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EVALUATION MID-TERM EVALUATION OF THE WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI), TANZANIA

August 31, 2018

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MID-TERM EVALUATION OF THE WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI), TANZANIA

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Cover Photo: Communities are fetching water in one of the water points at Kidabaga village, Kilolo district.

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Condolences

In memory of our friend and colleague in the ET, Engineer Yunusu Rugeiyamu, who passed away recently. We honor his valuable contributions to this evaluation and send our deepest sympathies to his family.

ABSTRACT

The purpose of the mid-term evaluation of the Water Resources Integration Development Initiative (WARIDI) is assessing progress towards target results and examining the methods of project implementation, both of which will inform time-sensitive course correction and future design. WARIDI 's goal is improved water resources management and service access across multiple sectors. Activities are implemented in selected districts of the Rufiji and Wami-Ruvu river basins in Tanzania. The evaluation team (ET) used a mixed methods approach, which included analyzing project documents and monitoring data, and gathering information through key informant interviews and focus group discussions with stakeholders involved in, or benefitting from, WARIDI's interventions. Using multiple sources of data allowed the ET to triangulate information for cross-validation and gain better understanding of issues from different perspectives. The evaluation found that, in general, WARIDI is well regarded as contributing to improved sustainability in water resources management. However, due to an early underestimation of the complexity and time needed to establish and scale-up activities—especially regarding Water, Sanitation, and Hygiene (WASH)—many targets will not be met. The program has done an excellent job integrating women and youth into programming but suffers from a lack of resources for the critical component one—WASH services. Allocating much more funding to this component should be a priority. The Leading with Sanitation approach has been effective in alerting communities that they require latrines before receiving other project benefits. However, it is unlikely that the goal of 1,000 participants will be met by the end of the project.

CONTENTS

- EXECUTIVE SUMMARY i
- 1.0 EVALUATION PURPOSE AND EVALUATION QUESTIONS..... 2
 - 1.1 Evaluation Questions 2
- 2.0 PROJECT BACKGROUND..... 2
 - 2.1 Program Description 2
 - 2.2 Target Beneficiaries and Geographical Area of Coverage..... 2
 - 2.3 Project Results Framework and Theory of Change..... 4
- 3.0 EVALUATION DESIGN, METHODS and LIMITATIONS 5
 - 3.1 Evaluation Design..... 5
 - 3.2 Evaluation Limitations 7
- 4.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS 8
 - 4.1 Question 1 (Implementation Approach): To what extent is the leading with sanitation approach used to implement the activities of WARIDI resulting in increased utilization of multiple-use water and sanitation services in the targeted LGAs?..... 8
 - 4.2 Question 2 (Implementation Approach): To what extent are WARIDI-supported LGAs performing compared to other LGAs in Tanzania? 12
 - 4.3 Question 3 (Sustainability): To what extent is the training and technological support provided by WARIDI to strengthen capacity at Basin, District, and Community level resulting in improved skills for management, operation, and maintenance of the facilities for water resources management, water supply, sanitation, and hygiene promotion?..... 20
 - 4.4 Question 4 (Sustainability): In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown and how can this inform the development of a sustainability plan for new water schemes by WARIDI and other WSDP actors? 26
 - 4.5 Question 5 (Sustainability): To what extent is WARIDI enhancing collaboration among other WSDP actors at the Basin and LGA level (e.g., community members, Government officials, Donors, NGOs, and CSOs) and how does this support the Basins and LGAs to achieve their plans? 29
 - 4.6 Question 6 (Private Sector): To what extent is WARIDI enhancing the participation of private sector in the implementation of activities and how that contributes towards achieving different activity milestone and results targets? 32
 - 4.7 Question 7 (Role of gender and youth): To what extent is WARIDI involving women and youth in the implementation process? And how are gender integration and youth inclusion activities mainstreamed with the activity key components? 34
 - 4.8 Question 8 (Management, leadership, and communications): To what extent are communications and decision-making processes facilitating or inhibiting implementation of activities in a timely manner? 36

4.9	Question 9 (Management, leadership, and communications): To what extent is the skills composition of the key personnel team sufficient towards achieving the results targets within the timeframe?	39
4.10	Other Findings.....	42
5.0	RECOMMENDATIONS.....	47
ANNEXES		50
Annex 1: Evaluation Statement of Work.....		51
Annex 2: WARIDI Performance Evaluation Design and Work Plan.....		57
Annex 3: Evaluation Methods and Limitations.....		79
Annex 4: Data Collection Instruments.....		84
Annex 5: WARIDI Targets and Achievement to Date.....		103
annex 6: Sources of Information/BIBLIOGRAPHY.....		105
Annex 6: Disclosure of any Conflicts of Interest.....		107

LIST OF FIGURES

Figure 1: Map of WARIDI Intervention Areas..... 3

Figure 2: WARIDI Activity Results Framework..... 4

Figure 3: WARIDI-Supported LGAs Reporting Rate Trends..... 14

Figure 4: Percentage of Households with Improved Toilets in Rural LGAs (WARIDI and non-WARIDI LGAs)..... 16

Figure 5: Percentage of Households with Improved Toilets in Rural LGAs (WARIDI and Non-WARIDI LGAs)..... 16

Figure 6: Percentage of Household with Functional Hand Washing Facilities and Soap 17

Figure 7: Number of ODF Declared Villages at National Level 19

Figure 8: IRs Sub-Team Relationships 37

LIST OF TABLES

Table 1: List of WARIDI Participating LGAs and Responsible Offices 3

Table 3: Latest Target Estimates and Budget for Water Access 9

Table 4: Percentage of Households with Improved Toilets in Rural LGAs (WARIDI and Non-WARIDI LGAs)..... 15

Table 5: WARIDI ODF Villages (Community Self-Assessment) 18

Table 6: Evidence of Practical Achievements of WARIDI-Supported COWSOs..... 22

Table 7: WARIDI Budget Allocations and Actual Expenditure to Date 41

Table 8: WARIDI Budget Allocations and Actual Expenditure to Date 41

Table 9: Comparison of Targets 42

ACRONYMS

Acronym	Description
ACOR	Alternate Contracting Officer Representative
BCC	Behavior Change Communication
BWB	Basin Water Board
CHW	Community Health Worker
CKM	Communications and Knowledge Management
CLTS	Community Led Total Sanitation
CO	Contracting Officer
COR	Contracting Officer Representative
COWSO	Community Owned Water Supply Organization
CSO	Civil Society Organization
CWST	Council Water and Sanitation Team
DC	District Council
DEC	Development Experience Clearinghouse
DFID	Department for International Development (UK Government)
DHO	District Health Officer
DO	Development Objective
DWE	District Water Engineer
EA	Engagement Agent
ET	Evaluation Team
FGD	Focus Group Discussion
GIYI	Gender Integration and Youth Inclusion
GOT	Government of Tanzania
HQ	Headquarters
INGO	International Non-Governmental Organization
IP	Implementing Partner
IR	Intermediate Result
IUWASH	Indonesia Urban Water, Sanitation, and Hygiene (USAID Project)
IWRM	Integrated Water Resources Management
iWASH	Integrated Water Sanitation and Hygiene (USAID Project)
KII	Key Informant Interview
LGA	Local Government Authority
LOE	Level of Effort
LwS	Leading with Sanitation
M&E	Monitoring and Evaluation

Acronym	Description
ME	Microenterprise
MEL	Monitoring, Evaluation, and Learning
MHM	Menstrual Hygiene Management
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly, and Children
MOWI	Ministry of Water and Irrigation
MUS	Multiple Use of Water Services
NSMIS	National Sanitation Management Information System
NGO	Non-Governmental Organization
NORC	National Opinion Research Center at the University of Chicago
OD	Open Defecation
ODF	Open Defecation Free
PAMSIMAS	National Rural Water Supply and Sanitation Project (World Bank Project)
PbR	Payment by Results
PMP	Performance Management Plan
PO-RALG	President's Office, Regional Administration and Local Government
SAGCOT	Southern Agricultural Growth Corridor
SOW	Statement of Work
STTA	Short Term Technical Assistance
TZS	Tanzanian Shillings
UNICEF	United Nations Children's Fund
U.S.	United States
USAID	United States Agency for International Development
USG	United States Government
WARIDI	USAID Water Resources Integration Development Initiative (WARIDI)
WASH	Water, Sanitation, and Hygiene
WB	World Bank
WSDP	Water Sector Development Program
WUA	Water User Association

EXECUTIVE SUMMARY

EVALUATION PURPOSE AND EVALUATION QUESTIONS

The purpose of this mid-term evaluation of the Water Resources Integration Development Initiative (WARIDI) is to assess its progress towards achieving the results targets, and the effectiveness of the approaches used to inform course correction for implementation and future design. The evaluation findings will contribute to the development of Year 3's and subsequent years' work plans. WARIDI supports the wider Water Sector Development Program (WSDP) of the Government of Tanzania (GOT), so the evaluation findings may be shared with the host Government Ministries and Districts. Findings, lessons learned, and best practices will contribute to improved implementation.

As per the Statement of Work (SOW), the evaluation was required to address nine core questions across five key topical areas. The core questions, and related findings, are elaborated in the executive summary and in Section 4 of the main report.

PROJECT BACKGROUND

WARIDI was awarded to Tetra Tech through the Water and Development IDIQ (Contract No: AID-OAA-1-14-00068) Task order no: (AID-621-TO-16-00003) to promote integrated water resources management and service delivery across multiple sectors, with the goal of improved water resources management and service access. WARIDI's activities are implemented in selected districts of the Rufiji and Wami-Ruvu river basins. The project includes three components:

- *Component 1 – Water Supply, Sanitation, and Hygiene (WASH) Services:* Increases access to sustainable multiple-use WASH services;
- *Component 2 – Governance:* Strengthens governance for sustainable and resilient management of water resources and services under a changing climate; and
- *Component 3 – Private Sector:* Increases livelihoods through supporting private sector opportunities in sustainable WASH services, agriculture, and natural resource management.

EVALUATION DESIGN AND METHODS

The fieldwork phase of the evaluation took place over the period June 18 to July 6, 2018. The evaluation used a mixed-methods approach, which included:

- Document review of relevant reports and materials
- A total of 45 key informant interviews (KIIs) - some conducted in group interviews - that reached 60 respondents across the project regions of Iringa and Morogoro and the five project districts (Mvomero, Kilombero, Kilosa, Kilolo, and Iringa). Out of the 60 respondents, 16 (27 percent) were female and 44 were male.
- A total of 24 focus group discussions (FGDs) (43 percent of participants were female and 57 percent male) were conducted in villages and towns across the five project districts. FGDs were held with two groups with Community Owned Water Supply Organization (COWSO) members and another with general community members (using 2 protocols conducted separately with men and women).
- At the time the ET conducted fieldwork, the training of microenterprises (MEs) was in its early stages and relatively few of the trained individuals were available for ET interviews.

Overall, there were 40 percent female respondents across data collection efforts, due to the predominantly male demographic among key informants in local government authorities (LGAs) and

other stakeholders.¹ Focus groups with women and youth were conducted as a part of the male and female FGDs with the community at large and with COWSO members.

KEY FINDINGS

Evaluation Question 1: To what extent is the leading with sanitation approach (LwS)...resulting in increased utilization of multiple-use of WASH services in the targeted LGAs?

The LwS approach has been effective in prioritizing sanitation and signaling to communities that they should have a latrine before being eligible for water (or other project benefits). In practice, the approach has had to be flexible so as not to delay other project activities. Construction of water schemes was ongoing at the time of the field visit. Completion of the rehabilitated schemes will increase water availability and allow for multi-use activities for the communities served, but not at the scale expected in the design, potentially reducing the impact of this activity. According to the mid-term progress report, WARIDI is expected to reach up to 791,000 people with improved water, and 750,000 people with basic sanitation, but will not meet the 1.5 million people expected by end of the project for each of the two targets.

Evaluation Question 2: To what extent have WARIDI-supported LGAs performed compared to other LGAs in Tanzania?

To assess the performance of WARIDI-supported LGAs compared to other LGAs, the evaluation has used data from the GOT's National Sanitation Management Information System (NSMIS) and the Department for International Development (DFID)-funded Payment by Results² (PbR) scheme.

Data from the NSMIS shows that in WARIDI-supported LGAs there has been a significant improvement in reporting and accuracy of sanitation and hygiene data, which has made a positive effect on the National Sanitation Campaign. However, the NSMIS data showed that WARIDI-supported LGAs did not perform as well as other LGAs in terms of the measurement of "percentage of households with improved toilets." Feedback at the Ministry level suggests performance is influenced more by intangible factors such as the initiative and motivation of the LGAs than by factors such as the level of donor support.

Handwashing data from the NSMIS indicates that WARIDI has had little impact on hygiene practice. The Evaluation team (ET) found that hygiene awareness has lower priority under WARIDI and the National Sanitation Campaign.

WARIDI-supported LGA performance has been modest so far in their ability to qualify for grants under the PbR scheme; one WARIDI-supported LGA qualified for PbR in 2016 and only two LGAs qualified in 2017. To date, only seven out of the 20 WARIDI-supported LGAs have qualified for PbR grants.

Evaluation Question 3: To what extent is the training and technological support provided by WARIDI...resulting in improved skills required for management, operation, and maintenance of the facilities for water resources management, water supply, sanitation, and hygiene promotion?

Capacity building through training and technological support to basin, district, and communities has been an integral part of WARIDI in all its intermediate results (IRs). On water resources management, WARIDI has supported the Basin Water Boards (BWBs), with a particular focus on the Wami-Ruvu and Rufiji water basins, to upgrade data monitoring and information systems, and strengthen flow measurement through the provision of instruments, software tools, and applications and associated training. WARIDI has also carried out training on climate change vulnerability to basin staff, LGA staff and WUAs.

At the time of the field visits, the skills training of Water User Associations (WUAs) had not yet been conducted and was awaiting results of the capacity assessment tool to identify their priority training needs. Based on preliminary findings, the indications are that WUAs still have lower capacity in their function in water use management.

¹ For details on limitations of the evaluation see Section 3.1.

² PbR is a performance-based financing scheme for the water sector. It is a national scheme and operates at the LGA level.

The WARIDI support and training provided so far to COWSOs has resulted in only limited improvement in understanding of the management, operation, and maintenance of the water supply facilities. COWSO knowledge and skills levels are still at a basic level and they require further training and hardware support. The WARIDI sanitation activities have supported the National Sanitation Campaign, increased latrine coverage, and strengthened standards of data collection, data verification, and reporting. WARIDI is the key contributor in the Integrated Water Resources Management (IWRM)/WASH sector, as it has mobilized and collaborated with other development agencies, private sectors business, and national programs [DFID, World Bank (WB), WSDP] who are now working together in water sector development in the Iringa and Morogoro regions.

Evaluation Question 4: In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown and how can this help to inform the development of sustainability plan for new water schemes by WARIDI and other WSDP actors?

Reasons for failure and breakdown in rehabilitated schemes relate to the management, operation, and maintenance of facilities, and to the degree to which District Water Engineers (DWEs) can provide support to COWSOs. WARIDI's support to COWSOs has partially supported these enabling conditions for the maintenance and management of the water schemes. In undertaking rehabilitation of non-functioning and partly functioning water schemes, WARIDI can be a model for future infrastructure works in that it has achieved high technical standards in the procurement of construction materials and in the design of facilities in supported LGAs. However, technical sustainability will depend on adequate standards of operation and maintenance by COWSOs. The reasons for failure to maintain water schemes can also relate to "external" factors beyond the scope of the project, such as the governance framework and the institutional environment within which the COWSOs and the water systems operate. In its design and scope, WARIDI is not currently configured to address institutional and governance factors.

Evaluation Question 5: To what extent is WARIDI enhancing collaboration among other WSDP actors at the Basin and LGA level...and how does this support the Basins and LGAs to achieve their plans?

In achieving IWRM goals, WARIDI is required to develop collaboration with actors at the national as well as the local level, and work to support the implementation of Water Sector Development Program Phase II. WARIDI is working with River Basin Authorities (RBAs), LGAs and sectoral ministries and agencies, and communities. WARIDI Engagement Agents (EAs) serve as the link to coordinate WARIDI activities and communicate with LGAs. WARIDI has also engaged with leaders in the national sectoral ministries and President's Office, Regional Administration and Local Government (PO-RALG).

WARIDI is effectively supporting the basins in implementing the WSDP plans. Activities supported by WARIDI include Technical Working Group meetings; Climate Vulnerability Mapping and training; capacity building of basin staff; strengthening the capacity of WUAs; improved data management; supporting rating curves development and flow measurements; and classification of water resources.

However, the evaluation found that WARIDI has had limited engagement and coordination with BWBs and LGAs at the district level, and that there is no clear connection between the WUAs who lead on water resources conservation, protection, and enforcement at the local level, and the COWSOs who are mainly utilizing the water resources at the community level. This is evidenced by the absence of formal or informal coordination meetings at the community level to foster a working relationship between WUAs and COWSOs, in collaboration with the BWBs and LGAs. To date, WARIDI has not facilitated such meetings.

Evaluation Question 6: To what extent is WARIDI enhancing the participation of the private sector in the implementation of activities and how does that contribute towards achieving different activity milestone and results targets?

WARIDI recognizes that there are potential roles for private enterprises in supporting Tanzania's evolving WASH sector, although the implementation of this component is still at an early stage. The approach to private sector identification involved mapping how the private sector can contribute to community access to WASH

through specific business models in providing products and services. This mapping revealed 443 participants from MEs that WARIDI could potentially engage. The selected products and technologies include water treatment products, smart meters, community education, feminine hygiene products, and sanitation products. WARIDI is planning to engage with financial institutions for providing loans to COWSOs for infrastructure rehabilitation and smart meter installation.

WARIDI has begun training and mentoring for 300 WASH-oriented MEs, such as local hardware stores, pharmacies, farm input stores, and other small shops. The WARIDI training encourages local MEs to offer WASH products and services, targeting 1,000 WASH service providers through known MEs and COWSOs.

