equality in the water sector in Tanzania, what do you see as some of WSDP II's greatest successes and deficiencies?
5. What do you see as some of the key successes and challenges of the RUWASA model in achieving rural water sustainability?
6. Do you think WSDP II has managed to address the key challenges in urban water supply especially for informal settlements and peri-urban areas? What can you say has not worked well in urban water supply and can be done better in the new WSDP III?

7. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban and peri-urban areas and towns? To what extent has WSDP II addressed such issues?
8. Sanitation investments have often been pushed to the periphery in most countries in Africa. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid areas and strategy towards achieving rural ODF status for communities? Why?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

9. WSDP II was designed to be implemented through a SWAP, *i.e.*, pooling of resources to support a single sector expenditure program under Government leadership. In your opinion, has the SWAP worked successfully under WSDP II? What do you see as some of the greatest successes and deficiencies of the approach in the last 5 years?
10. How successful was the Joint Sector Review as a program M&E approach? What challenges did the JSR face?
11. What would you say are some of the successes and challenges of the basket fund model?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

12. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
13. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 7 - Private Sector Actors

Organization: ……

Name of Respondent: ……..

Date of interview: …….

Name of Interviewers: ……..…….

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how has your organization been involved in the design and implementation of various WSDP II activities?
2. From a private sector perspective, do you think the design of WSDP II objectives was most relevant towards addressing the key Water sector challenges and priorities? What do you see as some of the major outputs and achievements of WSDP II?

3. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban and peri-urban areas and towns? To what extent has WSDP II addressed such issues?
4. What would you say are the key successes and deficiencies of the WSDP II's engagement of the private sector and communities towards addressing the key sector challenges?
5. What have been the involvement and investments in sanitation from the private sector? What have been the challenges in being involved and/or investing in sanitation? What needs to be done to incentivize Private sector involvement in Sanitation and Hygiene?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are measures to enhance dialogue, joint planning and coordination and M&E being effective at National, Regional, and local level structures?

6. WSDP II was designed to be implemented through a SWAP? How has this model worked from a private sector perspective? What do you see as some of the greatest successes and deficiencies of using this approach towards better coordination and planning across GoT and external partners including with the private sector?
7. Was the private sector involved in the WSDP II Joint Sector Reviews? What challenges did the JSR face? What would you propose to be done differently from an M&E perspective?

Questions related to evaluation Q3 - What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

8. From the private sector perspective, what do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
9. How do you think the private sector should be engaged to play a bigger role in the proposed WSDP III?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 8 – Communities/Water Users, Community Based Water Organizations

Organization: ……..

Name of Respondent: ……

Date of interview: ……..

Name of Interviewers: ……

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has THE WSDP II program achieved the expected results according to its results framework?

1. Briefly, how has your organization been involved in the design and implementation of various WSDP II activities?
2. What do you see as some of the major outputs and achievements of WSDP II from a community perspective?

3. What would you say are the key successes and deficiencies of the WSDP II's engagement with communities towards addressing the key sector challenges?
4. In terms of working towards achieving gender equality in the water sector in Tanzania, what do you see as some of WSDP II's greatest successes and deficiencies?
5. What do you see as some of the key successes and challenges of the RUWASA model and COWSO/CBWSO model in achieving results in rural water supply?
6. What are the coordination mechanisms implemented under WSDP II to link the efforts taken by RUWASA (ensuring water supply in rural areas) and Water Users Associations/WUAs (ensuring water resources management)? What have been the roles of CBWSOs/RUWASA in water resources management?
7. Earlier reports indicated that up to 19 percent of rural water schemes fail during the first year of operation. Do you think RUWASA has sufficiently engaged with communities to address this high failure rate under WSDP II? What do you see as the greatest successes and challenges in this regard?
8. What have been the roles, successes, and major challenges in working with the LGAs in supporting CBWSOs and WUAs towards ensuring rural water sustainability?
9. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban, peri-urban areas and towns? To what extent has WSDP II addressed such issues?
10. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid areas and strategy towards achieving rural ODF status for communities? Why? What can be done differently going forwards?
11. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of WSDP III?
10. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

Category 9 - Urban Water Authorities

Organization:……..

Name of Respondent:…….....

Date of interview:……...

Name of Interviewers:……

INTERVIEW GUIDELINES

Interview Questions related to evaluation Q1 - To what extent has the WSDP II program achieved the expected results according to its results framework?

1. Briefly, how has your organization been involved in the design and implementation of various WSDP II activities? How do you think WSDP II built on lessons learnt from WSDP1 on urban water supply challenges?
2. What do you see as some of the major outputs and achievements vs targets under WSDP II? Do you think the WSDP II has been effective in addressing some of the key inter-connected challenges in urban off-grid water supply and sanitation through its activities related to investments in urban water authorities? Why?
3. WSDP II saw the introduction of new innovative program delivery approaches such as World Bank - Payment for Results (PfR) and DFID- Payments by Results (PBR). How successful have been these approaches towards achieving WSDP II objectives? What are the key challenges these approaches have faced?
4. What would you say are the key successes and deficiencies of the WSDP II's engagement of the private sector and communities towards addressing the key sector challenges in urban areas?
5. What do you think has worked well in ensuring water access to informal settlements (without private connections in urban areas) (*e.g.*, water kiosks Model)? Are these initiatives sustainable? How can they be made sustainable? Can they be replicated in other areas?
6. Are issues related to pluvial drainage threatening buildings and on-site sanitation in urban, peri-urban areas and towns? To what extent has WSDP II addressed such issues?
7. Do you think the design of WSDP II objectives and activities gave sufficient focus on sanitation and hygiene particularly extending services to the off-grid urban areas? What achievements have you had in terms of sanitation under WSDP II?