The evaluation has found that WARIDI is not meeting the targets for this component and that the targets may not be realistic and achievable given the early stage of implementation of this component. WARIDI has set a target of 250 participants for Year 3 but reaching the target of 1,000 by end of the program is not likely. Furthermore, the mapping exercise will need to be expanded beyond the five initial LGAs to identify and reach the target of 1,000 participants by the end of the program.

Evaluation Question 7: To what extent is WARIDI involving women and youth in the implementation processes?

Through KIs with WARIDI Gender and Youth advisor, community development officers in Kilolo and Iringa DC, and FGDs with female community members and COWSOs, it was found that women and youth activities have been successfully mainstreamed in the program. This is a result of training and capacity building activities undertaken by WARIDI directed at its technical team, COWSOs and LGA officials. The general community members were able to participate in livelihood groups where 50 percent of the group members are women and youth. There were also specific Gender Integration and Youth Inclusion (GIYI) activities in two of the five visited councils. The specific GIYI activities, namely Upward training, were designed to be offered to influential traditional leaders from two villages (Kanolo in Kilombero DC and Lulanzi in Kilolo DC). The training is designed to strengthen gender awareness and change social norms to support women's participation in water and WASH-related decision-making. While the ET found that all activities were conducted according to plan, no monitoring data was available to assess the effect training sessions had on the two recipient villages, or how they compare to other villages and councils. Given the limited number of Upward training sessions, it is hard to say at this time whether this should be scaled up to other WARIDI councils. However, better monitoring and assessment may serve to determine the value it might have on gender mainstreaming in the program. A KI with the gender and youth advisor revealed that monitoring gender activities for timely feedback on progress requires a budget.

Evaluation Question 8: To what extent is the communications and decision-making process facilitating or inhibiting implementation of activities in a timely manner?

Management, leadership, and communications within WARIDI encountered challenges during the first year, including issues with coordination and integration of sub-teams, but have improved significantly since then. The sub-teams tasked with implementing each of the project components are now communicating well with the prime and other subcontractors and this is contributing to achieving the target results. From KIs, the ET learned that basin board members and sub-grantees are happy with the level of communication.

LGAs indicated that although WARIDI keeps them well informed of events and milestones, LGAs would appreciate greater transparency from WARIDI, especially on planning and reporting of costs, which may have implications on ownership of facilities and long-term sustainability.

Evaluation Question 9: To what extent is the skills composition of the key personnel team sufficient towards achieving the results targets within the timeframe?

The Implementing Partner (IP) and its key personnel have previous relevant WASH experience in Tanzania and/or on the Tanzania Integrated Water Sanitation and Hygiene Program (iWASH) or have worked with international non-governmental organizations (INGOs), however, they have not previously worked on a project of this scale.

At the interface with local government and the community level, the following roles are filled by relatively junior and in some cases less skilled field staff:

- Engagement Agents (EAs) are based in the LGAs and facilitate communications and coordination of activities between WARIDI and LGAs and community leaders and members.
- Engineering interns make up a significant percentage of the WARIDI technical staff, but they are recent engineering graduates and inexperienced.
- Sub-Grantees are well experienced in WASH activities but as service providers on short-term contracts they are assigned a relatively junior role.

Based on WARIDI's achievement against targets over the initial two years, it is evident that WARIDI underestimated the bureaucratic complexity and time needed to establish and scale-up activities to achieve targets, especially regarding sanitation/WASH activities. The extent to which WARIDI has missed targets is not due to the personnel lacking skills, but rather because of other factors, such as the complexity and reach of the project, the challenges related to the scaling up effort, and inadequate budget and personnel for sanitation/WASH activities. Improvements in management and communication are evident, lessons have been learned, and there is a greater urgency to meet targets.³

CONCLUSIONS AND RECOMMENDATIONS⁴

- Only WARIDI's WASH services (Component I) is required to achieve significant scale and is being judged primarily on the extent to which it meets these targets. WARIDI needs to reprioritize and provide adequate resources for its critical Component I activities. At the moment it has allocated only 12.3 percent of its total budget for WASH activities. The amount needs to be increased significantly to allow WARIDI to scale up its WASH activities.
- The project design and budget have dictated a target-driven approach. The combination of ambitious targets for WASH services and relatively limited budget have pre-determined a low-cost approach. The project design emphasizes "numbers of persons with improved access," therefore, this has become the focus of the implementation effort. The absence of performance indicators for sustainability and improved hygiene has resulted in these important issues being accorded lower priority.
- WARIDI has successfully built capacity through training and technological support at the Water Basin level and this has raised skills' levels and contributed to improved sustainability in water resources management. However, institutions such as the WUAs have not yet received training and COWSOs, despite having received training, need more support. The ET recommends further engagement with local water associations and LGAs to improve sustainability.
- Communications and management within WARIDI proved to be a challenge during the first year of the program. WARIDI underestimated the complexity and time needed to establish and scale-up activities to achieve targets, especially regarding sanitation/WASH activities. This resulted in the project not meeting targets and increased pressure to scale up activities.
- Despite recent improvements in management, communications, and operations, which are beginning to yield improved performance, WARIDI's projections show that it will still fall well short of the project targets. While the personnel and communications appear to be intact, reassessment of the targets and approach is required and should be aligned with team and individual performance goals as well as professional development.
- WASH/sanitation sensitization activities are still at an early stage in creating community behavior change; in addition, training has reached fewer than expected MEs at this stage of the project. Targets may need to be adjusted, or efforts may need to be brought up to scale given the slower pace and reduced emphasis on this component.

³ See other findings on target setting and design in the main report.

⁴ See elaborated recommendations on pages 47-48 of the main report.

- WARIDI's current focus is on the target number of beneficiaries and is based less on sustainable outcomes. The ET recommends the program take a more flexible selection approach and forge creative partnerships with LGAs to co-fund water schemes for improving sustainability.

I.0 EVALUATION PURPOSE AND EVALUATION QUESTIONS

The purpose of this mid-term evaluation of the United States Agency for International Development's (USAID) Water Resources Integration Development Initiative (WARIDI) is to assess the implementation progress by measuring progress towards achieving the results targets; making overall judgement about the effectiveness of the approaches used towards achieving sustainable services; and informing course correction and future designs. WARIDI was designed to be implemented for 60 months within the two most important water basins of Tanzania—Rufiji and Wami Ruvu—and has been on the ground for over 28 months.

The mid-term evaluation findings will inform and guide the Mission and the Implementing Partner (IP) in developing Year 3's and subsequent years' work plans to ensure resources are available and approaches are targeted towards achieving the desired results. As WARIDI is also supporting the wider Water Sector Development Program (WSDP) of the Government of Tanzania (GOT), and is implemented in collaboration with the Local Government Authorities (LGAs), the evaluation findings are expected to be shared with the host Government Ministries and Districts to improve implementation and share lessons learned for scaling up good practice beyond USAID's area of influence.

I.1 EVALUATION QUESTIONS

The following questions substantively address the five key topical areas mentioned in the evaluation Statement of Work (SOW) (Annex I).

Implementation Approaches

1. To what extent is the *leading with sanitation* approach used to implement the activities of WARIDI resulting in increased utilization of multiple-use of water and sanitation services in the targeted LGAs? Is this approach affecting other components of the project? Is the approach integrated to address all project components such as governance, climate change, agriculture, gender, and youth?
2. To what extent has WARIDI supported LGAs' performance compared to other LGAs in Tanzania according to the standardized measurements used by the GOT?

Sustainability

3. To what extent is the training and technological support provided by WARIDI to strengthen capacity at Basin, District, and Community level resulting in improved skills required for management, operation, and maintenance of the facilities for water resources management, water supply, sanitation, and hygiene promotion?
4. In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown and how can this help to inform a development of sustainability plan for new water schemes by WARIDI and other WSDP actors?
5. To what extent is WARIDI enhancing collaboration among other WSDP actors at the Basin and LGA levels [e.g., community members, government officials, donors, non-governmental organizations (NGOs) and civil society organizations (CSOs)] and how does this support the Basins and LGAs to achieve their plans?

Private sector

6. To what extent is WARIDI enhancing the participation of the private sector in the implementation of activities and how does that contribute towards achieving different activity milestone and results targets?

Role of gender and youth

7. To what extent is WARIDI involving women and youth in the implementation processes, and how are the gender integration and youth inclusion activities mainstreamed with the activity key components?

Management, leadership, and communications

8. To what extent are the communications and decision-making processes facilitating or inhibiting implementation of activities in a timely manner?
9. To what extent is the skills composition of the key personnel team sufficient towards achieving the results targets within the timeframe?

2.0 PROJECT BACKGROUND

2.1 PROGRAM DESCRIPTION

WARIDI was awarded to Tetra Tech through the Water and Development IDIQ (Contract No: AID-OAA-1-14-00068) Task order no: (AID-621-TO-16-00003) to improve water resources management and service access. WARIDI activities are implemented in selected districts of the Rufiji and Wami-Ruvu river basins. The project includes three components:

Component 1 – Water Supply, Sanitation, and Hygiene (WASH) Services: Increases access to sustainable multiple-use WASH services;

Component 2 – Governance: Strengthens governance for sustainable and resilient management of water resources and services under a changing climate; and

Component 3 – Private Sector: Increases livelihoods through supporting private sector opportunities in sustainable WASH services, agriculture, and natural resource management.

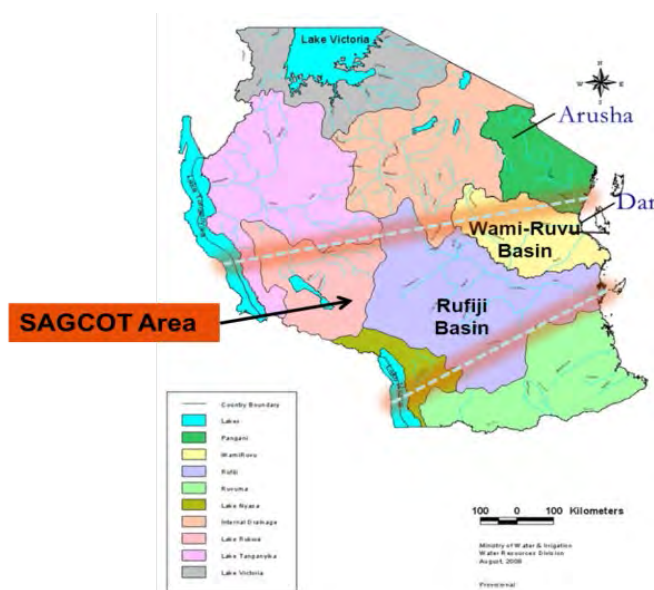
WARIDI works through national and local government authorities, the two Basin Boards, communities, private entities, and civil society to improve equitable delivery of water-related services and to enhance integrated watershed management approaches from the basin to the household level. WASH and livelihood services focus on demand-driven requests from 20 LGAs receiving project support, while emphasizing private sector partnerships for efficiency and sustainability, through the lenses of climate change adaptation, gender integration, and youth inclusion.

WARIDI is being implemented by TetraTech and its subcontractors, IRIS group, Water for Life, and Winrock International. The program contract has a funding ceiling of \$48,823,819 for a five-year (60 months) period, 2016-2021. The effective commencement date of the project was January 4, 2016.

2.2 TARGET BENEFICIARIES AND GEOGRAPHICAL AREA OF COVERAGE

Water Basin Level Intervention: WARIDI activities are implemented in the two major river basins that overlap with Tanzania's Southern Agricultural Growth Corridor (SAGCOT): the Rufiji and Wami-Ruvu (see Figure 1).

Figure 1: Map of WARIDI Intervention Areas



A systems-based approach is utilized to shape the selection of field sites within these two basins. The activity is strategically integrating interventions at multiple scales to achieve sustainable and catalytic impact. Activities at basin levels are cross-cutting policy, governance, and capacity-related issues at the national or basin-wide scale.

Local Government Authority Selection: For site-based interventions, WARIDI adopted a demand-led approach. LGAs had to apply to WARIDI explaining the “goodness of fit” to the selection criteria provided by WARIDI. Criteria included: 1) stated need; 2) willingness to co-fund and coordinate activities; 3) willingness to work with WARIDI on all Intermediate Results (IRs); 4) population size (the larger the population, the higher the priority); 5) quality of the application; and 6) being located where USAID is already working through other programs. Twenty (20) LGAs were selected (see Table 1) based on an objective assessment of the applications by WARIDI and government officials: one from Mbeya Region, nine from Morogoro Region, three from Njombe Region, five from Iringa Region, and two from Coastal Regional.

Target beneficiaries: Minimum numbers of beneficiaries for the key services provided by WARIDI are:

- 1,500,000 people gain access to improved drinking water sources
- 1,500,000 people gain access to improved sanitation facilities
- 3,000,000 people living in open defecation free (ODF) environments.

Table 1: List of WARIDI Participating LGAs and Responsible Offices

WARIDI Office Location	LGA Name	
Morogoro Office	1. Kilosa District Council 2. Mvomero District Council 3. Gairo District Council 4. Morogoro Municipal Council	5. Morogoro District Council 6. Bagamoyo District Council 7. Chalinze District Council
Ifakara Office	1. Ulanga District Council 2. Kilombero District Council	3. Malinyi District Council 4. Ifakara Town Council

WARIDI Office Location	LGA Name	
Iringa Office	1. Njombe District Council	6. Kilolo District Council
	2. Njombe Town Council	7. Wanging'ombe District Council
	3. Mafinga Town Council	8. Mbarali District Council
	4. Mufindi District Council	9. Iringa District Council
	5. Iringa Municipal Council	

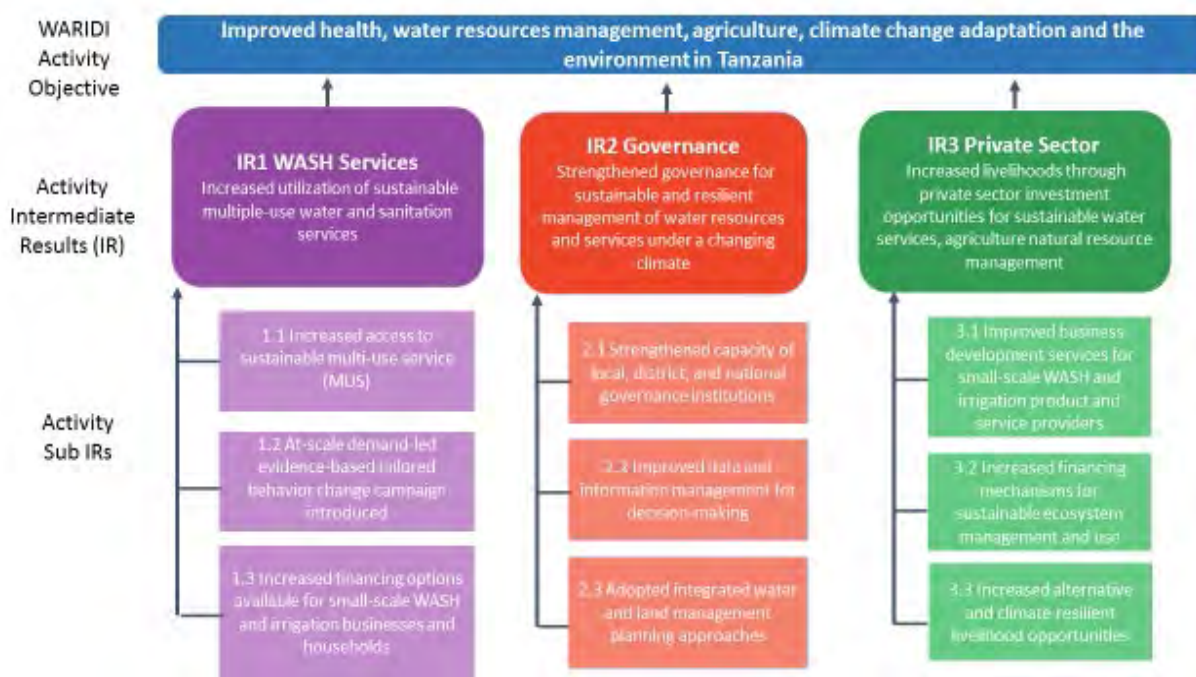
*Italicized are LGAs (all rural) which began implementation at the outset of the program. The rest have been engaged over the last 3-6 months.

2.3 PROJECT RESULTS FRAMEWORK AND THEORY OF CHANGE

WARIDI seeks to improve health, water resources management, agriculture, climate change adaptation, and environmental conservation in the target LGAs.

Figure 2 provides a diagrammatic representation of the WARIDI Results Framework.

Figure 2: WARIDI Activity Results Framework



The WARIDI Theory of Change states:

IF governance for sustainable and resilient management of water resources and services is improved at all levels (IR2);

AND IF evidence-based information, planning and action for climate-resilient water resource management and WASH service delivery is improved (IR2);

AND IF water supply and sanitation service delivery (infrastructure and management systems) is improved to scale-up coverage, provide for domestic and productive water needs, and increase the sustainability of service (IR1);

AND IF diversified, sustainable and climate-resilient livelihoods through enhanced private sector

investment are scaled-up (IR3);

THEN cross-sectoral and integrated management of water-related resources and services in the Rufiji and Wami-Ruvu Basins will be improved, leading to measurable improvements in human health, livelihoods, and environmental stability.

3.0 EVALUATION DESIGN, METHODS AND LIMITATIONS

3.1 EVALUATION DESIGN

The WARIDI mid-term evaluation used a mixed methods approach to address the evaluation questions (EQs), which analyzed project related documents, project monitoring data and data collected through key informant interviews (KIIs), group interviews (GIs) and focus group discussions (FGDs) with stakeholders involved and/or benefitting from the WARIDI interventions. The use of multiple sources of data allowed the ET to triangulate information for cross-validation and to gain good understanding of issues from different perspectives. The ET had two goals. The first was to generate an overall understanding of the project and its results and effects. The second was providing a detailed assessment of its various components and the effectiveness of the WARIDI approach. The goals helped the ET provide recommendations for achieving sustainable services and informing course correction and future project designs. The mid-term evaluation fieldwork was conducted between June 18 and July 6, 2018 in the initial five out of the 20 LGAs of WARIDI interventions within the Rufiji and Wami - Ruvu basins.

The ET used a participatory approach to the evaluation which included the Implementing partner and the USAID Technical office in the course of developing the design, involved the IP in the planning of fieldwork and also engaged them in the instrument development for the evaluation. Several out-briefing on preliminary findings were held with both the Mission and IP prior to submission of the report which improved the quality of our findings and conclusions and recommendations.

Sampling Procedure

Key Informant Interviews

A purposive sampling method was used for selecting Regions and Districts from which the KIIs and FGDs/GIs participants were drawn. The ET focused on the initial five LGAs of WARIDI interventions (Mvomero, Kilombero and Kilosa in Morogoro region and Kilolo and Iringa districts in Iringa region). A total of 45 KIIs were conducted with a range of project stakeholders and beneficiaries, including national-level Ministries, Regional Secretariats, LGA staff, USAID staff, WARIDI staff, and staff of the Rufiji and Wami Ruvu basins. Of the 60 KII respondents, 16 (27 percent) were female and 44 were male.

Focus Group Discussions

At the district level, the ET reached targeted stakeholders i.e. Community Owned Water Supply Organizations (COWSOs) and general community members more broadly via FGDs using structured discussion guides. Using randomized sampling and disaggregated by new and existing ones, 14 COWSOs were selected to interview. For each of the selected COWSOs, two members (a male and a female) were invited to participate in the discussion. The FGDs were conducted separately for each gender to minimize the influence of traditional societal norms on gender roles. The same procedure was used to draw participants for FGDs with the general community, however, they were randomly selected from the sample list of COWSOs with the additional criteria that the village should have a water scheme supported by USAID under WARIDI. In total, the ET conducted 24 FGDs across the five targeted LGAs. Of the 221 FGD participants, 96 (i.e. 43 percent) were female.

Table 2: Key Informant Interview and Focus Group Discussion Respondent Demographics

Type	Male	Female	Total	Percent Female
KIIs	44	16	60	27%
FGDs	125	96	221	43%
Total	169	112	281	40%

The interviews with women and youth were conducted as part of the male and female FGDs with the general community at large. Private sector stakeholders were also interviewed through their inclusion in FGDs with communities⁵. The overall number of KIIs was increased to 45 to allow for the inclusion of community health workers (CHWs), and the number of FGDs was reduced to 24 due to unavailability of some participants and the replacement of youth-specific groups with general community members.

The methodology used by the ET in conducting FGDs/KIIs is outlined below.

Methodology for Conducting KIIs

- Purposive selection of the participants for the KIIs was done based on the role of each related stakeholder in the WARIDI activity and the water sector at various levels (national and the two water basin levels).
- Each KII included an interviewer and participant(s) for a semi-structured discussion around pre-determined questions (included in an interview guide, see Annex III).
- All KIIs were recorded after informed consent was given by each participant. The interviewer was assisted by a note taker.
- The interview guide included 15-20 open-ended questions, starting with water questions, and moving on to narrower or key questions. The questions were neutrally worded and used neutral probing. The interview guide also included 10-12 closed-ended, quantitative questions to supplement the open-ended, qualitative data.

Methodology for Conducting FGDs

- Each FGD included a maximum of 15 participants who engaged in an open discussion structured around pre-determined questions (included in a discussion guide, see Annex III) led by a moderator.
- All FGDs were recorded with informed consent obtained from all participants prior to the start of the discussion, and in each FGD a note taker assisted the moderator. The note taker recorded key words, expressions, silences, and non-verbal language of the participants.
- The 90-minute FGDs were guided by 14-20 open-ended questions, starting with water questions and moving on to narrower or key questions using the following order: opening, introductory, transition, key, and ending. The questions were neutral in wording and structure.

Data Analysis Methods

Qualitative and quantitative analyses of the data were undertaken to determine the achievements and the shortcomings of the activity in relation to the objectives, targets, and evaluation questions. Qualitative analysis was conducted including review of transcripts from KIIs, GIs and FGDs using a thematic coding matrix which captured repeated themes and respondent characteristics. All transcripts were coded in spreadsheet format for analysis, identifying key quotes and extracting findings and/or information for report writing. Quantitative analysis included review of annual reporting, quarterly reporting and IPRS monitoring data to visualize trends using descriptive statistics. Data from the national sanitation management information system (NSMIS) was used to compare WARIDI and non-WARIDI LGAs performance on sanitation and hygiene, including use of sanitation services and Open Defecation Free (ODF) status of localities.

⁵ Refer to section 4.6.2 for detailed explanation

3.2 EVALUATION LIMITATIONS

There are several important limitations inherent to the design selected for this evaluation:

- **Time and location constraints:** The ET underestimated the time and bureaucratic procedures required to get interviews at the Ministerial and district levels, and reduced access to some stakeholders during working hours. To mitigate this, some of the affected stakeholders agreed to interviews outside of normal working hours and most interviews were successfully carried out as planned.
- **Data availability:** At the time of conducting field interviews for this mid-term evaluation, the training of MEs was still in its early stages, with only a few having received the training. The ET was able to interview a limited number of these trainees through their inclusion in FGDs with communities. Interviews with youth and women group leaders were also conducted via their participation in FGDs.⁶ In addition, some of the sub-grantees⁷ were unavailable for interviews since some staff members were off-site attending training workshops. At the time of the evaluation fieldwork, the communities were not yet benefiting from improved water availability, since rehabilitation works were still ongoing.
- **Selection bias:** As some key informants were unavailable to be interviewed, there was a possibility of selection bias, i.e., those respondents who accepted to be interviewed may differ in some important dimensions from those who did not, for example in terms of their attitudes and perceptions, affiliation with government/non-government structures, socio-demographic characteristics, and experience. In addition, the purposive nature of the site selection process introduces additional selection bias.
- **Recall bias:** KIs and FGDs relied on self-reports about events and perceptions that may date back several years and could be incomplete due to inaccurate or incomplete recall.
- **Response bias:** KIs and FGDs relied on self-reports about events and perceptions that may be biased due to social desirability or respondents wanting to provide answers they thought interviewers wanted to hear.
To mitigate selection, and response bias, qualitative findings were compared to secondary source data such as those from the NSMIS to triangulate and corroborate findings from qualitative primary sources.
- **Halo bias:** There is a known tendency among respondents to underreport socially undesirable answers and alter their responses to approximate what they perceive as the social norm, called halo bias. The extent to which respondents will be prepared to reveal their true opinions may also vary for some questions that call upon the respondents to assess the attitudes and perceptions of their colleagues or people whom they depend on for the provision of services. To mitigate this limitation, the ET outlined confidentiality and anonymity statements to all participants in KIs and FGDs. Where possible, the ET conducted the interviews in as neutral a setting as possible where respondents felt comfortable. FGDs were conducted separately for each gender to minimize the influence of gender and traditional societal norms.

**See Annex 3 for full details on evaluation methods and limitations.*

⁶ *ibid.*

⁷ Namely: IECA and CEMDO in Iringa district and Kilombero district respectively.

4.0 FINDINGS AND CONCLUSIONS

4.1 QUESTION I (IMPLEMENTATION APPROACH): TO WHAT EXTENT IS THE LEADING WITH SANITATION APPROACH USED TO IMPLEMENT THE ACTIVITIES OF WARIDI RESULTING IN INCREASED UTILIZATION OF MULTIPLE-USE WATER AND SANITATION SERVICES IN THE TARGETED LGAS?

4.1.1 Introduction

The *Leading with Sanitation* (LwS) approach has been adopted by the IP to highlight the importance of sanitation and to signal to communities that they must have a latrine as a prerequisite to gaining further project benefits. This has been interpreted by many as meaning “if we build a latrine, then we will get water.” However, under WARIDI, not all communities that satisfy the requirement to have a latrine will gain water.

In the first phase of WARIDI, which targets five LGAs (Mvomero DC, Kilosa DC, Kilombero DC, Kilolo DC, and Iringa DC):

- Sixteen (16) water schemes are being rehabilitated benefitting 44 villages or 169,000 people; and
- Ninety-seven (97) villages or 275,000 people will benefit from access to basic sanitation.

The LwS approach has, in some instances, raised expectations of further benefits (e.g., improved water for the community). However, the sanitation awareness component⁸ is intended to convince communities of the benefits of having a latrine, on its own merits. More generally, LwS is regarded as conveying a positive message, which reinforces the importance of sanitation and is well regarded by LGA staff as supporting the aims of the National Sanitation Campaign.

LwS started with a “leading” approach, which implied that all households in the village or sub-village should have a latrine before any interventions commenced. In practice, this had to be applied in a flexible manner to avoid project delays. The current approach is “as long as sanitation progress is being achieved, we can start with other project interventions.”⁹ This is a pragmatic approach that allows other project activities to run in parallel with sanitation activities.

4.1.2 Findings

Increased use of water services

EQ I specifically asks to what extent the LwS approach is resulting in increased availability and use of water for various multi-use purposes. At the time of the fieldwork visit, 14 of the 16 water schemes were undergoing rehabilitation, and none of the 16 schemes had been commissioned. Therefore, it was not possible to assess “increased water use” per se. However, on completion, the rehabilitated schemes will enable improved water access and increased water use, and allow for limited multi-use activities¹⁰ for the communities served by the 16 schemes. However, considering the design and the overall goal of achieving multiple-use of water, one of the interviews with District Water Engineers (DWEs) revealed:

“The envisaged increased water use as a result of multiple-use water is yet to be apprehended as a result of the incorporated tariff and meters except through increased accessibility and hygiene practices.”

⁸ Uses the Community Led Total Sanitation (CLTS) tool.

⁹ KII with WARIDI technical staff.

¹⁰ For Multiple Use Water Services in rural areas, an additional 5 liters per person per day (lcpd) is allowed for other water uses. The total allowance is therefore 30 lcpd, comprising 25 lcpd for domestic use (assuming water kiosk supply) and 5 lcpd for other (MUS) purposes.

It was clear from the interviews that the communities had been motivated to construct improved toilets and install tip tap “*vibuyu chirizi*” facilities that necessitate water usage for handwashing, increasing use of water. However, not all community members felt their water access was adequate. As stated by community members and volunteers,

“...we came here to volunteer because we represent the village, the village used to get water but in our sub-village (hamlet), there is no water, we are just given hope that we will get water. But we do not have access to tap water completely and that’s why we work very hard expecting that, they said if the project will be extended we can be able to get water. In short, our area has no water.” (Kipele, Iringa DC)

“...water points are very few, so we request for increased water points because some people stay far from the water points.” (Kidabaga Kilolo DC, Iringa Region)

“...some villages such as Misufini [do] not get water and even in the remaining two villages there are areas that do not get water, so there are complaints from the people.” (Hembeti, Mvomero DC, Morogoro Region)

The extent to which the program is being implemented at scale is a critical issue. Phase 1 is expected to benefit 169,000 people and Phase 2 will benefit a further 270,732 people, for a total of 439,732 people. According to WARIDI’s projections, by accepting a more fluid definition of “numbers of people gaining access to basic drinking water services,” which includes “improved reliability,” the overall target numbers achieved by end of the project can be increased from 439,732 to 791,075. This is far short of the project target of 1.5 million people. If this is indeed the case, only 53 percent of the intended beneficiaries will receive an improved water supply. Accordingly, WARIDI will have far less impact than intended.

WARIDI is an integrated water resources project addressing multiple outcome areas, including:

- Improved access to sanitation (IR1)
- Improved access to water services (IR1)
- Improved community health and hygiene practices (IR1)
- Water basin level improvements and improved governance (IR2)
- Community livelihoods (IR3)
- Gender and youth roles and opportunities (Cross-cutting)

However, a majority of the feedback received¹¹ from and issues of concern raised by stakeholders (at the village, ward, and district levels) relate to the WASH components of WARIDI. The clear message given to the ET is the following:

- District/LGA places priority on improved availability of water; and
- Community puts a higher priority on basic access to water than sanitation, or issues related to maintenance, governance or private sector supply chain etc.

Of the WARIDI total budget of \$48.8 million, only \$5.97 million (or 12.2 percent) is allocated to water schemes rehabilitation (see Table 3). The provision of improved access to water needs a much greater focus from WARIDI to meet the project targets as well as community and LGA expectations. WARIDI targets are discussed further in Section 4.10.1.

Table 3: Latest Target Estimates and Budget for Water Access

Construction for Rural Water Facilities	Budget Amount	People Served	Cost per Beneficiary
Construction costs for 16 schemes	\$2,292,476	169,331	\$13.54

¹¹ From FGDs and KIs with a wide variety of stakeholders.

Construction for Rural Water Facilities	Budget Amount	People Served	Cost per Beneficiary
Construction costs for solar schemes	\$225,000	5,000	\$45.00
Total remaining construction funds	\$3,450,217	265,401	\$13.00
Total	\$5,967,693	439,732	-

An indirect benefit of the WARIDI project is that it enables LGAs to access additional funding from the United Kingdom (UK) Government's Payment by Results (PbR) Project¹². However, in 2016, only one WARIDI LGA qualified, and in 2017, only two LGAs qualified for PbR funding (see EQ 2 for further discussion on PbR).

Increased use of sanitation services

The LwS approach has been effective in prioritizing sanitation and signaling to communities that they should have a latrine before they will be eligible for water (or other project benefits). This has encouraged households to build and use latrines. However, the latrine/open defecation free (ODF) program is not operating at the scale or pace intended. This has been due to slower uptake and behavior change in the community. Although communities would prefer that these two interventions work concurrently, the LwS approach has had cascading effects on the pace of water scheme rehabilitation and water provision. WARIDI data indicates that, by the end of the project, it will have reached 750,000 persons i.e., it will have achieved 50 percent of the target (of 1.5 million) for numbers of people with increased access to basic sanitation. In terms of the ODF target of 3 million people, WARIDI estimates it will achieve 925,600 (or 31 percent) by end of the project. Accordingly, WARIDI is resulting in increased use of sanitation services in the target areas, but to a much lesser extent than intended.

The evaluation also finds that hygiene awareness among the target communities is low.¹³ Improved hygiene awareness and practice is an integral and essential component of WASH, and necessary to achieve the desired outcome: "improved health." While hygiene messaging is included in the Community Led Total Sanitation¹⁴ (CLTS) triggering, it receives limited follow-up. The reasons for this are:

- There are no performance indicators for hygiene,¹⁵ which effectively relegates its importance; and
- The sub-grantee contract tenure of one year allows limited time for follow-up. In addition, they are under pressure to achieve sanitation and ODF targets, which they prioritize over hygiene outcomes.

Sub-village level officials (leaders, village health workers) also have a role in reinforcing health and hygiene messages. However, they have been given limited training,¹⁶ and are not provided with sufficient communications and knowledge management (CKM) materials such as leaflets, posters, toolkits, and guidance notes to replicate training and more broadly share knowledge in their communities. As sub-grantees have noted, "*hygiene awareness takes more time*" compared to latrine triggering.¹⁷ As a follow-up

¹² Funded through the UK Government Department of Foreign Affairs and Trade (DfID). Under PbR LGAs are paid according to the progress they make at improving access to safe water. By assisting LGAs to rehabilitate water infrastructure WARIDI enables LGAs to leverage additional funding under PbR.

¹³ Evidence: from KIIs, FGDs, inspections e.g. the lack of handwash facilities.

¹⁴ CLTS is an integrated approach to achieving and sustaining open defecation free (ODF) status. CLTS entails the facilitation of the community's analysis of their sanitation profile, their practices of defecation and the consequences, leading to collective action to become ODF with emphasize on increasing access to improved sanitation and hygiene facilities.

¹⁵ It should be noted that the national Sanitation & Hygiene Register already includes data on handwash facilities which could be used by WARIDI as an indicator/proxy for hygiene awareness.

¹⁶ Village and sub-village leaders are included in the sanitation awareness component (i.e. the CLTS triggering).

¹⁷ IE under CLTS procedure communities are triggered, using relatively confrontational messaging and graphic demonstrations, and then are encouraged to set a timeline for the whole community to construct latrines. This timeline is typically a few months.

for households who do not construct their latrine within the allowed timeframe, the village leadership has legal avenues (i.e., by-laws) to enforce the construction of latrines. Ultimately, household members can be fined or punished through community “naming and shaming” if they do not have a latrine. Where households cannot afford to build a latrine, community assistance may be given. But hygiene awareness requires a more educational approach to the one adopted to encourage (or compel) households to see value in the latrine and the means to construct one for home use. This typically requires a different approach and longer timeframe to achieve desired results, but it can lead to more lasting social change.

Although the WARIDI ODF/latrine program is not on track to achieve the expected targets, it is well regarded by LGA staff as making a significant contribution to the GOT’s national sanitation campaign. The WARIDI LwS approach broadly follows the national approach, with some key differences (Text Box 1).

Text Box 1: WARIDI ODF/Sanitation Approach

- Broadly follows national strategy approach
 - *Uses CLTS triggering*
 - *No subsidy approach for household latrines*
 - *Naming and shaming used to enforce compliance*
- Points of difference with national approach
 - *Different definition of ODF (WARIDI uses “Universal ODF” – GOT uses Level 1 & Level 2 ODF)*
 - *WARIDI excludes institutions (e.g., schools, churches, mosques, health facilities, and market places)*
 - *WARIDI uses adaptive approach tailored to baseline status of community*

As noted in Text Box 1, WARIDI excludes schools and other institutions from its ODF program. Schools are usually considered a key entry point for community WASH activities as it is recognized that influencing pupils (via teachers) adds further WASH “reach” to the home environment since teachers are strong influencers and, in turn, pupils are able to influence parents’ sanitation and hygiene habits and practices. The ET observed that a few schools have been included in ODF/CLTS triggering depending on methods used by the sub-grantee. However, since most schools lack adequate WASH facilities, an effective schools WASH program requires a combination of hardware (i.e., provision of facilities) as well as software. WARIDI has no budget for WASH facilities provision.¹⁸ Schools’ WASH programs typically include Menstrual Hygiene Management (MHM), which particularly benefits girls.

Other Multiple Use Services

Other IR2 and IR3 components (e.g., catchment activities, livelihood activities) are not yet fully integrated into the project. This is largely due to the institutional disconnect between the responsible government agencies. Successful outcomes of training on livelihoods using multiple use water sources are expected at the community level. Multiple use activities will depend on water availability and water pricing. Pending the completion of the water scheme rehabilitation works, water for multiple-use purposes is still constrained, hence this activity could not be fully assessed at the time of the fieldwork visit.