Questions related to evaluation Q2- With development partners returning to ear-marking projects rather than pooling resources in a basket fund, to what extent are the measures to enhance dialogue, joint planning, and coordination, and M&E being effective at the National, Regional, and local level structures?

8. What do you see as some of the greatest successes and deficiencies of using the SWAP approach towards better coordination and planning across GoT and external partners including with the private sector especially for urban WASH?
9. The WSDP II was designed to have annual Joint Sector Reviews. How were UWASAs involved in the JSR? What challenges did the JSR face? What would you propose to be done differently from an M&E perspective?

Questions related to evaluation Q3 - What are the key lessons learned, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

10. What do you see as the major risks facing the sustainability of WSDP II outputs that should be factored in the design of urban water supply components of WSDP III?
11. What needs of beneficiaries do you believe WSDP III should address that WSDP II has not addressed or has been addressing inadequately? What activities of WSDP II should be a) continued, b) discontinued, c) added to WSDP III and how should these be improved?
12. How do you think the private sector should be engaged to play a bigger role in the proposed WSDP III?

Thank you very much for taking your time to speak to us and answer our many questions. We appreciate it!

ANNEX 3: SOURCES OF INFORMATION – LIST OF STAKEHOLDERS INTERVIEWED

S.No.	Stakeholder Type	Name of the Organization of the Interviewed Respondent
1	Development Partners Group	UKAID/UK Aid
2	Development Partners Group	KFW
3	Development Partners Group	African Development Bank (AfDB)
4	Development Partners Group	World Bank
5	Development Partners Group	SNV
6	Development Partners Group	USAID
7	Development Partners Group	World Bank - 2030 WRG
8	Civil Society Organization	Project Clear
9	Development Partners Group	GIZ
10	Civil Society Organization	BORDA
11	Private Sector	TIB Development Bank
12	Private Sector	CRDB Bank Plc
13	Government of Tanzania Staff	MoW - Directorate of Sewerage and Sanitation
14	Government of Tanzania Staff	MoW - Water Quality Department
15	Government of Tanzania Staff	MoW - Coordination and Design Department
16	Government of Tanzania Staff	MoW - Water Resource management Department
17	Government of Tanzania Staff	MoW -Policy and Planning Department
18	Government of Tanzania Staff	MoW - National Water Fund
19	Government of Tanzania Staff	MoW - National Water Institute
20	Government of Tanzania Staff	MoH - National Sanitation and Hygiene Program
21	Government of Tanzania Staff	MoE - School WASH program
22	Government of Tanzania Staff	Ministry of Finance - Assistant Commissioner
23	Government of Tanzania Staff	PO-RALG-Coordination Unit - MoH
24	Government of Tanzania Staff	**R**UWASA – National Office
25	Government of Tanzania Staff	Regional WASH Team Dodoma (consisting of RUWASA Regional Manager, and Regional Representatives from MoH and MoE
26	Government of Tanzania Staff	Regional WASH Team Mwanza (consisting of RUWASA Regional Manager, and Regional Representatives from MoH and MoE
27	Government of Tanzania Staff	Regional WASH Team Morogoro (consisting of RUWASA Regional Manager, and Regional Representatives from MoH and MoE
28	Government of Tanzania Staff	Regional WASH Team Njombe (consisting of RUWASA Regional Manager, and Regional Representatives from MoH and MoE
29	Government of Tanzania Staff	Regional WASH Team Dar es Salaam and Pwani (consisting of Regional Representatives from MoH and MoE)
30	Government of Tanzania Staff	Energy and Water Utilities Regulatory Authority (EWURA)
31	Government of Tanzania Staff	Lake Victoria Basin - Basin Water Board
32	Government of Tanzania Staff	Pangani Basin - Basin Water Board
33	Government of Tanzania Staff	Wami-Ruvu Basin - Basin Water Board
34	Government of Tanzania Staff	Rufiji Basin - Basin Water Board

S.No.	Stakeholder Type	Name of the Organization of the Interviewed Respondent
35	Government of Tanzania Staff	Dar es Salaam Water and Sewerage Authority (DAWASA)
36	Government of Tanzania Staff	Dodoma Urban Water Supply and Sanitation (DUWASA)
37	Government of Tanzania Staff	Mwanza Urban Water Supply and Sanitation (MWAUWASA)
38	Government of Tanzania Staff	Morogoro Urban Water Supply and Sanitation (MORUWASA)
39	Government of Tanzania Staff	Moshi Urban Water Supply and Sanitation (MUWSA)
40	Government of Tanzania Staff	District WASH Team - Njombe DC (consisting of RUWASA District Manager, District Health Officials, District Schools WASH officials)
41	Government of Tanzania Staff	District WASH Team - Sengerema TC (Consist of RUWASA District Manager, District Health Officials, District School WASH officials)
42	Community Representatives	Community Based Water Supply Organisations (CBWSOs) - Peruhanda (Njombe DC)
43	Community Representatives	Water Users Associations (WUAs) - River Tobora and River Mara Kusini (Lake Victoria Basin)
44	Community Representatives	Water Users Associations (WUAs) - Upper Users (Pangani Basin)

ANNEX 4: SOURCES OF INFORMATION – DOCUMENTS REVIEWED

S.No.	Title of the Document
1	Memorandum of Understanding for WSDP between the Government of the United Republic of Tanzania and Development Partners
2	Water Sector Development Programme 2006 – 2025
3	Joint Sector Monitoring - Eid Memoir Reports of 2016 & 2017
4	Draft WSDP I - Evaluation report. 2013
5	Water Sector Development Programme: Restructuring Plan for Phase I - Revised June 2011
6	WSDP II document - 2014/2015 - 2018/2019
7	Mid-Term Review of the Water Sector Development Programme Phase II (WSDP II) and Review of the Water Dialogue Framework, Tanzania 2018
8	Dialogue and WSDP II Way Forward
9	Round Table Meeting, 2018/Action Plan
10	Reports for the Dialogue Meeting (2016, 2017, 2020 & 2021)
11	Re - Enhanced dialogue mechanism document 2019
12	Water Sector Status Report 2015-2020
13	The Integrated Water Sector - Monitoring & Evaluation System - Feb 2021
14	NAWAPO, 2020. Fourth Chapter - Implementation Plan Matrix- 2020 - 2030
15	Fourth Draft NAWAPO, 2020.Implementation Strategy - 2020 - 2030
16	NAWAPO Fourth Implementation Strategy - 2020 - 2030-For Stakeholders Consultation
17	Landscape Analysis of Tanzania – Sanitation and Hygiene, August 2019
18	Public Expenditure Reports – Annual – CAG reports
19	Tanzania Water Supply and Sanitation Network (TAWASANET) - Annual Equity Report - 10yrs of Equity (2008 – 2018), 2020
20	TAWASANET - Annual Equity Report – 2019
21	TAWASANET - Annual Equity Report -2016
22	TAWASANET - Annual Equity Report-2015
23	TAWASANET - Annual Equity Report- 2014
24	TAWASANET - Annual Equity Report - 2013 (6yrs reflection to inform second phase)
25	UNICEF - Sanitation for All - Annual Report (2019)
26	GoT - MoW - Annual Report for the Year ended 30June 2020
27	WUA Formation Guidelines 2019
30	KfW 16th Evaluation Report 2019-2020
31	UNICEF - 2018 School Water, Sanitation and Hygiene Assessment (Feb 2020)
32	GoT- National Strategy for Accelerating Sanitation and Hygiene for all (2020-2025),prepared by UNICEF
34	UK/Aid Implementation in past 5yrs, by Lukas Kwenzi blog
35	Guidelines for Transfer of Water use, discharge and groundwater permits, 2018
36	WRM_Water Well Quality Monitoring Regulations 2018
37	WRM_Control and Management of Storm Water Regulations, 2018
38	WRM_Water Resources Classification System Regulations, 2018
39	WRM_(Fees Setting) Regulations, 2019
40	Rainwater Harvest Guidelines, 2020
41	Dam Safety Guidelines, 2020
42	Guidelines for Groundwater Exploration and Well Drilling, 2019
43	National Water Fund Regulations, 2019
44	WSS (Registration and Operations of CBWSOs) Regulations, 2019
45	Tanzania National Determined Contribution in response to Climate Change
46	National Climate Change Response Strategy (2021-2026)

ANNEX 5: DISCLOSURE OF ANY CONFLICTS OF INTEREST

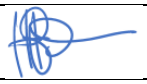
Name	James Origa
Title	Independent Consultant
Organization	ME&A (Data for Development)
Assessment Position	Team Leader
Evaluation Award Number (contract or another instrument)	AID-OAA-I- 15-00024/AID-621 -TO- 17-00005
USAID Project(s) Assessed (Include project name(s), implementer name(s) and award number(s), if applicable)	Water Sector Development Program Phase II – Final Evaluation
I have real or potential conflicts of interest to disclose.	No
If yes answered above, I disclose the following facts: Real or potential conflicts of interest may include, but are not limited to: 1. Close family member who is an employee of the USAID operating unit managing the Project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the Project(s) being evaluated, including involvement in the project design or previous iterations of the project 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or Previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature 		JAMES ORIGA OTIENO
Date 28th June 2021		

Name	Winfred Mbungu
Title	Water Expert
Organization	NORC at the University of Chicago
Assessment Position	Team Member – National Water Expert
Evaluation Award Number *(contract or another instrument)*	AID-OAA-I-15-00024/AID-621-TO-17-00005
USAID Project(s) Assessed *(Include project name(s), implementer name(s) and award number(s), if applicable)*	Water Sector Development Program Phase II – Final Evaluation
I have real or potential conflicts of interest to disclose.	No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* *1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* *2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* *3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* *4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* *5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* *6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	June 25, 2021

Name	Jane Joseph Peter
Title	Water Expert
Organization	ME&A (Data for Development)
Assessment Position	Team Member – National Water Expert
Evaluation Award Number *(contract or another instrument)*	AID-OAA-I-15-00024/AID-621-TO-17-00005
USAID Project(s) Assessed *(Include project name(s), implementer name(s) and award number(s), if applicable)*	Water Sector Development Program Phase II – Final Evaluation
I have real or potential conflicts of interest to disclose.	No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* *1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* *2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* *3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* *4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* *5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* *6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	06/14/2021

Name	Richard Noth
Title	Water Sector Specialist
Organization	NORC
Assessment Position	Water Sector Specialist
Evaluation Award Number *(contract or another instrument)*	AID-OAA-I-15-00024/AID-621-TO-17-00005
USAID Project(s) Assessed *(Include project name(s), implementer name(s) and award number(s), if applicable)*	Water Sector Development Program Phase II – Final Evaluation
I have real or potential conflicts of interest to disclose.	No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* *1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* *2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* *3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* *4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* *5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* *6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	June 29, 2021