WARIDI is working to improve capacity to address climate change and has exceeded the target (achieving 157 percent) for “number of institutions with improved capacity to address climate change issues.” However, the target for “number of stakeholders with an increased capacity to adapt to the impacts of climate change” remains at only 1 percent achievement. WARIDI conducted a climate change analysis to help in decision making and planning and has begun piloting local interventions.

¹⁸ It should be noted that WARIDI does not in any way exclude schools WASH (hardware or software) and it is up to the IP to allocate the budget according to its implementation plan and priorities.

4.1.3 Conclusions

- WARIDI is well regarded and seen as making a significant contribution to District water and sanitation programs but is not operating at the intended scale and has not reached the required targets. The extent to which WARIDI is resulting in increased utilization of multiple-use of water and sanitation services in the targeted LGAs is reduced from the expected number of beneficiaries or districts reached reflected in the original design.
- The LwS approach is regarded as highlighting sanitation and supporting the scaling up of National Sanitation Campaign efforts. However, some evidence suggests it has slowed rehabilitation efforts for water provision, and communities would prefer a concurrent approach to water provision and sanitation.
- With regards to WARIDI integrated and multi-faceted approach, District Governments and communities prioritize improved water availability above other project benefits.
- Other components of WARIDI, while appreciated, are regarded by Districts to be of lower priority. Governance IR2 and private sector IR3 components are regarded as complementary but separate activities and are not yet well integrated into the overall project.

ODF/sanitation

- WARIDI has supported the National Sanitation Campaign and has:
 - Improved standards of data collection and reporting;
 - Built capacity at the LGA, Ward, and village levels; and
 - Led to increased latrine coverage in targeted areas.
- The hygiene awareness component has received insufficient focus under WARIDI, and has lacked performance measurement over the course of implementation (no indicator for measurement).
- The absence of a schools' WASH component is a missed opportunity to strengthen the ODF/sanitation outcomes.

Water Supply

- Rehabilitated water schemes are appreciated in targeted areas, but there is significant demand for increased water supply in many wards/villages, including those without existing schemes which feel left out.
- The water improvements achieved as a result of WARIDI have the potential to enable LGAs to leverage additional funding for water infrastructure through DFID's PbR program. However, very few LGAs to date have been able to qualify for PbR funding (see Section 4.2.2 and Figure 7).

4.2 QUESTION 2 (IMPLEMENTATION APPROACH): TO WHAT EXTENT ARE WARIDI-SUPPORTED LGAS PERFORMING COMPARED TO OTHER LGAS IN TANZANIA?

4.2.1 Introduction

LGAs receive limited support from the government and other partners to implement activities to improve WASH-related services in their respective areas. As far as sanitation and hygiene are concerned, efforts at the national level are coordinated by the Ministry of Health Community Development, Gender, Elderly and Children (MOHCDGEC) and President's Office Regional Administration and Local Government (PO-RALG) as well as the Environmental Health and Sanitation section. Data on sanitation and hygiene status and performance of LGAs is collected quarterly and stored in the National Sanitation Management Information System (NSMIS). The NSMIS records data on: the number of ODF communities; the number

of households without toilets; the number of households with improved toilets; the number of households with functional handwashing facilities and soap, etc. WARIDI has been working with five LGAs and plans to reach 20 LGAs by the end of the activity in 2021. At the LGA level, WARIDI is working through sub-grantees to improve sanitation and hygiene in collaboration with LGAs, particularly the District Health Officers (DHOs) and the National Sanitation Campaign. WARIDI-supported LGAs are therefore benefitting from additional support over and above that provided by the government and other developing partners.

Discussions with LGA officials during the field visits revealed that lack of funds hampers expansion and improvement of water availability, sanitation, and hygiene-related activities. DFID's PbR scheme is one of the sources of funds the LGAs could have utilized to increase access and improve WASH-related activities. However, to qualify for the PbR, LGAs are required to have an accurate registry of water points, up-to-date data on functionality for each water point, and have a district-wide WASH strategy.

In support of water resources management activities, WARIDI is working with the two water basins (Wami-Ruvu and Rufiji River Basins), which drain the majority part of the southern agricultural growth corridor of Tanzania (SAGCOT) region. The major focus is supporting water resources management for multiple uses of water. The two river basins are particularly important as sources of hydro-electric power generation and for domestic and other needs for the main city of Dar es Salaam and other towns. The river basins are also critical for biodiversity and receive WARIDI support not available to the other basins in the country.

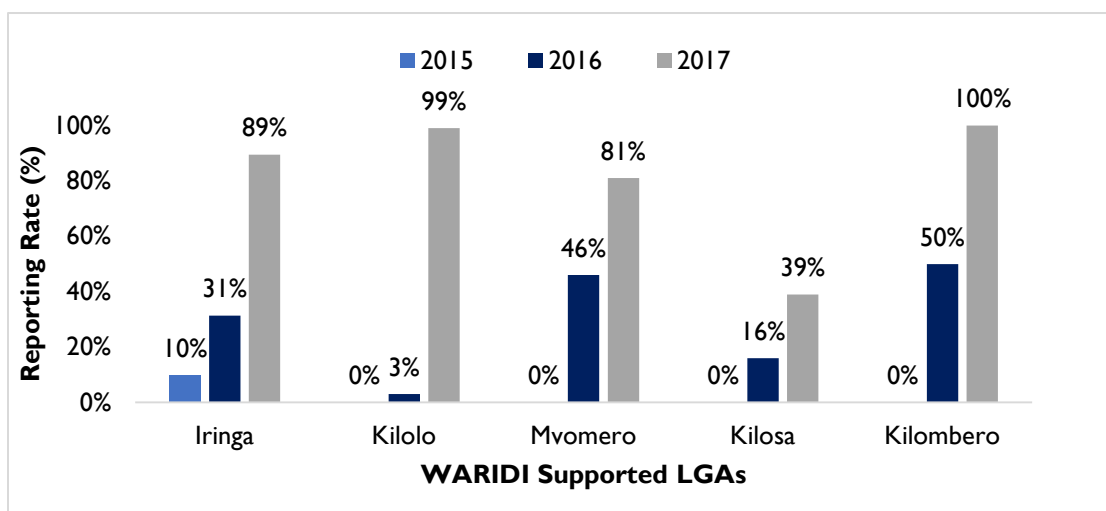
4.2.2 Findings

Improved reporting of sanitation and hygiene data

Figure 3 shows that LGA's reporting rate in the five WARIDI-supported LGAs has greatly improved over the period 2015 to 2018. By visiting LGAs, the DHO confirmed this is a result of WARIDI's awareness raising, data collection training, and providing register books to record sanitation and hygiene data on a quarterly basis. WARIDI has provided 6,000 extra registry books, increasing efforts of data acquisition from LGAs. In practice, this means that the National Sanitation Campaign no longer provides register books to the WARIDI-supported LGAs.

Data reporting from the LGAs has improved, reaching 100 percent in the April-June 2018 quarter. WARIDI's support is highly appreciated by authorities at the LGA level and has helped improve the data reporting rate from 0 percent in 2015 for LGAs like Kilolo, Mvomero, Kilosa, and Kilombero to almost 100 percent in the second quarter of 2018.

Figure 3: WARIDI-Supported LGAs Reporting Rate Trends¹⁹



Sanitation and hygiene improvement

The GOT, through the MoHCDGEC and its Environmental Health and Sanitation Section, uses several standard measures in evaluating the performance of LGAs in Tanzania. The LGAs are ranked based on the number of ODF villages, the percentage of households with improved toilets, the percentage of households with functional hand washing facilities and soap, and the number of households without toilets. Since 2015 when the NSMIS was launched, there have been improvements from several LGAs on several fronts. Key informants at the Ministry level including Ministry of Health and PO-RALG confirmed that,

“Remarkable progress has been made in the quarterly reporting, despite issues in the quality of data, but at least the data is there. We will work toward ensuring quality of the data.”

However, by ranking the LGAs at the national level none of the WARIDI-supported LGAs are found in the top 10 performers, although neither are they in the bottom list. According to the data from the NSMIS database, the best performing LGA (mainly measured by having highest number of households with improved toilets) is Njombe DC with 99.2 percent, followed by Mlele DC (85 percent), Meru DC (83 percent), Kyerwa DC (82 percent), Missenyi DC (82 percent), Arusha DC (81 percent), Bariadi DC (78.5 percent), Hai DC (75.5 percent), Makete DC (72.5 percent), and Mwanga DC (71.5 percent).

In an attempt to see the trend and contribution of WARIDI’s support, the 31 highly ranked LGAs for the three years’ period were compared and ranked by the percentage change from the baseline (2016). Results in Table 4 show the WARIDI-supported LGAs (highlighted in gray) did not have a significant change in performance, except for Kilolo. Nationally, the LGA with the most significant improvement is Kyerwa, which moved from 21.2 percent in 2016 to 82.5 percent in 2018. Iringa DC showed a change of about 4 percent from the baseline in 2016 and based on the data it appears that Kilosa DC and Mvomero DC had a negative change.

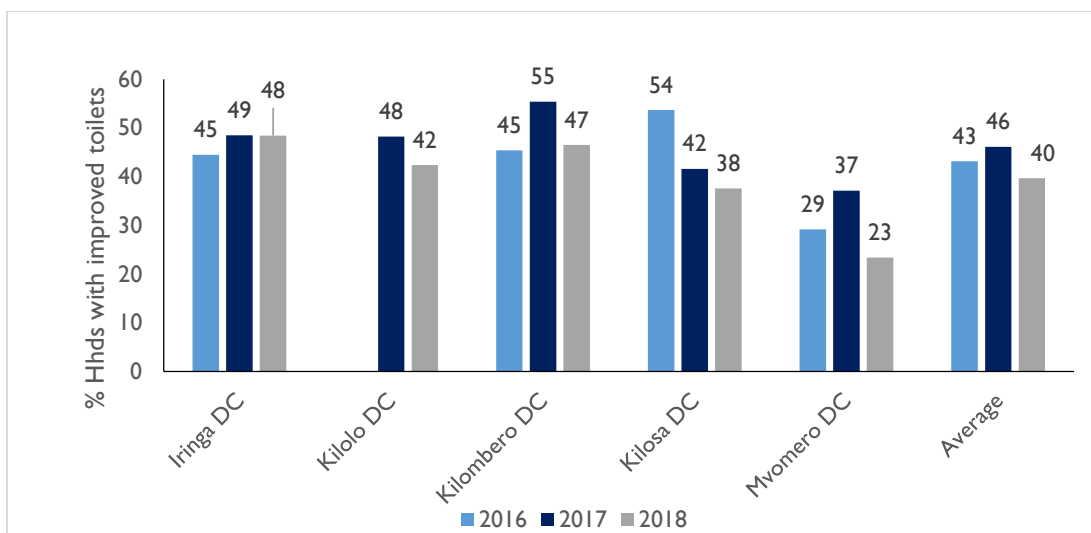
¹⁹ Source of data: NSMIS under the Ministry of Health Gender, Elderly, and Children, 2018.

Table 4: Percentage of Households with Improved Toilets in Rural LGAs (WARIDI and Non-WARIDI LGAs)

No.	Name of LGA	2016	2017	2018	Change (2016-2018)	% Change (2017-2018)
1	Kyerwa DC	21.2	72.3	82.5	61.3	10.2
2	Wanging'ombe DC	0.62	71.5	56.3	55.68	-15.2
3	Kilolo DC	0	48.2	42.4	42.4	-5.8
4	Mlele DC	53.3	79.6	86.1	32.8	6.5
5	Missenyi DC	54.9	40.7	82.9	28	42.2
6	Makete DC	51.2	60.8	77.8	26.6	17
7	Sumbawanga DC	39.5	57.7	63.7	24.2	6
8	Mbeya DC	32.3	50.5	56.3	24	5.8
9	Morogoro MC	64.3	88.5	87.9	23.6	-0.6
10	Same DC	49.4	65.9	68.3	18.9	2.4
11	Moshi DC	59.5	70.8	78.2	18.7	7.4
12	Arusha DC	55.7	61.6	74.3	18.6	12.7
13	Hai DC	60.4	70.6	76.2	15.8	5.6
14	Gairo DC	31.1	46.1	45	13.9	-1.1
15	Meru DC	69.9	77.8	83.2	13.3	5.4
16	Siha DC	48.6	68.5	60.8	12.2	-7.7
17	Bariadi DC	67.6	76.4	78.6	11	2.2
18	Bagamoyo DC	42.9	48.8	51.4	8.5	2.6
19	Ulanga DC	30.2	40.4	38.3	8.1	-2.1
20	Kibaha DC	54.9	65.3	61.5	6.6	-3.8
21	Iringa DC	44.5	48.5	48.4	3.9	-0.1
22	Chalinze DC	32.6	35.1	35.7	3.1	0.6
23	Njombe DC	96.3	99	99.2	2.9	0.2
24	Kilombero DC	45.4	55.4	46.5	1.1	-8.9
25	Mufindi DC	55.3	37.8	56.2	0.9	18.4
26	Mwanga DC	71	70.4	71.5	0.5	1.1
27	Malinyi DC	49.2	49	49.6	0.4	0.6
28	Mvomero DC	29.2	37.1	23.4	-5.8	-13.7
29	Rungwe DC	69	72.8	62.2	-6.8	-10.6
30	Morogoro DC	34.6	16.3	22.3	-12.3	6
31	Kilosa DC	53.7	41.6	37.6	-16.1	-4

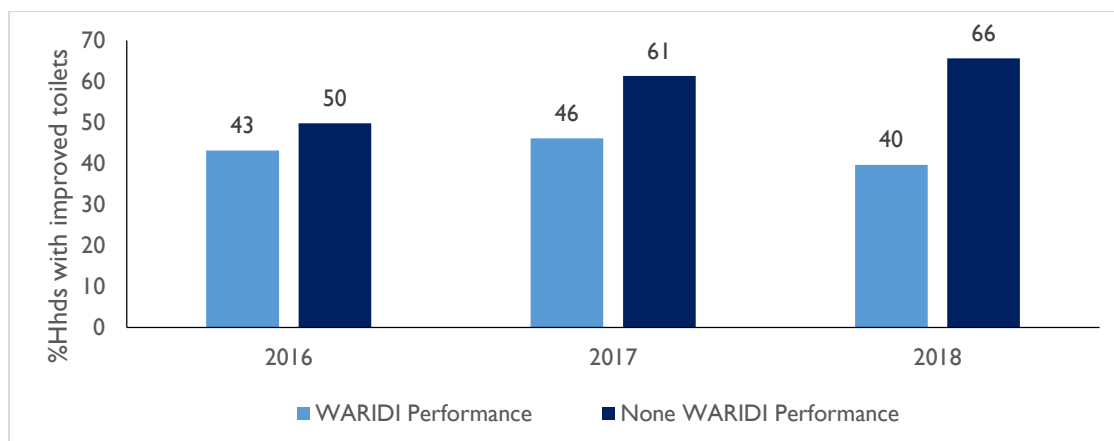
The results vary by district and do not show a clear upward trend from one year to the next. This is illustrated in Figure 4 for the WARIDI-supported LGAs. While results across all LGAs are varied, WARIDI LGAs do not appear among the top 10 performing LGAs. WARIDI sites in Iringa showed improvements over the last three years but those in Mvomero did not. This evaluation did not analyze these differences with a control group approach, so further analysis is needed to know why they are not out-pacing non-supported LGAs.

Figure 4: Percentage of Households with Improved Toilets in Rural LGAs (WARIDI and non-WARIDI LGAs)²⁰



Taking the average of WARIDI-supported LGAs and non-WARIDI-supported LGAs for the three years (2016, 2017, and 2018) (Figure 5) shows that, for 2016 and 2017, WARIDI-supported LGAs were not able to match the performance of the non-WARIDI LGAs. However, there are signs that performance is increasing; although 2018 is still in its final quarter, there were modest improvements from 2016 to 2017.

Figure 5: Percentage of Households with Improved Toilets in Rural LGAs (WARIDI and Non-WARIDI LGAs)²¹



Kills at the Ministry level indicated that top performers are not necessarily those who received support from development partners. Instead, performance appears to be influenced by motivated sub-village leaders and district level leaders. Motivated leaders are driven by initiatives and priorities at the LGA level through competitions, recognition of the top performers, frequent awareness campaigns, and meetings of regional, district, ward, and village leaders. For example, the Njombe DC leaders have made it their number one priority to talk about sanitation and hygiene at every meeting. As a result, Njombe has been at the top of most indicators. *“The success of Njombe is not only because of the support received from [United*

²⁰ Ibid.

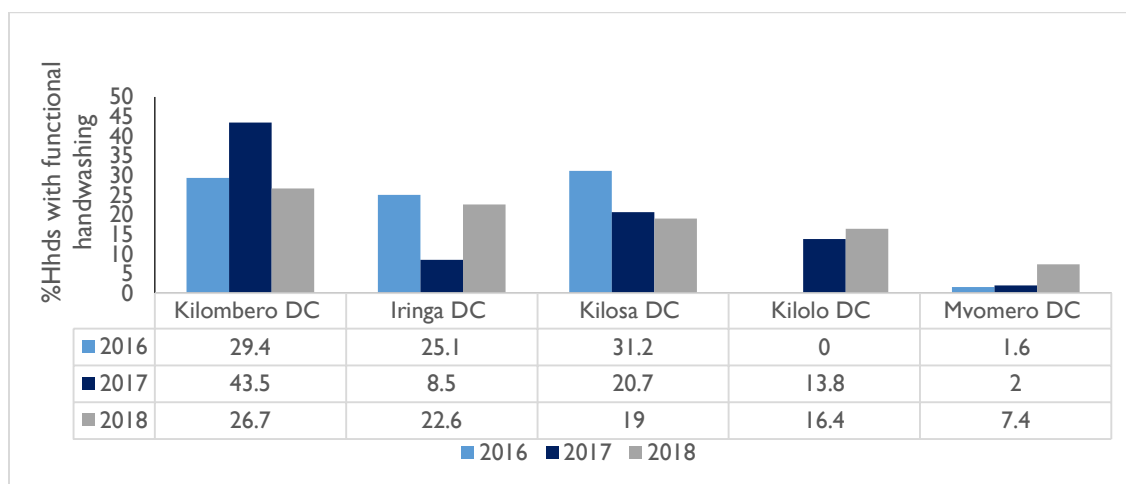
²¹ Ibid.