Name	Bahati Tenga
Title	Evaluation Specialist
Organization	USAID- Data for Development
Evaluation Position	Activity Manager
Evaluation Award Number *(contract or another instrument)*	AID-OAA-I-15-00024/AID-621-TO-17-00005
USAID Project(s) Evaluated *(Include project name(s), implementer name(s) and award number(s), if applicable)*	Water Sector Development Program Phase II – Final Evaluation
I have real or potential conflicts of interest to disclose.	No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* *1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* *2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* *3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* *4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* *5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* *6. Preconceived ideas toward individuals, groups, organizations, or objectives of the projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	14th June 2021

Name	Jacob Laden
Title	Evaluation Advisor
Organization	NORC at the University of Chicago (Data for Development)
Assessment Position	Sr. Evaluation Advisor
Evaluation Award Number *(contract or another instrument)*	AID-OAA-I-15-00024/AID-621-TO-17-00005
USAID Project(s) Assessed *(Include project name(s), implementer name(s) and award number(s), if applicable)*	Water Sector Development Program Phase II – Final Evaluation
I have real or potential conflicts of interest to disclose.	No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* 1. *Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* 2. *Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* 3. *Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* 4. *Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* 5. *Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* 6. *Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	JTL
Date	June 14th, 2021

ANNEX 6: INCEPTION REPORT

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF WATER

WATER SECTOR DEVELOPMENT PROGRAM PHASE II FINAL EVALUATION

INCEPTION REPORT

JUNE 2021

EVALUATION INCEPTION REPORT

Water Sector Development Program Phase II Final Evaluation

Prepared by: USAID/Tanzania Data for Development Project

Submission Date: 6/17/2021

Contract Number: AID-OAA-I-15-00024/AID-621-TO-17-00005

Activity Start Date and End Date: June 2021 to October 2021

Submitted to:
Permanent Secretary, Ministry of Water, Government of Tanzania, Dodoma
Contracting Officer's Representative, Data for Development Activity, USAID/Tanzania
Alt. COR, Data for Development Activity, USAID/Tanzania
Program Monitoring and Evaluation Specialist, USAID/Tanzania
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Development Partners Water Working Group Coordinator, Dar es Salaam

Prepared by:
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NORC at the University of Chicago
James Origa, Team Lead and Regional Water Expert, Data for Development
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1.0 INTRODUCTION

The Government of Tanzania through the Ministry of Water is implementing the Water Sector Development Program (WSDP) for the period of 2006-2025. Phase II of the program started in 2014 and was slated to end in 2019, however following the midterm evaluation of the phase two program, it entered an extension period to July 2021. The program follows a sector wide approach to planning (SWAP) in water resources management, water supply and sanitation services. Under the leadership of the Ministry of Water, in coordination with international development partners working group and the international partners working group for government agencies, it is simultaneously implemented by all water sector stakeholders across Tanzania's regional and local government entities.

The program development objective is

> "*to strengthen sector institutions for integrated Water resources management and improve access to water supply and sanitation services. By the end of the program, the GoT would have met its Five Year Development Plan sector targets and be well on the way to meeting the SDGs for improved water supply and sanitation coverage across all segment of the population, as well as have in place a sustainable regulatory framework for comprehensive water resources management and development."*[48]

WSDP II's implementation started on July 1, 2016 with the following five (5) components:

- Water Resources Management;
- Rural Water Supply and Sanitation;
- Urban Water Supply and Sanitation;
- Sanitation and Hygiene; and
- Program Management and Delivery Support.

The total WSDP II estimated costs are $3.3 billion and is implemented for five years until 2020-2021 in all Local Government Authorities (LGAs), Basin Water Offices (BWOs), and Water Supply and Sanitation Authorities (WSSAs) in the country.

2.0 BACKGROUND AND PURPOSE OF THE EVALUATION

The Tanzania Ministry of Water (MOW) with support from the United States Agency for International Development commissioned the Data for Development Project to conduct a final evaluation of the WSDP II. The evaluation is expected to provide assessment of achievements towards program objectives and outcomes as specified in the WSDP II program document, *sectoral policies and strategies, national frameworks (FYDP II) and global commitments (e.g., SDGs)*. Based on findings, challenges, experiences, and lessons learned from implementation of WSDP Phase II, it will provide recommendations for the design and implementation of WSDP III.

The provided terms of reference (TORs) define the following seven (7) tasks as the focus of the evaluation:

(1) Evaluate the design and implementation of program components, objectives, interventions areas, result framework and KPIs and reprioritize them for implementation within WSDP III

(2) Evaluate sector monitoring and evaluation during WSDP II;

(3) Evaluate relevance of the program strategy and assess whether it provided the most effective route towards expected/intended results.

(4) Evaluate program management, coordination and support provided as outlined in the Program Document

[48] MoWI WSDP II Evaluation TOR

(5) Examine the financial management and reporting of the program, with specific to cost-effectiveness of interventions and the shift from basket to earmarked funding

(6) Assess performance and sustainability of the program in relation to legal and institutional framework

(7) Prepare end evaluation report and outline recommendations for implementation of water sector components during WSDP phase III.

2.2 CORE EVALUATION QUESTIONS

Based on the above tasks as defined in the TOR, the following evaluation questions will guide the structure of the evaluation, its instruments for primary source data collection and document review. They will also be the organizing framework for the evaluation findings, conclusions and recommendations.

1) To what extent has the design and objectives of WSDP II program components been designed to meet the needs and challenges it sought to address among target beneficiaries? To what extent has it achieved the expected results according to its results framework and KPIs? Detailed analysis will be done for each of the three major program components as well as on the extent of integration across these three components:
    - Water supply (includes both urban and rural)
    - Water Resources Management (WRM)
    - Sanitation and Hygiene (urban and rural)
2) How effective and efficient was the WSDP II program sector wide approach to planning (SWAP), financial management, M&E, coordination, and program implementation at National, Regional, and local level structures? (including all Program Management and Delivery Support)
3) What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?

The formulation of the above core evaluation questions is guided by the following specific evaluation investigation areas:

(a) ***Relevance***: The extent to which WSDP II objectives and design was consistent with the challenges and concerns in the sector and with the needs and priorities of its beneficiaries.

(b) ***Effectiveness***: The extent to which the products, outputs, and activities under WSDP II achieved the intended objectives.

(c) ***Efficiency***: The extent to which the impacts and benefits arising from WSDP II activities were commensurate with the level of effort and resources deployed.

(d) ***Institutional arrangements and sustainability*** of program outputs: The extent to which the program strategy/approach, coordination and support were the most appropriate for the long-term sustainability of WSDP II outputs.

3.0 EVALUATION APPROACH/METHODS

The evaluation will apply both qualitative and quantitative analysis methods to provide answers for the core evaluation questions. This mixed approach will entail review of documents, longitudinal analysis to highlight key observable trends of existing WSDP II results indicators and monitoring data and interviews with GOT officials and development partners.

To comprehensively answer the research questions, we shall adopt a three-part approach involving;

1. Review and analysis of existing WSDP II program design documents, monitoring data and reports.

2. Structured systematic desk review of other documents related to the water sector to provide a systemic/holistic sector history, current context and expected trends
3. Undertaking an estimated 30-35 key informant interviews (KIIs) with stakeholders across the water sector including: MoWI Staff, International Government Agencies, National Level Ministries and GOT authorities, *NGOs and private sector actors*.

The region selected in the 2018 Mid-Term Review (MTR) of the WSDP II were Dar es Salaam, Dodoma, Morogoro and Singida. For added geographic diversification, the final valuation proposes to replace Singida with Tabora and add Mwanza Region. The five proposed sites to focus the evaluation include: Mwanza, Morogoro, Tabora Dar es Salaam and Dodoma, three of which are the same as those in the MTR.

- The evaluation will coordinate activities through the Coordinator of the Development Partners Working Group Water Secretariat, Nsaaiya Amaniel Kihunrwa – DPG Water Secretariat
- Anticipated to introduce the consultants to various external institutions and other DPG partners.
- Share available relevant partnership documents and data.
- Review and provide comments on draft reports produced by the evaluation team.

The approach per each of the core evaluation questions is detailed in table 1 below.

Table 1: Summary of Assessment Methods and Data Analysis Approach

Questions	Methods and Data Sources	Data Analysis
Q1-To what extent has the design and objectives of WSDP II program components been designed to meet the needs and challenges it sought to address among target beneficiaries? To what extent has it achieved the expected results according to its results framework and KPIs? **Q2** – How effective and efficient was the WSDP II program sector wide approach to planning (SWAP), financial management (including public expenditure review, payment by results and payment for results), M&E, coordination, and program implementation at National, Regional, and local level structures? **Q3** – What are the key lessons learnt, enabling factors and risks in sustaining WSDP II program outputs which should inform the design of WSDP III?	✔ Review of WSDP II results frameworks and monitoring data from 2014 to June 2021 ✔ Review of WSDP II-related performance reports including past evaluation reports ✔ Review of WSDP II public expenditure reports ✔ Review of Tanzania water sector Strategy and Policy documents and sector performance reports for the period 2014 to 2020 published by the GoT ✔ Review of water sector strategy documents and Investment projects reports published by GoT Partners, NGOs and private sector actors ✔ Semi-structured Key Informant Interviews (KIIs) of key relevant Government of Tanzania (GoT) officials who have participated directly or partnered in the implementation of WSDP II at National, Regional, and district levels ✔ Semi-structured Key Informant Interviews (KIIs) of key development partners including bilateral country missions, Development Finance Institutions and international aid organizations who have partly financed and partnered with the GoT towards the implementation of WSDP II ✔ Semi-structured Key Informant Interviews (KIIs) of key NGOs and private sector actors most relevant to the Tanzania water sector ✔ Semi-structured Key Informant Interviews (KIIs) of Community-based water users	○ Desk reviews and synthesis of relevant secondary source documents ○ Trend analysis of quantitative data provided by MoW (WSDP II monitoring data per component and activity performance data) and other publicly available WSDP II-relevant data[49] ○ Review of expenditures and impact of the payment by results and payment for results initiatives. ○ Coding of qualitative interviews ○ GIS mapping and visualization of service coverage and gaps across the three components of WSDP II

[49] To achieve this, the evaluation team will be requesting all relevant data including program activities and results monitoring data, and data related to public expenditures and budget tracking to enable sufficient quantitative analysis and development of key trends.

3.1 EVALUATION KEY INFORMANTS AND STAKEHOLDERS

Key informant interviews will be conducted with a diverse range of stakeholders from the national to the local level government authorities, Development Partners (WSDP II funding partners/donors), Non-governmental organizations, relevant private sector players and relevant community groups/water users' representatives involved in WSDP II.

Based on the evaluation questions and the emergent themes from the document desk reviews, the evaluation team will prepare data collection instruments for different respondents to be applied during the semi-structured KIIs.