Nations Children’s Fund] UNICEF it is rather the concerted efforts at the LGA level, because there are several LGAs which received the same UNICEF support such as Mbeya and Mbarali but are not consistently performing as well as Njombe” said the National Sanitation Campaign Coordinator.

Households with functional handwashing facility with soap

Using data from the NSMIS, the ET analyzed households with functional handwashing facilities. Figure 6 shows the trend of performance in terms of the percentage of households with a functional handwashing facility with soap in the WARIDI-supported LGAs. The results show that little progress is made in attaining targets for handwashing facilities. From observations in the field and through discussions with key informants, the ET found that the performance of this indicator is well below the target. According to the National Sanitation Campaign Coordinator, the target is for at least 43 percent of households to have functional handwashing and soap and using them by 2021. Currently, the national average is only 19 percent. This confirms the evaluation finding that hygiene awareness is a low priority for both WARIDI and the national sanitation campaign.

Figure 6: Percentage of Household with Functional Hand Washing Facilities and Soap²²



ODF verified communities

By end of the project, WARIDI aims to achieve 3 million people living in ODF verified environments. ODF verification, according to the national guidelines (URT, 2016), is a process of assessing whether the triggered community has achieved status and ODF certification. There are two categories of ODF status. ODF Level 1 is the highest standard attained and indicates that all households and institutions have and use improved toilets and show no sign of open defecation. The verification and certification of ODF communities involves four key steps: community self-assessment, external ODF verification, ODF certification, and ODF celebrations.

Based on the data collected from interviews with key informants in Mvomero, Kilosa, Kilombero, Iringa, and Kilolo, the ET learned that WARIDI, through its sub-grantees, works to achieve ODF status, albeit with different definitions of ODF.²³ It was also noted that since WARIDI does not support schools/institutional WASH, it can only aspire to achieve ODF Level 2. Key informants interviewed at Kilosa revealed that eight villages there had attained ODF Level 2, and only 3 had reached Level 1 status. However, this is only at step 1 status—self-assessment. In Kilombero, key informants told the ET that

²² Ibid.

²³ The National Sanitation Campaign uses ODF level 1 (higher level or improved sanitation) and ODF level 2 (basic sanitation), whereas WARIDI uses the term “universal ODF” which is closest to ODF Level 2, but importantly excludes institutions.

prior to WARIDI only 3 villages had attained ODF status, but since WARIDI (to July 2018), there are 40 villages which are ODF declared (Table 5). An increase of ODF is also seen for Iringa DC.

Table 5: WARIDI ODF Villages (Community Self-Assessment)

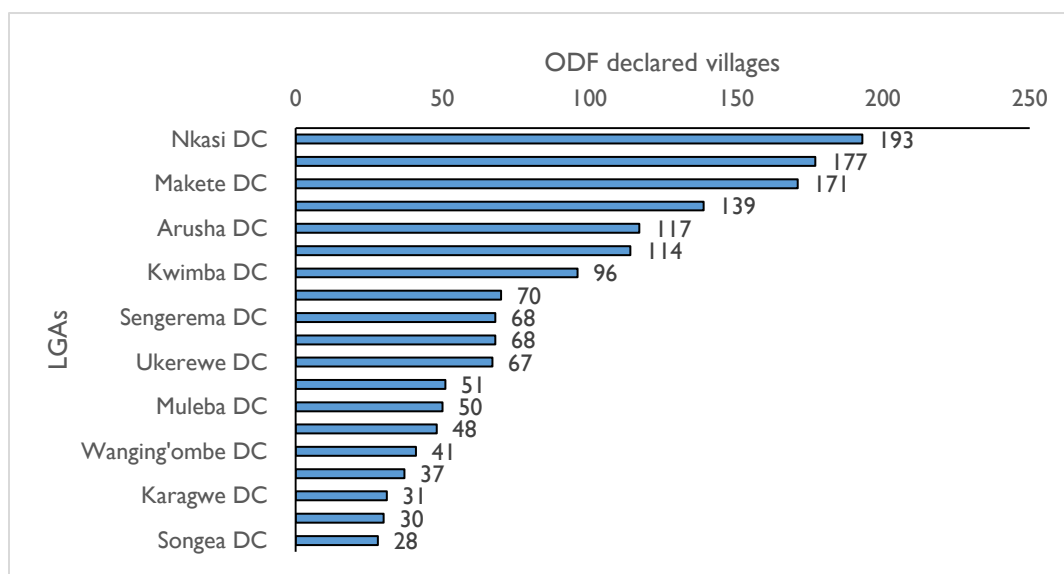
LGA	ODF Level Villages at Baseline (2016)	ODF Level 1 (2018)	ODF Level 2 (2018)
Mvomero DC	0	-	0
Kilosa DC	-	3	8
Kilombero DC	3	40	-
Kilolo DC	-	-	-
Iringa DC	23	39	0

In comparison with other LGAs in Tanzania, it was noted that none of the WARIDI LGAs rank among the 20 best performing LGAs (i.e., having the highest numbers of ODF declared villages). Figure 7 shows that Nkasi DC is at number one among the rural LGAs with 193 villages, followed by Handeni DC which has about 177 ODF declared villages, Makete with 171 ODF declared villages, Meru DC with 139 ODF villages, and Arusha DC with 117 DC villages making the top five in the country. Although this comparison is based on numbers, and there is hardly the same number of villages in every LGA, it helps to give a picture of the progress made in achieving ODF status.

Qualification of PbR Scheme

The findings show that in 2016, the first year of the PbR scheme, only 57 LGAs qualified. In 2017, there was an increase to 96 LGAs who qualified for the PbR scheme. It was noted that the only WARIDI-supported LGA which qualified for PbR in 2016, was Iringa DC, while Kilolo DC and Kilosa DC qualified for PbR in 2017. To date, only seven out of the 20 WARIDI-supported LGAs have been able to qualify for the PbR scheme. Although Iringa DC qualified in 2016 and received funds which were expected to be a motivation for further improvements, it failed to qualify for PbR in 2017. The feeling is that this is a missed opportunity for WARIDI since by facilitating LGAs to qualify for PbR funding, WARIDI would have indirectly contributed to the improved access. The formation and training of COWSOs, for example, was supposed to go hand-in-hand with water points mapping and improved water point functionality—the main criteria for qualification into the PbR scheme. Through the ET’s discussions with DWEs, only a few recorded changes of functionality of water points resulted from the COWSO training.

In Kilosa, for example, it was reported that two shallow water wells were revived because of the COWSO training, but there was no evidence from other areas. To improve water quality and access, the support of the DWEs’ to obtain PbR qualification is an important milestone achieved in some high performing LGAs. Learning from the success of Njombe, which has qualified twice for PbR grants, the DWE noted: “Njombe DC’s double qualification is the result concerted efforts and increased self-commitment from the entire team at water department office—especially the technicians whom I trained on [global positioning system] GPS usage—who later worked very hard to collect timely and precisely submitted the data as well as working on improving functionality of some water points. It was a spirited teamwork result.” (DWE, Njombe).

Figure 7: Number of ODF Declared Villages at National Level²⁴

In its MEL Plan, WARIDI planned to work with the LGAs in 2017/2018 to support water points mapping that would result in qualifying for the PbR scheme. The ET was informed that WARIDI conducted a training for experts from all 20 LGAs to identify strategies to qualify for PbR support in March 2018. From the ET's discussions with the PbR focal person at the Ministry of Water and Irrigation, the results for PbR qualified LGAs for 2018 are planned to be released in August 2018.

4.2.3 Conclusions

- WARIDI's assistance through engagement of sub-grantees in collaboration with DHO staff has improved data collection and data verification, and led to improved reporting by WARIDI-supported LGAs in support of the National Sanitation Campaign. Sanitation activities are better and reporting has reached 100 percent on a quarterly basis for all WARIDI LGAs. However, further efforts need to be made to improve the data quality.
- There has been an increase in numbers of improved latrines in the WARIDI-supported LGAs in Iringa but not in Morogoro. While results across all LGAs are varied over the past three years and do not all show positive trends, WARIDI LGAs do not appear among the top 10 performing LGAs for WASH. This evaluation did not analyze these differences with a control group approach; to know why they are not outpacing non-supported LGAs would require further analysis.
- WARIDI excludes institutions from its ODF activities and uses a concept of "Universal ODF" which differs from the GOT's definition. WARIDI's achievements are not well reflected in the GOT data as a result, signifying the challenge of attaining ODF status while ignoring institutional WASH. It is clear that to receive accredited ODF status, WARIDI's sanitation and ODF activities will need to include institutional WASH.²⁵
- WARIDI-targeted LGAs have received support and training to enable them to qualify for PbR grants. However, the results to date have been modest. In 2016, the first year of the PbR scheme, overall 57 LGAs qualified for PbR grants, but only one WARIDI LGA was included in this. In 2017,

²⁴ Ibid.

²⁵ To achieve ODF certification under the GOT National Sanitation Campaign, all households and institutions (such as schools, churches, mosques, health facilities, and market places) must have properly managed sanitation and hygiene facilities. As the WARIDI ODF model excludes institutions it uses the term "Universal ODF" to imply compliance in all other respects.

three WARIDI LGAs qualified for PbR grants, out of an overall 96 LGAs. WARIDI could leverage added benefit by supporting LGAs to obtain access to PbR funds and increase access to water in the respective LGAs.

4.3 QUESTION 3 (SUSTAINABILITY): TO WHAT EXTENT IS THE TRAINING AND TECHNOLOGICAL SUPPORT PROVIDED BY WARIDI TO STRENGTHEN CAPACITY AT BASIN, DISTRICT, AND COMMUNITY LEVEL RESULTING IN IMPROVED SKILLS FOR MANAGEMENT, OPERATION, AND MAINTENANCE OF THE FACILITIES FOR WATER RESOURCES MANAGEMENT, WATER SUPPLY, SANITATION, AND HYGIENE PROMOTION?

4.3.1 Introduction

Capacity building through training and technological support to the Basin, District, and communities has been an integral part of WARIDI in all its IRs. WARIDI has supported capacity development of diverse institutions. On water resources management, WARIDI has supported the Basin Water Boards (BWBs) with a focus on Wami Ruvu and Rufiji water basins and their associated organs such as water catchment committees and in strengthening Water User Associations (WUAs). On the other hand, WARIDI has worked to build LGA staff capacity, form and train COWSOs, and train community groups such as women and youth, farmers, and entrepreneurs.

An integrated water service delivery approach, Multiple Use of Water Services (MUS), was an entry point for WARIDI's livelihoods interventions in Kilolo DC, Iringa Rural DC, Mafinga DC, and Mufindi DC, involving senior officials from different departments such as Community Development, Water, Planning, Environment & Sanitation, Natural Resources, Health, Agriculture and Livestock, and key community representatives. These officials were involved in selecting specific livelihoods activities that depend on water and those that do not. This required balancing demands of livelihoods and water availability.

4.3.2 Findings

The training and support provided by WARIDI at Basin, District, and community levels has raised understanding and skills, and strengthened staff capacity to carry out their specific duties. Findings are described based on different components:

Water resource management and climate change

WUAs are the lowest tier of water management under the decentralized system of water resources governance and were formed to conserve water from sources, resolve conflicts related to the joint use of water resource among members of the association, and collect water user fees on behalf of the BWB. Under WARIDI, a WUA capacity assessment and monitoring tool²⁶ has been developed and piloted in four WUAs (Kisangati and Ngerengere Juu in Wami-Ruvu and Mtitu and Lukosi Chini in Rufiji Basin) and a report²⁷ for baseline capacity assessment for the four WUAs was produced. Assessment for two additional WUAs (Ngerengere Chini and Miyombo) in Wami-Ruvu has also been completed. Capacity was assessed in four areas: structural aspects of the WUAs, technical knowledge and skills, governance, and contemporary issues with impacts on water resources. The results of the capacity assessment revealed that, in general, WUAs have low capacity in all key areas. The existing capacity of the Kisangata WUA, for example, was low, with the largest capacity gaps [difference between the desired capacity (score of 4) and existing capacity] in technical knowledge and skills and governance, which received scores of 2 and 3, respectively. The capacity assessment confirmed that WUAs have low capacity in all key areas and will

²⁶ WUA Capacity Assessment Tool.

²⁷ A report for baseline capacity assessment of Kisangata, Ngerengere Juu B, Mtitu, and Lukosi.

inform the need for follow up interventions by BWBs and WARIDI.

Based on the discussions with basin staff and WARIDI, WUAs have not been trained. Training is awaiting the capacity assessment tool to identify the priority training needs of the target area. Identifying the training needs was a major step to providing training to WUAs, one that will enable them to carry out their functions properly.

Trainings on climate change vulnerability in the two water basins has been conducted to basin staff, LGA staff and WUAs. The training followed a study on ‘Climate Change Vulnerability Assessment in the Wami Ruvu and Rufiji River Basins’ that was commissioned by WARIDI. The ET was informed by staff in each of the LGAs visited that the training was useful to them and had given them skills in water resources management, water supply, and sanitation. The basin staff that reported to have attended training included the DWEs, Community Development Officers (CDOs), and DHOs. The training on climate change also targeted WUA and COWSO leaders, and leaders who attended reported that it had provided them with skills to understand the changes in climate and focus their efforts to manage water resources. However, the ET found that few WUAs had been involved in the training. In the Wami Ruvu for example, only leaders from five WUAs were involved in the climate change training.

WARIDI has supported the two basins in the upgrade and modernization of data monitoring and information systems as well as strengthened flow measurements by providing equipment/instruments and software tools and applications. In addition, training on the retrieval and use of Earth Observation and Remote Sensing data was given to basin staff. Discussions with basin staff at the Wami Ruvu and Rufiji basins indicated that technological support and training has helped the two basins improve their rating curves, store and maintain their databases, ensure the quality of the data, and enabled them carry out routine flow measurements.

Furthermore, discussions with beneficiaries at the basin level at both Wami Ruvu and Rufiji Basins revealed that the skills gained from the training have helped basin staff in retrieving Earth Observation data from various sources and utilizing them for analyses, particularly for data scarce watersheds. To acknowledge the contribution of the capacity building to basin staff, one basin officer said:

“Our staff at the basin can now utilize the huge amount of data sets available from remote sensing to carry out assessments for areas that have no data when a quick assessment is requested, especially by the government or clients, something we could not be able to do before.” (Wami-Ruvu Basin Officer)

WARIDI capacity building has also increased the ability of basin staff to support WUAs. This is evident in the assessments they have done to identify capacity needs at the Ward level. However, it is too soon to know the effect this has had on WUA capacity in serving the wards.

Management and operations of small rural water supply systems

COWSOs are the institutions responsible for the management, operations, and maintenance of small rural water schemes. They must also handle customer case, revenue collection, and sanitation and hygiene education. COWSOs have legal status and powers to collect water fees and make expenditures and, since 2010, policies mandated that COWSOs be autonomous from local and village governance structures. COWSOs members are appointed through democratic processes from the community at large and there is a requirement for at least one of the three key COWSOs management roles to be undertaken by a woman. Currently, not all village water schemes have elected to have a COWSO,²⁸ and instead retain a more traditional village water committee structure.

Under WARIDI, training and support²⁹ provided to COWSOs has included:

²⁸ As of June 2016, only 14 percent of rural water systems are managed by registered COWSOs.

²⁹ Support to COWSOs did not include provision of tools or equipment.

- Support for the formation of new COWSOs;
- Refresher training given to existing COWSOs (depending on needs as assessed by the COWSO Competency Model);
- Develop Capacity Building and Training Plan for COWSOs;
- Hold community awareness meetings to inform the wider community of COWSO activities;
- Three-day skills training³⁰ (classroom-based) for new COWSO members (includes: operation and maintenance, management of water funds, environmental management and safety plans, and customer care);
- Two-day refresher training for existing COWSOs (according to needs); and
- Support for water mapping of water points, to enable LGAs to qualify for DFID PbR grants.

The skills training provided to COWSOs, although useful, was insufficient (i.e., two or three days) to make a significant contribution to COWSO management and operations. However, COWSO members were positive in their assessment of the training received:

“We learn to collect money from water users and a lot of things mostly in caring water sources, cleaning of tanks, and about technicians.”

“The training conducted help to make member more active, before that it seems like [the] chairman own[ed] the project, after training the association member started to be active.”

COWSO members across sites visited commented that they would have liked more refresher training, mentorship, or other forms of follow-up after the training.

COWSO support through sub-grantees

In the first five LGAs, WARIDI has supported 126 COWSOs in addition to the 15 COWSOs formed and trained to manage the water supply schemes supported directly by WARIDI. The 126 COWSOs received no financial support and the training alone was not expected to contribute significantly to WARIDI’s target for improved access to basic water services or to result in practical improvements in water service provision.

However, recently (July 2018) the sub-grantees have been documenting practical improvements achieved, which they attribute to the COWSOs training provided by WARIDI.³¹ This data is still being collected and verified by the IP but the results (provided by WARIDI) claim that water points have been rehabilitated and infrastructure repairs carried out, resulting in an additional 17,000³² persons gaining access to water (Table 6). Although the numbers of beneficiaries are relatively small, the results suggest that a second-round program of COWSO grants, which combines training with hardware support, could further leverage the number of beneficiaries and would enhance LGA’s efforts to qualify for PbR grants. The WARIDI results are encouraging and indicate that the training alone can result in practical benefits. However, the results need to be treated with caution until they have been verified.

Table 6: Evidence of Practical Achievements of WARIDI-Supported COWSOs³³

No.	Achievement
52	Water Points rehabilitated by COWSOs benefiting approximately 6,827 people

³⁰ Uses existing Ministry of Water & Irrigation Training Manual: “A Trainers Manual for Community Managed Water Supply Organizations in Tanzania,” July 2015.