Box: Approach for Conducting KIIs

- Each KII will include one participant who will engage in a semi-structured discussion around predetermined questions (included in an interview guide) with an interviewer.
- The interviewer will be assisted by a note taker, and all KIIs will be recorded with informed consent obtained from the participant prior to the start of the discussion. The note taker will also record key words, expressions, silences, and non-verbal language of the participant.
- The interview guide will include 5-10 open-ended questions, starting with wider questions and moving into narrower or key questions. The questions will be neutrally worded and neutral probes will be used.
- Reporting of the KII will include quotes from anonymous interviewees

The following table indicates the maximum range of stakeholders who will be invited for interviews with the evaluation team. The team estimates they will complete at least 32 interviews with key informants (above a 64 percent response rate).

Due to the prevailing circumstances surrounding COVID-19 and operational requirements from USAID, all KIIs will be conducted virtually. Should the circumstances change, the evaluation will look at exploring face to face interviews.

Planned KIIs by Region and Stakeholder Group[50]

Interviewees	DSM	Morogoro	Dodoma	Mwanza	Tabora	Total
GoT National - Ministry of Water (MoW) departments and units including: ● Water Resource Management (WRM) ● Water supply, (WS) ● Sewerage and sanitation (SS) ● Water Quality, (WQ) ● Planning/Public Private Partnerships Unit ● Coordination Unit			6			6
National Ministerial agencies such as: ● Water Fund, ● Water Institute, and ● Water Regulatory Board (EWURA)	2		1			3
Key Service Delivery Agencies for Water Supply, Sanitation & Hygiene services including: ● Rural Water Supply and Sanitation Agency (RUWASA) ● Select Urban Water and Sanitation Authorities (UWASA) – DAWASA, TUWASA, MORUWASA, DOWASA, MWAUWASA	1-2	2	2-3	2	2	8-11
Key Water Resources Management Agencies, *i.e.*, Select Water Basin Boards – selected based on the level/availability of water renewable sources ● (High, Medium and Low) 3 basin boards selected as follows: (i) Wami Ruvu, (ii) Rufiji and Lake Victoria						3-5
WSDP II Partner Ministries ● Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) ● Ministry of Education, Science and Technology (MoEST) ● Ministry of Natural Resource Management ● Ministry of Finance ● Ministry of Land ● PORALG (Heath Coordination Unit, Regional Secretariat)			4-6			4-6

[50] Please note that those listed that are not responsive or available during the planned data collection period will not necessarily be interviewed (a 100 percent response rate is not expected. However, we will target at least a 64 percent response), with a total of 45 KIIs.

Interviewees	DSM	Morogoro	Dodoma	Mwanza	Tabora	Total
Development Partners – Counterparts representatives of Thematic Working Groups Thematic group 1 - Financing & Planning, Institutional Capacity Building and Performance Monitoring Thematic group 2 - WRM Thematic group 3 - Water Supply and Sanitation Service Delivery Thematic group 4 - Sanitation and Hygiene	4					4
Other bilateral and multilateral DPs (World Bank, AfDB, KNCV)	1-2					1-2
NGOs (Water Aid, SNV, TAWASANET)	1-3					1-3
Private Sector actors both, • Services/product providers/suppliers, e.g., E-water Pay Ltd, Trans Africa Water and Davis & Shirtliff • Large scale water users/water-intensive companies, e.g., Coca Cola, Fish processors around Lake Victoria, large-scale agricultural processors	1-3					1-3
Local Government Authorities District Engineer/RUWASA District Coordinator & In the council office – DED/Planning Department	1-2	1-2	1-2	1-2	1-2	5-10
Community water users representative groups including COWOSOs[51] and WUAs	2	2	2	2	2	10
TOTAL						**45**

[51] The selection would consider the different types of COWOSOs including private sector, community based, and associations of water users.

4.0 ENGAGEMENT OF GOT COUNTERPART STAFF

The D4D evaluation team intends to actively engage relevant GoT counterpart staff early on in the evaluation rather than only a marginal engagement at review of draft reports stage. At the same time, the team is cognizant of the need to ensure that the evaluation team provides a complete independent evaluation of WSDP II. To this end, we are proposing the engagement of the following GoT counterpart staff during the evaluation process.