³¹ This information was not available to the ET at the time of the fieldwork. However, the ET is aware that water point mapping is carried out by specialists from the DWE Office, not by COWSOs. The COWSOs training does not cover water point mapping. COWSOs may have a role in facilitating the water point mapping.

³² This data is still being collected and verified by WARIDI, official numbers will be reported in Year 3 annual report.

³³ Unverified data provided by WARIDI after completion the evaluation field visits.

No.	Achievement
57	New Water Points established by COWSOs benefiting approximately 7,465 people
5	Other scheme repairs completed by COWSO leading to improved reliability for approximately 3,490 people

Under the current grants program (i.e., round one) there was no provision for follow up monitoring of COWSOs to assess the post-training benefits. As indicated in Table 6, the benefits of COWSO training may (if verified as accurate) go beyond improved skill levels and include improved reliability and higher numbers of improved water beneficiaries. A COWSO baseline assessment with follow-up monitoring using a range of indicators would allow for more rigorous performance tracking of COWSOs and help determine the factors contributing to sustainable operations.

Reasons given for not wanting to form a COWSO include: “we used to run our own water system for 15 years, why do we need a COWSO;” suspicion that communities will have to pay some of their revenue (from water fees) to government; and opposition from village leadership. Formation and training of COWSOs leads to expectations of infrastructure support. Instances were related of COWSOs dropping out mid-training upon learning that WARIDI was not going to address their infrastructure needs.³⁴

The COWSOs are mandated to set water tariffs with District guidance. However, in practice, COWSOs receive limited support or guidance from DWEs and set their own tariffs. It is evident that many COWSOs set tariffs based on “willingness to pay” rather than on a detailed financial assessment of operating costs. Many COWSOs opt for flat rate tariff structures (i.e., a fixed monthly payment regardless of consumption) rather than consumption-based tariffs which require metering. Flat rate tariffs are administratively simply to manage but can lead to over-consumption since there is no incentive to use water wisely.

COWSOs remain institutionally weak (staffed mainly by volunteers) with Districts/DWEs unable to provide meaningful support. Ward/Village leaders feel excluded from COWSO training, which causes tensions especially in key areas of tariff setting and expenditure.

COWSO training is useful and appreciated, and has contributed to improvements in management and operation of COWSOs. However, the skills training is of relatively short duration (two to three days) and was intended as introductory or refresher training to upgrade skills, rather than as contributing to sustainability. COWSO members would have liked more refresher training, mentorship, or other forms of follow-up after the training to help put the knowledge and skills gained into practice. COWSOs have an obvious need for training and have expressed this consistently to the ET. COWSOs have also consistently expressed the need for assistance to deal with infrastructure repairs and extensions (currently, this is not available to the 126 WARIDI-supported COWSOs). Therefore, it seems the preferred way to assist COWSOs is through a combination of training and infrastructure support. Improvements to infrastructure and service levels are how water users will judge the effectiveness of their COWSOs. Training that does not result in improved service levels will not be valued by COWSO customers.

The lessons learned from the first round of COWSO grants are expected to result in a more effective second round of COWSO grants: the IP proposes to include a component of hardware support for all targeted COWSOs with a program of follow-up monitoring to assess “improved service” levels as well as “increased access.”

Sanitation and ODF promotion. This has included community mobilization to raise awareness on hygiene and the need for all households to have a latrine. Using the CLTS tool, institutional triggering is undertaken at the village leadership level, to build awareness and gain the support of leaders. Then

³⁴ KII with Sub-Grantee, Kiloso District.

community triggering is carried out, which results in a community agreement for every house to have a latrine. Under WARIDI, the ODF sub-grantee works closely with the LGA's DHO to identify target villages and jointly undertake CLTS triggering. Since there has been a national sanitation campaign in operation since 2012, some villages and wards have already been covered. DHO staff have expertise in the use of CLTS and do not require training. However, they lack resources (e.g., transport) and so welcome the support provided by WARIDI. Working in partnership with WARIDI has enabled LGAs to scale up their sanitation campaign activities.

As previously noted (Section 4.1.3), hygiene awareness has been a relatively weak component of the sanitation program under WARIDI and is also given insufficient attention under the national sanitation campaign: only 19 percent of households in Tanzania have handwashing facilities with soap (see Figure 6).

Sanitation and ODF promotion and training is undertaken by ODF sub-grantees, who are on short one-year performance contracts. The sub-grantee contracts are driven by targets rather than achieving sustainable outcomes.

Data collection and reporting. District/ward/village officials have reported significant benefits from the training in sanitation data collection and reporting provided by WARIDI. This is resulting in improved standards and quality of data collection and reporting.³⁵ WARIDI has built capacity at the ward, village, and sub-village level, undertaken a rigorous process of data verification, and provided further support by providing sanitation registers. However, there are still data quality concerns, primarily related to the motivation and incentivizing of the data collectors, located at the sub-village level. The data collection role is often given to CHWs, or to volunteers. The Kilombero District approach is to use sub-village leaders as data collectors and this is proving to be more successful³⁶ and could be a better model for districts.

Since data collection is a GOT initiative and existed pre-WARIDI, sustainability of data collection is primarily a government responsibility. Despite it being a mandatory requirement, not all villages are collecting data due to lack of resources and support at the District and national level. WARIDI has provided something of a model in terms of data collection, validation, and reporting, which can be replicated more widely. But, for the GOT, the sanitation register quarterly reporting remains “a work in progress” nationally. Data reporting from the LGAs has greatly improved, reaching 100 percent in the April-June 2018 quarter. See Section 4.2.2 for details.³⁷

Livelihoods. Commencing in March 2018, the livelihood training (five days) unveiled opportunities for income generation and there is demand for this to be expanded to include more community members. The selected farmers from Irindi/Magana and Ng'uruhe villages that fall under WARIDI water schemes in Kilolo District become Trainers of Trainers who spread knowledge and skills to the wider community. The training aimed at building their capacity to adopt appropriate technologies and improved management practices for alternative livelihoods interventions (home gardening, small stocks husbandry, and beekeeping) to enable them to generate sustainable household incomes and improve food security and nutrition security through efficient water use. A total of 150 participants (76 males and 74 females) attended the training; among the participants, 57 percent (85) were youth and 43 percent (65) were adults.

Micro-Enterprise Support Program. The Program aims to contribute towards WARIDI outcomes through supporting rural and peri-urban WASH enterprises, and create sustainable commercial markets for WASH products and services in rural Tanzania. WARIDI is currently implementing a capacity building and mentorship program for 250 WASH-oriented microenterprises (MEs) in 10 districts. Targeted

³⁵ DHOs in all Districts have noted this, i.e., “reporting is on time, and accuracy of data has greatly improved.” National Sanitation database further reflects this improvement.

³⁶ IE lack of motivation and lack of incentives was less of an issue in Kilombero. Village leaders already have status within the community.

³⁷ Refer also to section 4.2.2 of this report and Figure 3.

enterprises are small, community-based, and largely licensed businesses—mainly local hardware stores, pharmacies, farm input stores, and other small shops. WARIDI is providing training and mentorship in business plan development, management skills, sales strategy, basic fiscal management and accounting, and other core skills. The training will improve MEs' capacity to support private sector sustainability and expanded provision of WASH services and products. A total of 198 MEs across 10 districts participated in the Module 1 training in the Morogoro and Iringa regions.

WASH products. Partnership development of small-scale WASH products has not yet been rolled out to communities over the partnerships period January-March 2018. The purpose of the partnerships is to add value across the project IRs. So far, WARIDI has been able to establish six partnerships with 11 more still in the pipeline. These partnerships are intended to support the WARIDI ODF campaigns, increase access to WASH products in respective LGAs, and contribute to the WARIDI broader goals. WARIDI plans to use innovative ideas and approaches in the partnerships, support women and youth groups (fostering income generation opportunities), provide support and linkages with WARIDI capacity building program for MEs, and combine resources for road shows for wider public outreach and linking partner activities with ongoing National Sanitation Campaign. It is intended that these actions will anchor sustainability and foster lasting changes on the ground.

Collaboration with national and international programs and organizations. To this end, throughout the course of Year 2, WARIDI has worked to ensure that it has established good relations with government officials (at all levels and across all sectors), NGOs, donors, and all other partners who are working in the IWRM/WASH spheres nationally and more specifically in the Wami-Ruvu and Rufiji basins. WARIDI is an active participant in national-level Technical Working Groups organized by the WSDP. In so doing, WARIDI is providing knowledge and lessons to District counterparts who are largely unaware of such developments. In this way, national guidelines and emerging best practices are disseminated and may be applied at local levels. WARIDI has just started to develop close collaboration with DFID-PbR related to IRI interventions by training COWSOs that leads to functional water points that increase coverage as construction or extension of new structures.

In December 2016, the project organized a joint DFID/USAID visit to Iringa Region to review WARIDI's planned WASH activities with the Iringa (Rural) and Kilolo LGA officials. WARIDI LGA planning meetings were held in March of 2018 to develop an immediate implementation plan towards PbR cycle. This came after LGAs requested WARIDI's support to meet the requirements of DFID's PbR scheme. The Kilolo LGA was the recipient of an initial grant from DFID to help the district meet the PbR qualification requirements, including having an accurate registry of water points, up-to-date functionality data for each water point, and a district-wide WASH strategy. Concrete actions for how WARIDI will support PbR have been included in the Year 3 work plan, including baselines on water points through WARIDI COWSO grants.

4.3.3 Conclusions

- At the time of the field visits, training of WUAs has not been conducted and was pending arrival of a capacity assessment tool to identify the priority training needs in the target areas.
- WARIDI's capacity building has increased the ability of basin staff to support WUAs; this is evident in the assessments they have done to identify capacity needs at the ward level. While it is too soon to know the impact this has had on WUA capacity in serving the wards, there are positive signs.
- WARIDI's support and training provided to COWSOs has resulted in only limited improvement in understanding of the management, operation, and maintenance of the water supply facilities. The training provided was insufficient for the purposes of achieving long-term sustainability of operations. The COWSOs knowledge and skills levels are still at a basic level and they require

further field level support, refresher training, mentorship, or other forms of follow-up after the training to put knowledge and skills into practice in serving their communities.

- The sub-grantees have been documenting practical improvements which may be attributed to the training provided by WARIDI. However, these claims still need to be verified. The lessons learned from the first round of COWSO grants indicate that training alone is insufficient to achieve sustainable benefits. When combined with hardware support, this would result in more consistent improvements. Therefore, COWSOs' preferred model of assistance is a combination of training and hardware support. Indeed, this is the intention of the IP in the second round of COWSO grants. The hardware support³⁸ would also require technical assistance from the DWE and/or WARIDI technical staff.
- Under the current grants program (i.e., round one), there was no provision for follow-up monitoring of COWSOs to assess the post-training benefits. Neither has there been any baseline undertaken to assess changes in the capacity and performance of COWSOs.
- WARIDI's sanitation/ODF activities have supported the National Sanitation Campaign, increased latrine coverage and strengthened standards of data collection, data verification, and reporting. ODF/sanitation activities have good prospects for sustainability since this is mostly a software activity and DHO staff have the required expertise but lack minor support (for transport etc.).
- Sustainability's prospects have been improved by WARIDI but the preoccupation with targets and low-cost solutions is at times compromising it. However, sustainability cannot be the responsibility of WARIDI alone. LGAs have a primary role in ensuring sustainability and currently lack a clear strategy (and budget) to realize this aim.
- Adoption of livelihood interventions are behavior triggered and beneficiaries will need time to understand and appreciate the solutions, income, and returns before adoption and later replication. This will provide incentives to the wider community to adopt and replicate these interventions.
- WARIDI is the key contributor in IWRM/WASH sector, as it has mobilized and collaborated with other development agencies, private sectors business and national programs (DFID, World Bank, WSDP, etc.) who are now working together in water sector development in Iringa and Morogoro regions.
- Capacity building to MEs must be tailored to the partnerships and stakeholders. Public demand is a primary factor in driving the incentives to supply WASH products from MEs. To ensure sustainability, intervention should focus on the consumer end of the value chain by raising awareness and sensitizing communities to the advantages of using WASH products offered by the private sector. In doing so, they would create demand for those products while linking them to MEs found within the community.

4.4 QUESTION 4 (SUSTAINABILITY): IN COMMUNITIES WITH REHABILITATED WATER INFRASTRUCTURE, TO WHAT EXTENT DOES WARIDI ADDRESS THE REASONS FOR FAILURE AND BREAKDOWN AND HOW CAN THIS INFORM THE DEVELOPMENT OF A SUSTAINABILITY PLAN FOR NEW WATER SCHEMES BY WARIDI AND OTHER WSDP ACTORS?

4.4.1 Introduction

Under WARIDI, only existing partly functioning or non-functioning water schemes are selected for

³⁸ E.G: infrastructure repairs, rehabilitation, construction and extensions, etc.

rehabilitation and extension. Under Stage I of WARIDI, 16 schemes are being rehabilitated. At the time of the fieldwork visit, 14 of the 16 water schemes were still undergoing rehabilitation, and all 16 schemes had yet to be commissioned.

The question addresses the reasons for failure and breakdown of the schemes as a way of mitigating future failures and learning lessons for sustainable operations. Since it is too early to assess possibilities for the failure of the WARIDI-rehabilitated schemes, the answer to the question pre-emptively addresses reasons for failure and the prospects for sustainable operations of the rehabilitated schemes.

4.4.2 Findings

The core underlying issues causing failure of the majority of rural water systems relate to the management, operation, and maintenance of facilities, and to the inadequate levying and collection of water user fees from water users to sustain operations. Poor management was cited as a major source of failure which was manifested through poor quality of materials used in the construction of water intakes and storage tanks as well as water points. Poor quality of pipes for transmission and distribution of water and lack of technical skills and weak institutions at the local level were also cited as reasons for failure or breakdown of water infrastructures. One COWSO leader at Mang'ula scheme in Kilombero told the ET that *“pipes that were laid down for water transmission from source to the tank were of poor quality such that the project never succeeded in bringing water to the storage tank.”*

Learning from the mistakes of the past WARIDI took a pragmatic approach to ensure quality by introducing bulk purchase directly from the industries, with contractors provided with the necessary materials for construction. This works to ensure the quality of materials used in the construction and the pipes used in the transmission and distribution of water are the same in every scheme. This model of operations was appreciated by leaders in most of the LGAs. *“One of the exemplary approaches WARIDI uses is the bulk purchase of materials directly from the manufacturer, at Iringa DC we consider this as a good approach and we have advised the Ministry of Water to follow this approach,”* said the Iringa DC District Executive Director (DED). According to the Iringa DC and Kilolo DC DEDs, the use of the quality materials and pipes will not only ensure sustainability of the WARIDI rehabilitated infrastructures but will go a long way in helping LGAs maintain the quality of water infrastructures in all future projects.

In addition to supporting the formation of COWSOs, WARIDI has provided training to COWSOs that has helped raise skill levels. COWSO leaders demonstrated awareness of management, financial and technical requirements related to water systems operations. However, the training provided has been of limited duration and is insufficient to ensure the sustainability of operations. COWSOs receive limited backup support from LGAs and little guidance on tariff setting. One of the DWEs interviewed stated, *“Setting of tariffs[s] is usually done by the COWSOs through their general meetings and [the] DWE’s office can intervene if there are complaints.”*

The issue of sustainability, and other reasons for failure are assessed below according to a variety of relevant metrics and categories.

- **Institutional sustainability:** COWSOs are the organizations responsible for the management, operations, and maintenance of small rural water schemes. COWSOs remain institutionally weak, they are not well understood in the community, and village leaders feel excluded. Support available to COWSOs from LGAs and DWEs is limited by the availability of resources and budget.

Institutional sustainability has long been a challenge for the rural water (and the urban water) sector internationally. WARIDI is not structured to address the sustainability of COWSOs and this goes beyond its scope and mandate. See Section 4.10.2 for further discussion related to WARIDI’s design and how it addresses sustainability.

Drawing lessons from the successful COWSO in Tanangozi Kalenga, the ET has learned that it is possible for a COWSO to manage its water scheme and be self-sustaining, without reliance on

external support, if the management is committed to providing services to the community. The COWSO secretariat said, “the Tanangozi-Kalenga COWSO is led by the Executive committee originated from the Tumia groups (meaning user groups) from each of the villages served by the COWSO. The COWSO has hired the Manager, Accountant, and chief plumber who is responsible for the daily operation of the COWSO.”

- **Financial sustainability:** COWSOs are given little guidance on tariff setting and cost recovery and are free to set own tariffs. COWSOs have informed the ET of instances of political interference in tariff setting from village leadership who feel excluded from the COWSO formation and training processes. Newly formed COWSOs may lack the confidence and authority to make the case for cost-recovery based tariffs. In many cases, it is evident that COWSOs set tariffs according to the community’s “willingness to pay” rather than on a detailed financial assessment of its required operating costs. Some COWSOs choose flat rate tariffs (i.e., a fixed monthly payment regardless of consumption) rather than consumption-based tariffs which require metering. This can lead to over-consumption since there is no incentive to use water wisely. Financial sustainability depends on having community and leadership support for setting tariffs based on full cost recovery,³⁹ a high ratio of consumers paying their water bills on time, and an operating expenditure planned and accounted for transparently. The training provided by WARIDI has included a financial component, which has led to an improved understanding of the need for effective accounting and tariff setting. The financial sustainability of COWSOs will, however, require a longer-term program of support and monitoring.
- **Technical sustainability** is addressed under WARIDI through high technical standards in design, procurement, and tendering. LGAs were consulted at the design stage of the water schemes but felt relatively excluded from procurement and tendering stages, which would have been a useful learning opportunity for them. The standard of constructed facilities appears, from fieldwork inspections, to be acceptable (the majority were still under construction at the time of field visit). Construction includes community participation. This can be a model for future infrastructure works undertaken by LGAs. However technical sustainability will depend on adequate standards of operation and maintenance by COWSOs.
- **Governance** issues, budgeting, and resources at the District government level provide the basis for the sustainability of WASH services. Lessons learned from the Tanzania iWASH) Program⁴⁰ indicate that the COWSO institutional model predominantly used in Tanzania has inherent weaknesses. It allows COWSOs to both own and manage rural water schemes. This introduces a “potential conflict of interest, particularly as some water users may also be COWSO members. There is a risk that self-interest and local political influence may lead to sub-profitable tariff-setting, non-payment of water fees and progressive system deterioration.” It further finds that “in order to improve functionality and governance of rural water schemes, there should be a separation of roles between service users, a local regulator, the asset-holder, and the scheme operator. COWSOs should ideally be asset-holders only⁴¹.” Finally, the iWASH Close-out Learning Review notes that “the role of LGAs as water scheme regulators is poorly understood and their failure to fulfill the regulatory role leaves COWSOs unaccountable.”