GoT Counterpart	Expected Engagement During the WSDP II Evaluation Process
Mr. Teddy Mwaijumba – Assistant Director Policy and Planning & Chairman of the WSDP II review team; Contact Person for WSDP II Final Evaluation	Provide overall leadership of evaluation process including. ✓ Formally assigning the below relevant GoT counterpart staff to work with and provide relevant data and information to the D4D Evaluation team ✓ Making introductions and facilitating coordination with other non-Ministry of Water departments and agencies implementing WSDP II ✓ Sharing of WSDP II related Public Expenditure data to facilitate the evaluation team undertake tracking of financial resources flow for various WSDP II activities ✓ Consolidating all GoT comments on draft reports
Mr. Remigius Mazigwa - Head - Program Coordination & Delivery Unit – The GoT Coordinator - WSDP II Final Evaluation	✓ Liasing person for the GoT Stakeholders in WSDP II Final Evaluation Process ✓ Facilitating sharing of relevant data including WSDP activity reports, WSDP II annual reports, Results/monitoring data, relevant expenditure data and partner engagement data from all components leads with the evaluation team. ✓ Review and provision of comments on draft reports produced by evaluation task team
Ms. Diana Kimario – M&E Officer - Policy and Planning Department	✓ Sharing of WSDP II overall results framework, periodic monitoring and progress reports, past evaluation reports ✓ Review and provision of comments on draft reports produced by evaluation task team
Mr. Robert Sunday - Lead Officer - WSDP II Water Resources Management (WRM) Department	✓ Sharing of WSDP II WRM-related data including WRM program strategy and activity reports etc. ✓ Introduce the Consultant to various WRM related institutions and partners including coordinating meetings with the basin water boards ✓ Review and provision of comments on draft reports produced by evaluation task team
Mr. Stanley Daud - Lead Officer - WSDP II Water Quality Services (WQ) Department	✓ Sharing of WSDP II WQ-related data including WQ program strategy and activity reports etc. ✓ Introduce the Consultant to various WQ related institutions and partners including coordinating meetings with the basin water boards ✓ Review and provision of comments on draft reports produced by evaluation task team
Felister Lyimo – Lead Officer - WSDP II - Water Supply; Sewerage and Sanitation Departments and Urban Water Utilities Agencies	✓ Sharing of WSDP II Water supply-related data including water supply program strategy, relevant policy documents and WSDP II activity and expenditure reports etc. ✓ Introduce the Consultant to various Water Supply related institutions and partners including Overall Water Supply Department, Sewerage and Sanitation Department, and Urban Water Utilities Authorities ✓ Review and provision of comments on draft reports produced by evaluation task team

GoT Counterpart	Expected Engagement During the WSDP II Evaluation Process
Mr. Hamis Matungulu – Lead Officer - WSDP II – Rural Water Supply and Sanitation activities	✓ Sharing of WSDP II Water supply-related data including water supply program strategy, relevant policy documents and WSDP II activity and expenditure reports etc. ✓ Introduce the Consultant to various Water Supply related institutions and partners including coordinating meetings with RUWASA, Water Supply Authorities and COWOSOs ✓ Review and provision of comments on draft reports produced by evaluation task team
Selemani Modu – Lead Officer – PORALG activities under WSDP II	✓ Liaising person for the Local Government Authority Stakeholders in WSDP II Final Evaluation Process ✓ Facilitating study approvals and introduction to the LGAs stakeholders, working the national coordinator under MoH and MoE to retrieve monitoring data and sharing of relevant data including WSDP activity reports, WSDP II annual reports, Results/monitoring data, relevant expenditure data and partner engagement data from all components leads with the evaluation team. ✓ Review and provision of comments on draft reports produced by evaluation task team
Mr. Anyitike Mwakitalima – National Coordinator - Community Sanitation program from the Ministry of Health - WSDP II Sanitation and Hygiene	✓ Sharing of WSDP II Sanitation and hygiene-related data including program strategy, relevant policy documents and WSDP II sanitation/hygiene activity and expenditure reports etc. ✓ Introduce the Consultant to various Sanitation and Hygiene related community sanitation institutions, agencies and partners including coordinating meetings and KIIs ✓ Review and provision of comments on draft reports produced by evaluation task team
Mr. Faustine Mwombeki – National Coordinator School WASH program from the Ministry of Education – WSDP II Sanitation and Hygiene	✓ Sharing of WSDP II Sanitation and hygiene-related data including program strategy, relevant policy documents and WSDP II sanitation/hygiene activity and expenditure reports etc. ✓ Introduce the Consultant to various Sanitation and Hygiene related to school WASH program institutions, agencies and partners including coordinating meetings and KIIs ✓ Review and provision of comments on draft reports produced by evaluation task team
Mr. Selemani Yondu – PORALG Lead Officer for the WSDP II stakeholders	✓ Sharing of WSDP II related Public Expenditure data to facilitate the evaluation team undertake tracking of financial resources flow for various WSDP II activities ✓ Review and provision of comments on draft reports produced by evaluation task team

5.0 KEY STEPS, EVALUATION TIMELINES AND DELIVERABLES[52]

1. Final Design and Work Plan/ Inception Report building off of this draft document -June 2021 Approval
2. Clearances (and fulfilment of information requests MoWI)- June 2021
3. Instrument development- June 2021(Approval by end of June)
4. Data collection - July- August 2021
5. Analysis- August 2021

[52] * Reports and presentations will follow USAID style guidelines, will be in English and will be submitted/presented to MoW and DPs following USAID review.
* Detailed Gannt chart will be provided with final design and work plan

a. Coding and triangulation of KIIs and desk review
b. Performance data analysis and visualization
c. Write up of analytic memos

6. Draft Evaluation Report- End of September 2021
7. Ministry, USAID and DP review (within 10 days from receipt of the draft)
8. Final Evaluation Report- submitted 10 days after receiving comments from clients. (October 2021)
9. Presentation slide deck (in PPT)- with possible presentation to USAID, MoWI and DPs. (October 2021)

6.0 PROPOSED TEAM COMPOSITION

James Origa – Regional WASH Expert and Evaluation Team Lead

- In this evaluation James Origa will serve as team lead (TL) responsible for all draft and final deliverables
- James Origa is a Water & Sanitation Engineer and Public Policy Scientist, who after many years spent fixings pipes and toilets, is now focused on fixing the institutions that fix the pipes, toilets and other public service needs in general. His core skills and leadership capabilities are in developing strategic policy priorities, leading research and supplying timely and actionable policy advice, and coordinating policy initiatives on issues related to Water & Sanitation and Public Sector Management
- James most recent consultancy assignments in the region include:
    - Consultancy as a Short Term Technical Assistant by Tetra Tech ARD to support the Inception Phase of the five-year, $37 million USAID's Sustainable Water and Sanitation Services Activity in Eastern Democratic Republic of Congo, including (1) Development of a Market Systems Development (MSD) Strategic Implementation Plan for the 5 years of the Activity to inform the exploration, design, and testing of context-appropriate, performance-based business models for delivery portable water service; (2) Detailed analysis of the Institutional Governance structure and recommended an approach for developing Public-Private Partnership (PPP) Transaction options for the delivery of water services in North and South Kivu Provinces.
    - Consultancy to analyze the Technical, Financial and management aspects of 260 mechanized rural water schemes in Kenya to design a market-based bundling service contract for the O&M services for Oxfam International.
    - Consultancy to undertake a detailed Assessment of the Tanzania Water Sector – collect and analyze data aimed at identifying specific blockages that hinders Government of Tanzania from achieving its Water supply & Sanitation targets. The results of the assessment informed the development of USAID Tanzania Mission's 5-year WASH strategy.

Dr. Winfred Mbungu – National Water Resources Management (WRM) Expert

- Dr. Mbungu will serve as senior researcher and subject matter expert for the assessment during all phases of instrument development, document review, data collection, analysis and report writing.
- He is an experienced consultant in water resources engineering and management, hydrology, watershed management, land use and climate change, agriculture, small scale irrigation, technologies as well as evaluation of water and natural resources related projects. His recently worked includes biophysical modelling including hydrological modelling, design of water and wastewater treatment plants, water quality and modelling in water quality, watershed management, environmental flow assessment, land use and climate change impacts assessment and crop productivity improvement, remote sensing and GIS application in water resources and irrigation management. Others include geospatial models for hydrological and natural assessment for risks (drought and flood) assessment as well as availability and sustainability of water resources and dynamic crop systems models for assessing scenarios in Agricultural production and productivity. In 2019, he was among the key consultants in the team of Data for Development undertaking USAID/Water assessment.

Dr. Richard Noth – Water Supply Expert/Economist

- Dr Noth in this assignment will provide expertise related to urban water supply and sanitation service delivery, especially in sustainability of the water supply.
- He is an international water expert with 43yrs of experience in Management and financial advisor, specialized in management, finance and public private partnerships for water, sanitation and environmental infrastructure, also investment banking for small and medium enterprises, project finance and strategic and capital investment planning. Previously, he has worked with Data for Development in undertaking USAID/Water sector assessment as a senior advisor and water SME supporting the design, document review, analysis, and report production

Ms. Jane Joseph, Gender and Community Development Specialist

- In this assignment Jane will be an additional subject matter expert bringing gender and community engagement expertise in water resource management and on water sector development as whole. Jane will review tools to ensure gender aspect as well as stakeholders engagement issues well captured during the data collection, she will support systematic literature review, data collection efforts and analysis.
- Jane Joseph, a National Water Expert- Stakeholder Engagement and Gender Integration. A consultant with 12 years of professional background and progressive advancement in management of water related projects. As a sociologist with extensive knowledge and expertise in conducting stakeholder's identification and analysis, and project coordination in the area of water resource management. Jane has recently participated in the team of consultants commissioned to conduct Environment and Social Impact Assessment of various water dams and hydropower proposed projects, including the proposed Dongo Earth Fill water dams in Kiteto district, the proposed Kikuletwa III Hydropower Project, and Kikonge Multipurpose Dam (Hydropower and Irrigation) Project. She also participated in the evaluations of Fair Water Future Project III and Progress of WSDP II in Wami/Ruvu Basin. In previous years, Jane performed Gender assessment for the Water security for growth project in Pangani Basin; Lead a team commissioned by Lake Victoria Basin Water Board to conduct stakeholder mapping, analysis and facilitate development of strategic plan for basin's stakeholder's engagement and management of national socio-economic. She facilitated and monitored stakeholder engagement in Pangani Basin.

Bahati Tenga – Activity Manager and M&E Specialist

- In this assignment, Ms Tenga will perform activity management roles including day to day coordination of the activity and assisting the team on technical support. She will support the team during the design stage, engage in document review, and instrument development. With the support of the coordinator from DPWG and the contact person in the MoW, Bahati will ensure effective, and timely preparation of all logistics issues related to the assignment and further coordinate data collection efforts, data processing, and analysis to be used in the evaluation report.
- Tenga is an accomplished professional with competency in planning, evaluation and learning of development projects within research/ assessments (using qualitative and quantitative methods) and participatory approaches for community empowerment and citizen engagement. Bahati has extensive knowledge and over 18yrs of experience in conducting assessments, baseline studies and evaluations, among many other areas in infrastructure development including water and road sectors, environment and climate change, public health fields as well as in socio-economic sectors including youth and women empowerment, gender, and community development. As an evaluation specialist of data for development, she performed overall coordination of the various evaluations and assessments. In 2019 she was an activity manager supporting water assessment study design, instruments development, systematic literature review and coordination of the data collection exercise for the government officials at Ministerial level and agencies to Local Government Authorities.

Jacob Laden – Sr. Evaluation Advisor

- In this evaluation, Jacob Laden will spearhead evaluation design and analysis, advised on coordination and management support for field work, and will review intermediate and final deliverables along with the Data for Development COP, David Hughes
- For over 15 year Jacob has managed and lead a significant number of international and national evaluations and assessments. Jacob has experience in evaluating and assessing USAID and Department of state programs. Since 2017, Jacob has been key personnel leading and advising all evaluations and assessments undertaken by Data for Development in Tanzania.

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