4.4.3 Conclusions

- Reasons for failure and breakdown in rehabilitated schemes relate to the management, operation, and maintenance of facilities, and to the degree to which DWEs can provide support to COWSOs.

³⁹ Or recovery of operation and maintenance costs as a minimum.

⁴⁰ iWASH Program, Tanzania, Close-out Learning Review. USAID/ Florida International University, October 2015.

⁴¹ Ibid.

WARIDI's support to COWSOs has partially supported these enabling conditions for the maintenance and management of the water schemes. The reasons for failure can also relate to "external" factors beyond the scope of the project, such as the governance framework and the institutional environment within which the COWSOs and the water system must operate. In its design and scope, WARIDI is not configured to address such issues.

- The rehabilitation of non-functioning and partly functioning water schemes by WARIDI has achieved high technical standards in design in supported LGAs. However, technical sustainability will depend on adequate standards of operation and maintenance by COWSOs.
- Financial sustainability depends on having community and leadership support for setting tariffs based on full-cost recovery, on-time payment, and operating expenditure that is transparently planned and accounted for. The training provided by WARIDI has included a financial component, which has led to an improved understanding of the need for effective accounting and tariff setting. The financial sustainability of COWSOs may require long-term program support and monitoring.

4.5 QUESTION 5 (SUSTAINABILITY): TO WHAT EXTENT IS WARIDI ENHANCING COLLABORATION AMONG OTHER WSDP ACTORS AT THE BASIN AND LGA LEVEL (E.G., COMMUNITY MEMBERS, GOVERNMENT OFFICIALS, DONORS, NGOS, AND CSOS) AND HOW DOES THIS SUPPORT THE BASINS AND LGAS TO ACHIEVE THEIR PLANS?

4.5.1 Introduction

Effective governance is essential for sustainable water and resilient management of water resources and this infers the need for collaboration and coordination among sector stakeholders. Implementation of activities geared towards improving water resources management, improved services access, and climate change adaptation requires joint discussions and planning among all important actors and stakeholders.

Recognizing this, WARIDI clearly stated that change can only happen "if *governance for sustainable and resilient management of water resources and services is improved at all levels.*" Strategic efforts were therefore needed to enhance coordination and strengthen governance for sustainable and resilient management of water resources and services.

WARIDI works with institutions from the local to the national level as stipulated in the National Water Policy of 2002⁴² and the Water Resources Management Act.⁴³ In achieving IWRM goals, WARIDI is required to collaborate with actors at the national and local level and work to support the implementation of Water Sector Development Program Phase II.⁴⁴ Apart from working with the two rivers basins (Wami Ruvu and Rufiji), WARIDI works with local LGAs and sectoral ministries and agencies, communities with diverse competing demands. At the each of the five initial LGAs, WARIDI engages an engagement agent (EA) who serves as a link to coordinate WARIDI's activities and communicate with LGAs. WARIDI has also engaged with leaders at the national level, particularly in the sectoral ministries [Ministry of Water and Irrigation (MOWI), MOHCDGEC, and PO-RALG].

Water Resources Management

WARIDI works in collaboration with the MOWI's Directorate of Water Resources Management and other development partners by directly engaging with BWBs from the National Water Board, community-level water resources management institutions such as catchment committees, and with WUAs. WARIDI has participated in the national-level water resources technical working group meetings for Water,

⁴² National Water Policy, 2002.

⁴³ Water Resources Management Act, 2009.

⁴⁴ Water Sector Development Program Phase II.

Sanitation, and Water Resources Management by contributing to discussions and ensuring that WARIDI's activities are known at the national level. At the same time, WARIDI offers knowledge and lessons learned to the District staff who are often unaware of developments at higher levels and who ensure best practices dissemination at local levels. WARIDI is also working to strengthen WUAs, which are important entities for water resources and resiliency management at the grassroots level. To support IWRM and resiliency management and to coordinate activities at the Basin level, WARIDI has a basin specialist posted at each basin who works with the basins to implement WSDP plans.

Water Supply and Sanitation

WARIDI works with the LGAs to increase community access to clean and safe water, bolster water point reliability, and increase functionality by forming COWSOs and building capacity to achieve water supply targets. On issues related to water supply, WARIDI works closely with the DWEs' office at the LGA level and with the COWSOs at the community level. On issues related to sanitation and hygiene, WARIDI works with the DHOS' office. The Council Water and Sanitation Team (CWST) team at the LGA level is responsible for general planning and oversight at the district level. To promote improved sanitation and hygiene services, and reach sanitation and ODF targets, WARIDI collaborates with the National Sanitation Campaign. The PO-RALG, with its decentralized structures, regional secretariats, and LGAs facilitates communities and plays a leading role in implementing water supply and sanitation services. The coordination activities at the PO-RALG are conducted by the sector coordination unit, which follows-up implementation of water supply and sanitation projects at the LGA level.

4.5.2 Findings

The ET found that WARIDI has made efforts to engage different actors and stakeholders from the community level to the national level to achieve sustainable water and resilient water resources management. The ET was informed of efforts WARIDI made to engage with MOWI at the beginning of the project, and to form a WUA Learning Group with the involvement of other donor organizations [e.g., Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), United Nations Development Programme (UNDP), etc.] to effectively coordinate WUA capacity building efforts and share experiences from other development partners. The ET was informed that WARIDI is working on the priorities of the basins in implementing WSDP plans and this ensures sustainability and continuity of the activities even after WARIDI. This was remarked by one participant in the discussions at the basin, "WARIDI did not come with their own activities, but are working to implement the priorities of the basin and these have been identified to ensure that they are beneficial to the long plans of the basin."

Some of the activities that WARIDI has supported include:

- Coordination meetings of the Technical Working Group;
- Climate Vulnerability Mapping of Wami Ruvu and Rufiji Basins⁴⁵ and training;
- Capacity needs assessments of WUAs;
- Capacity building of basin staff;
- Strengthening the capacity of WUAs;
- Support improved data management and storage by providing equipment, supporting rating curves development, and supporting flow measurements and databases; and
- Supporting the water resources classification system

Beneficiaries appreciate WARIDI's support and acknowledge that, as a result, there are noticeable changes in management. Although not implemented at the time of the visit to the basins, WARIDI is planning to support the purchase of equipment that will extend the monitoring network of the basins. Basin staff believe that the equipment and the placement of auto-telemetry stations will allow the basins to be well

⁴⁵ Wami Ruvu and Rufiji Basins Climate Vulnerability Mapping, RCMRD, March 2017.

covered and sustainable.

“The support of WARIDI has helped us to conduct high flow measurements which has not been possible for several seasons due funds constraints.” (Wami-Ruvu and Rufiji Basin staff in different meetings)

WARIDI EAs and junior engineers were present at each of the LGAs, in addition to engineering interns at each of the water schemes. Despite evidence that EAs are facilitating WARIDI reports, staff was relatively junior and lacked influence in the LGAs; LGA staff expected more support, more regular engagement, and updates from the EAs.

Junior engineers are performing their basic function in monitoring water points to prevent failure and breakdown. However, according to DWEs, coordination could be improved. Junior engineers do appear to be coordinating with the sub-grantees and contractors in follow-up activities carried out in the district in collaboration with WARIDI. DWEs ask for more updates and engagement in ongoing construction efforts. DWEs would like to visit for quality assurance of construction, but lack the resources to do so, which may be evidence that factors other than communication impede their ability to perform this role.

One of the engineers at the DWE’s office remarked:

“Sometimes we want to visit the construction sites, particularly when important engineering works are done such as concrete pouring to ensure that proper standards are followed, but we lack resources to reach to the sites.”

Although WUAs are important for water resources conservation, protection, and allocation at the local level, they remain weak as they are run by volunteers who remain disjointed from the LGA leadership and their legal mandate is not usually respected. At the time of the field visit, no training on WUA capacity strengthening had been conducted.

The ET found that there is a lack of coordination between the BWBs and LGAs on the IWRM at the LGA level, as there is no clear connection between the WUAs who are supposed to lead the water resources conservation, protection, and enforcement at the local level and the COWSOs who are mainly utilizing the water resources at the community level. One of the important issues for sustainability would have been to make the WUAs financially capable. However, despite recognizing the role of WUA in IWRM, there has been no attempt by WARIDI to require COWSOs to apply to water permits for the water schemes under their management.

There were obvious human activities taking place in the vicinity of the water sources at some of the WARIDI-supported water supply projects. Observed activities included agriculture activities, charcoal stoves, and pit latrines that could have been avoided if the communities and COWSOs were empowered towards water resources management provisions. The instigation of collaboration between the trained COWSOs and WUAs would facilitate the COWSOs to be agents of change towards water resources management in their areas, as well as enable the Basins and the WUAs to collect the much-needed water user fees from the facilities under their management.

There is no water quality monitoring taking place nor is there any agreement or activities relating to water quality issues at the catchment level.

4.5.3 Conclusions

- WARIDI is an important water sector supporting agent and, in some LGAs, the only one. Accordingly, it is in a position to facilitate—at the LGA level—a collaboration forum among WSDP actors in the project area to support water resources management and the water supply agenda. The collaboration forum should hold regular meetings for the discussion of challenges facing integrated water resources management in their areas.
- Despite evidence that EAs and junior engineers are performing their roles in construction, preventing failure and breakdown, and facilitating WARIDI reports, the staff was relatively junior

and lacked influence in the LGAs. LGA staff expected more communication, more regular engagement, and updates from these staff. Furthermore, DWEs lacked the resources to reach the water points to provide quality assurance at the sites.

- The evaluation found that there is a lack of coordination between the BWBs and LGAs on the IWRM at the LGA level, with no clear connection between the WUAs engaged on water resources conservation, protection, and enforcement at the local level and the COWSOs who are mainly utilizing the water resources at the community level.

4.6 QUESTION 6 (PRIVATE SECTOR): TO WHAT EXTENT IS WARIDI ENHANCING THE PARTICIPATION OF PRIVATE SECTOR IN THE IMPLEMENTATION OF ACTIVITIES AND HOW THAT CONTRIBUTES TOWARDS ACHIEVING DIFFERENT ACTIVITY MILESTONE AND RESULTS TARGETS?

4.6.1 Introduction

WARIDI recognizes that there are potential roles for private enterprises in supporting Tanzania's evolving WASH sector. The approach in private sector identification involved mapping how the private sector can, and does, contribute to community access to WASH through specific business models in WASH-related value chains and in providing products and services. Later, through prioritization across respective IRs and ranking of previous performance endorsements, LGA acceptability, and community consultations and learning visits, WARIDI was able to enter into agreement and collaboration with six private companies.

4.6.2 Findings:

WARIDI's engagement with the private sector follows the "shared value concept" and focuses on companies that create measurable business value through identifying and addressing social problems that intersect with their business in the area mainly of ODF, water supply, and hygiene improvements. The kind of products and technologies involved include water treatment products (chlorine packs for inline treatment or water kiosk use), smart meter (water kiosk), community education, feminine hygiene products (sanitary pads), and sanitation products (Lixil-sato toilets). It was reported that prior to the mid-term evaluation field visit, 200 Sato toilets pieces were sold, providing an improvement of household pit latrines part ODF sanitation campaigns.

However, LGAs and communities have limited knowledge of these activities and have had only minor involvement in identifying, choosing, and prioritizing the selected products across the respective WARIDI IRs, thus raising concerns around performance endorsements, LGA acceptability, and community willingness to accept the products.

WARIDI is currently implementing a capacity building and mentorship program for WASH-oriented MEs in 10 districts. Targeted enterprises are small, community-based, and largely licensed businesses—mainly local hardware stores, pharmacies, farm input stores, and other small shops. These MEs are often on the front lines of livelihood and WASH service provision in rural areas. WARIDI is providing training and mentorship in business plan development, management skills, sales strategy, basic financial management and accounting, and other core skills to build the capacity of these MEs to support private sector sustainability and expand provision of WASH service and products. WARIDI is looking for opportunities to encourage local MEs to increase and expand WASH products and services offerings—including by discussing strategies for WASH marketing and by directly linking trained MEs to WASH product companies looking to expand their distribution channels into WARIDI districts. At the time the field interviews for this mid-term evaluation were conducted, the ME training was still in its early stages, with only a few having received the training. The ET was able to interview a limited number of these trainees not as private sector group, but through their inclusion in FGDs with communities, COWSOs and WUAs

since they were also members of these groups. Participants who had received ME training on issues related to the business had good knowledge of WASH products and applications such as costs for establishing toilets, hygiene improvement, renovation, quality, and grades of toilets. The link to the MEs was particularly evident in Kidabaga, Kilolo DC and participants acknowledged the benefits of enhancing their skills with a view to expanding their businesses but expressed concerns on the low level of awareness among community members about the products, prompting fears about future sales volumes for the new products.

In Year 3, WARIDI designed and implemented the Microenterprise Support Program, starting with 10 LGAs. The training team delivered a total of 30 training sessions on Module 1 (Marketing and Sales), Module 2 (Financial Management) and Module 3 (Business Modelling) across 10 districts of the Morogoro and Iringa regions. A total of 198, 179, and 177 microenterprises across 10 districts participated, respectively, in the Module 1, Module 2 and Module 3 training sessions.

This year WARIDI plans to carry out monitoring visits to about 177 trained MEs in 10 LGAs as a follow-up check after the training program (ended June 2018) with an intention to track and document MEs' progress. As part of this exercise, they will be selecting MEs for a follow-up mentorship phase, which will have a greater emphasis on water and sanitation opportunities for MEs (as well as other more general business support services). Basic questions WARIDI asks MEs to answer include whether they have implemented changes in their business based on the training e.g. if they made changes to their marketing strategies or sales techniques; their accounting and financing systems; or their business planning practices. The emphasis here is for them to give specific examples (and observe) of changes they made or are making now, and whether they have stocked or sold new WASH products either during or after the WARIDI training. They are also asking whether they have made other changes in terms of how they stock, source or market WASH products.

WARIDI has set a target of 250 for Year 3, but the goal of 1,000 participants by end of the program is not likely to be reached. Furthermore, the mapping exercise will need to be expanded beyond the 443 identified in target LGAs to include other LGAs in order to identify and reach the target of 1,000 participants by the end of the program.

WARIDI expects to engage with Water.org, a company that links with financial institutions such as Equity Bank for providing loans to COWSOs and MEs to enable them to carry out minor infrastructure rehabilitation and install smart meters for use in water supply. At the time of the evaluation, WARIDI was planning a baseline survey for smart meter (eWATERpay) at Mvumi and Msowero COWSOs in Kilosa LGA. This baseline information will provide feedback for preparation and installation of the piloting smart meters. The baseline exercise will be followed by COWSOs training, household registration and meter installation, which are expected to take place in October and November 2018. Other examples include smart meters for houses in peri-urban settings (pre-paid) and E-Water pay, a private sector dealing with smart meters for COWSOs using smart cards in a kiosk.

4.6.3 Conclusions

- WARIDI recognizes that there are potential roles for private enterprises in supporting Tanzania's evolving WASH sector, although the implementation of this component is still at an early stage. In implementing its capacity building and mentorship activities, WARIDI has so far reached 300 WASH-oriented MEs, typically small, community-based licensed businesses such as local hardware stores, pharmacies, farm input stores, and other small shops.
- WARIDI is not meeting the targets; targets may not be realistic and achievable given the early stage of implementation of this component. Targets are not prioritized according to the products, technology, and available opportunities across specific value chains.
- For the sustainability of this activity, there needs to be strong consumer take-up of products and

services. There is insufficient awareness at the consumers' end of the value chain on the necessity and advantage of using water supply, hygiene, and sanitation products offered by these private sectors. This would then create demand for those products and services while linking them to the relevant ME. To date, awareness of this activity has reached very few people, and it is highly unlikely that it will contribute to meaningful results within the remaining timeframe.

- Without significant acceleration of implementation, reaching targets is not feasible or realistic within the remaining lifespan of the project. Interventions by private or public actors are not yet sustained by demand; there remains to be a low level of take up by MEs providing products in the market system.

4.7 QUESTION 7 (ROLE OF GENDER AND YOUTH): TO WHAT EXTENT IS WARIDI INVOLVING WOMEN AND YOUTH IN THE IMPLEMENTATION PROCESS? AND HOW ARE GENDER INTEGRATION AND YOUTH INCLUSION ACTIVITIES MAINSTREAMED WITH THE ACTIVITY KEY COMPONENTS?

4.7.1 Introduction

Including women and youth is an important facet of the WARIDI activity. WARIDI recognizes the critical importance gender and youth integration play in successful and sustainable attainment of multiple use of water services, integrated water resources management, governance and planning, and climate change adaptation.⁴⁶ Aligned with one of USAID's cross-cutting objectives, Development Objective (DO) I "Tanzanian Women and Youth Empowered,"⁴⁷ the women and youth aspect is key to the activity design and implementation.

4.7.2 Findings

During desk reviews and actual data collection, it was revealed that the involvement of women and youth activities are, by design, planned to be implemented through other program activities. The ET spoke to various stakeholders on the extent to which WARIDI involved women and youth in the implementation process, and the following were the findings regarding the extent to which WARIDI involves women and youth in the implementation process and how the Gender Integration and Youth Inclusion (GIYI) activities are mainstreamed in the key program activities:

Mainstreaming of Gender Integration and Youth Inclusion activities

FGDs and KIIs showed that WARIDI does not have specific women and youth interventions but the activities are mainstreamed within other key program components/IRs. Across the program at large, women and youth were involved across activities and made up at least half of the COWSOs membership. They also made up a large portion of the community water committees, which were observed to have been following the national guidelines for women and participation. For example, during the implementation of livelihood activities, groups are formed and receive training and it is a requirement that women and youth make up 50 percent of group members. This ensures that they actively take part and benefit from the implementation of group activities.

GIYI activities have also been included as stand-alone activities such as gender training of LGAs.⁴⁸ This is aimed at enhancing an understanding of GIYI to LGA staff so that they support and take part in the implementation of activities in their areas of jurisdiction in relation to WARIDI activities and on similar

⁴⁶ WARIDI Gender Integration and Youth Inclusion Strategy, 2016.

⁴⁷ Country Development Cooperation Strategy, 2014-2019.

⁴⁸ The trainings were conducted in April 2018 and the evaluation fieldwork was conducted in June/early July. There are plans by WARIDI to monitor the implementation of these trainings.

LGA activities. Upward training was also conducted in the Kilombero and Kilolo districts for influential community members such as religious leaders. The training aimed at raising awareness of communities to bring about gendered social norms change (GSNC) to support women's participation in WASH activities. All these activities are geared towards supporting the effective implementation of key program components.

From documents reviewed and KIs with WARIDI staff, the ET learned that over the five-year life of the project, WARIDI targets to train 430 people (the data will be reported in the third year of implementation). At the time of the evaluation, WARIDI has already trained 232 people (187 LGA staff in the 20 districts, eight sub-grantees, and 17 community facilitators) against 100 participants—the original target for Year 3.⁴⁹ All the trained stakeholders are responsible for either conducting activities or providing support in the implementation of activities in support of gender equity, women, and youth empowerment.

Involvement in leadership and decision-making

As part of the implementation of program activities, women and youth are expected to be part of the leadership structures of various stakeholder groups or associations such as COWSOs and other water subcommittees. In such associations, it is encouraged that women and youth should be included. Talking of women's roles in WARIDI sites, a WARIDI staff member observed that they are responsible for: *“Making sure that women and youth are part of the associations/organizations and are encouraged to take part meaningfully.”*

It is mandated by COWSOs' formation guidelines to have women in COWSOs and within its three top positions, that is, chairperson, secretary, or treasurer, through FGDs conducted with female COWSO members. This was evident in most of the sites the ET visited and was a recurrent theme in the comments from community members. In some COWSOs such as Kilolo and Kilosa, it was revealed that women's inclusion in leadership positions was not being reinforced. This was evident in one FGD conducted in Kilolo District where a female COWSO member made the following comment: *“There is no gender equality, to be honest as in our committee we were two women but now one left and so I am left alone now.”*

This was also the case in another COWSO in Kilosa where a women member expressed: *“Yes, there is but not so much especially in our area women are not always involved. E.g., we don't get information about seminars. At least nowadays we are somehow involved. That is why I have also been informed to attend here.”*

While women and youth participation is evident across WARIDI sites, some but not all sites have women represented in leadership roles in COWSOs and committees.

Involvement in the implementation of activities

Involvement in trench preparation for water pipes installation. In the FGD and some KIs, respondents reported that during actual implementation of activities, youth are involved in trench digging while women are involved in backfilling of trenches and other related processes. It was also added that women are highly mobilized into taking part because they are the ones who need water the most for daily activities.

Involvement in sanitation data collection. KIs with stakeholders show that women are highly involved in data collection and recording for the ODF/National Sanitation Register. This is despite the lack of incentives and remuneration for this activity.

4.7.3 Conclusions

- The gender integration and youth inclusion activities have been successfully implemented in WARIDI. Both KIs and documents reviewed (such as quarterly, semi-annual, annual reports, and monitoring documents) show that women and youth activities are being implemented separately

⁴⁹ MTR technical note-final by WARIDI COP-June 2018.

while also being mainstreamed through the key program components namely WASH, Governance, and Private sector. The FGDs and KIIIs conducted by the ET show that the successful mainstreaming of GIYI activities in the program is due to training and capacity building activities undertaken, directed at the WARIDI technical team, COWSOs, LGA officials responsible for supporting and implementing GIYI activities, and influential traditional leaders from community in which WARIDI is being implemented.

- Integration of women in leadership roles was evident in most of the sites the ET visited and was a recurrent theme in the comments from community members. However, not all sites have women represented in leadership roles in COWSOs and committees.
- Despite being successful and timely in implementing its GIYI activities, due to lack of a separate budget for implementation and monitoring, the gender segment has not effectively monitored its activities and instead relies on other program activities in which gender is being mainstreamed.

4.8 QUESTION 8 (MANAGEMENT, LEADERSHIP, AND COMMUNICATIONS): TO WHAT EXTENT ARE COMMUNICATIONS AND DECISION-MAKING PROCESSES FACILITATING OR INHIBITING IMPLEMENTATION OF ACTIVITIES IN A TIMELY MANNER?

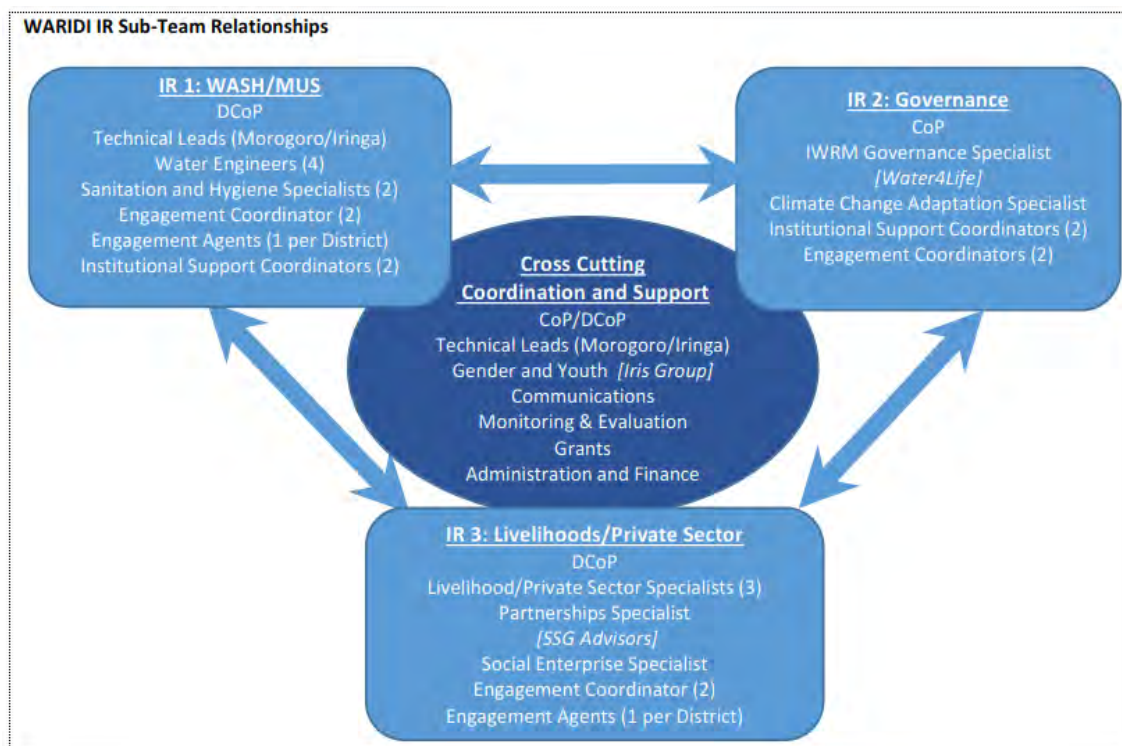
4.8.1 Introduction

Management, leadership, and communication play a leading role in the attainment of project goals. WARIDI is implemented by Tetra Tech ARD (Prime), Winrock International, SSG, Iris, and Water for Life Solutions, and maintains offices in Morogoro and Iringa. At the WARIDI offices in Morogoro and Iringa, technical and administrative staff have been recruited to support activity implementation, but the majority of the staff is located at the Morogoro Headquarters (HQ) Office. International visits by Tetra Tech, Winrock, and other subcontractor experts have been carried out as the need arises to support the implementation of different IRs. Short Term Technical Assistance (STTA) has been recruited from time to time to carry out specific consultancy studies. The WARIDI HQ office in Morogoro is responsible for communication with outside partners at the regional and national levels such as sectoral ministries and partners. At the LGA level, WARIDI has employed EAs who support and coordinate activities at the District level and report to WARIDI. Activities at the Basin level are coordinated by BWB Support Specialists who have been placed in both basins of Wami Ruvu and Rufiji. In achieving the targets that are meant to improve water resources management, improved services access, and climate change adaptation in selected districts of the Rufiji and Wami-Ruvu river basins, WARIDI works in three IRs and implementation of activities is carried out by different sub-teams as shown in Figure 8.

Implementation of projects and activities in the respective LGAs is carried out by sub-grantees and contractors who are hired by WARIDI. Projects at the LGA level are usually identified by the responsible districts based on their priorities and are submitted to WARIDI who then communicate to the district the names and number of projects chosen for implementation. Communication between the LGA and WARIDI is done through the EAs placed at each WARIDI-supported LGA.

The Basin Board Support Specialists act as links of communication between WARIDI and the basin boards and are coordinating all activities implemented in support of the WSDP implementation.

Figure 8: IRs Sub-Team Relationships



4.8.2 Findings

From interviews with WARIDI staff, it was clear that management and leadership, particularly in the first year of the project, was a challenge. For example, they found it difficult to coordinate the teams working on the three project IRs; each team was pursuing its own targets and there was no integrated approach. “At the beginning of the project, it was like three sub-teams were working independently and there was no coordination and there was a general lack of understanding what other teams could contribute to the attainment of the targets,” remarked one WARIDI staff member. “Things have since changed and teams are now talking to each other, and there are frequent communications among IR implementers (including subcontractors), which has resulted in tremendous progress in the realization of target results. This has included the introduction of weekly reports, monthly reports in addition to the usual reports we were writing” commented one participant of the WARIDI staff KII.

There was a general satisfaction with the flow of information between WARIDI and the LGAs through the Basin Board Support Specialist. Despite the fact the main IWRM IP operates from the United States (U.S.), they have been effective in facilitating the execution of activities. “So far it has worked very well for us, even when we have an urgent matter we write to the [Chief of Party/Deputy Chief of Party] COP/DCOP copying the Basin Specialist and we have always received positive feedback” narrated one basin staff during the interview.

From KIIs with different actors at the LGA level, the ET was informed of a lack of understanding of the roles of EAs as well as the roles of DWEs’ and DHOs’ offices in their interaction with sub-grantees and sub-contractors at the LGA level. The EAs are located at the LGA office and interact mostly with the DWEs’ office but are seen as lacking influence at the District level. Furthermore, staff from LGA and particularly the DWEs’ office feel excluded from site supervision and are not recognized as having a key role nor as important actors in the contracts signed between WARIDI and subcontractors. “Sometimes when we go to the site, we realize that things are not working well in the implementation of the work from an

engineering point of view, and would like the contractor to change something, it is difficult for them to change it if it has a cost implication to them, because they answer only to their client who is WARIDI” commented one DWE. This is despite the fact that the projects and schemes are supposed to be owned by the LGA and, at the administrative level, the LGAs continue to provide support and an enabling environment for WARIDI to operate effectively.

WARIDI operates as a project, answerable to USAID and subject to a commercial performance contract to deliver targets. From the LGA perspective, they feel that WARIDI operates a parallel structure from which they feel relatively excluded from decision-making. This has implications in terms of ownership of facilities. Partly, the frustration is out of LGA/DWE lack of resources to fully participate, e.g., their reliance on WARIDI for transport for site visits, etc. Although WARIDI keeps them well informed of events and milestones, LGAs feel lack of ownership and influence. LGAs are called on to intervene only when there are problems. *“At one point one COWSO sub-grantee had hired non-competent facilitators for COWSO formation and communities refused to accept, until the DWEs office was informed, the DWEs office having looked at the credentials of the facilitators advised the sub-grantee to look for competent facilitator and the process of COWSO formation progressed smoothly after that”* explained one DWE in the KIIs.

Through WSDP, each LGA has a CWST⁵⁰ that involves mainly key officers from the WARIDI-supported sectors of Water, Health, Community Development, Education, Finance, and Planning. CWST has a strategic plan called Council Water and Sanitation Plan (CWSP) and, once it has been published, most of the LGA’s WASH interventions are unfolded from there. The CWST is chaired by the LGA Director and in the event of potential LGA support such as WARIDI, the support coordinator in the LGA would be incorporated in the team. This will be the opportunity for WARIDI to regularly inform the LGA of its plans for integration into the LGA plans, and conversely for capturing of the team’s, and ultimately the LGA’s, necessary institutional support.

Some WARIDI recruits are apprentices/interns that are too junior to command the respect of the LGA professional staff and the people they lead in the field. The nearest immediate professional counterparts to them are based in the LGAs; however, they are not answerable to LGAs, only to WARIDI. That demoralizes the LGA personnel and reduces their readiness to collaborate on what is being done in their areas.

From KIIs, LGA staff feel a lack of transparency and openness of the part of WARIDI, particularly on planning and reporting of costs involved for different projects. As a result, LGAs have failed to report according to the PO-RALG and MOWI templates which require costs to be reported for each quarter. The same view was expressed by the National Sanitation coordinator who said, *“the National Sanitation Campaign would like to know the plans and budget allocated for sanitation and hygiene activities in LGAs for us to be able to make follow-ups and possibly be able to learn.”*

The ET learned that there have been efforts by the WARIDI team to communicate with different stakeholders in the sectorial ministries at the national level, but these efforts have not been entirely successful. Some PO-RALG and MOWI stakeholders reported to the ET that they have only heard about WARIDI in reports they receive from the LGAs and the basins. WARIDI has established contact persons at every ministry, but they are not always active. For example, at the MOWI’s Directorate of Water Resources the contact person had moved/changed jobs and the MOWI liaison person was unaware of this.

⁵⁰ The CWST is the LGA team that is responsible for supervising and monitoring the implementation and operations of water, sanitation, and hygiene projects in the LGA. It is also accountable for organizing and supervising establishment and formation of COWSOs and for monitoring COWSOs’ performance.

4.8.3 Conclusions

Management, leadership, and communications within WARIDI have been improved from what they used to be. The sub-teams implementing the IRs are now communicating and have a frequent dialogue that has contributed to the achievement of the target results. KIIs and documents reviewed show that there is a good flow of communication and information among different stakeholders, but coordination among implementers of the different activities, including sub-grantees, would benefit from further strengthening.

KIIs conducted by the ET show that basins and LGAs, as well as sub-grantees, are happy with the level of communication they have with WARIDI and would like for it to continue. However, at the LGA level, there was a call for more transparency from WARIDI, especially on plans and reporting of budgets and progress for the various projects.

4.9 QUESTION 9 (MANAGEMENT, LEADERSHIP, AND COMMUNICATIONS): TO WHAT EXTENT IS THE SKILLS COMPOSITION OF THE KEY PERSONNEL TEAM SUFFICIENT TOWARDS ACHIEVING THE RESULTS TARGETS WITHIN THE TIMEFRAME?

4.9.1 Introduction

The WARIDI team comprises a full-time in-country team with U.S.-based support personnel (from the consortium member organizations) available on a part-time or as-required basis. During the fieldwork, the ET was able to meet with the in-country WARIDI team members only.

The in-country WARIDI team comprises 86⁵¹ persons across the project HQ (in Morogoro) and the regional offices (in Iringa and Ifakara). The WASH Services Section is the largest unit within the WARIDI in-country team and comprises 20 persons (including 13 engineering interns).

WARIDI also makes use of national NGOs who are contracted as sub-grantees and are primarily responsible for implementation of the Component I activities. As such the sub-grantee staff are part of the key personnel team.

4.9.2 Findings

The iWASH Program, implemented over a six-year period (ending January 2016) is regarded as the precursor to WARIDI. WARIDI shares many of the characteristics of iWASH but represents a significant scaling up of outcomes. The iWASH targets achieved included: (i) 200,000 gain access to water; (ii) 40,000 gain access to improved sanitation in schools and homes; and (iii) more than 250,000 people were sensitized to hygiene and sanitation.⁵²

The iWASH was funded by USAID and implemented by Florida International University with partners: Winrock International leading on water supply and private sector components; and CARE International leading on sanitation and hygiene. Winrock International has carried this experience through on the WARIDI project, in the role of partner responsible for the IRI component, i.e., all WASH activities. Therefore, the IP has previous relevant experience in implementing integrated WASH programs at the District level in Tanzania.

The current in-country WARIDI contingent includes personnel with previous experience on the iWASH Program, and /or have worked with international NGOs (INGOs) operating in the WASH sector in

⁵¹ Comprising: 72 employed, 13 engineering interns, and one Peace Corps volunteer. By mid-August this will increase to 80 employed staff, pers comm. WARIDI COP.

⁵² <https://tz.usembassy.gov/u-s-government-funded-iwash-program-helps-200000-tanzanians-access-water-supply/>

Tanzania.⁵³ High-level technical expertise is provided by U.S. partners on a “fly in-fly out” basis. The national in-country team key personnel are well qualified and appear highly committed to their roles. They have not, however, previously worked on a project of this scale and reach (WARIDI is one of the more ambitious projects of its kind in Tanzania to date). IPs revealed,⁵⁴ they “*underestimated the bureaucratic complexity and time needed to establish a large project in Tanzania.*”

While WARIDI has experienced and well qualified key personnel at its disposal, at the interface with local government, as well as at the community level, the key roles are filled by relatively junior and in some cases less skilled staff:

- EAs are based in the LGAs and facilitate communications and coordination of activities between WARIDI and LGAs and community leaders and members. The role of EA is not fully appreciated by LGAs who have observed that EA staff were relatively junior and lacked influence.
- Engineering interns make up a significant percentage of the WARIDI technical staff, but they are recent engineering graduates, relatively inexperienced and are required to liaise with more senior and experienced DWE engineers.
- Sub-grantees, although experienced in WASH implementation, are contracted as service providers on short-term contracts. Despite their expertise, they have a relatively junior role, and this limits their potential influence.

Based on WARIDI achievement against targets (refer Annex 5) over the initial two and a half years, it is evident that WARIDI management has been slow to come to grips with the “scaling up” needs, particularly with respect to IRI activities. For example, in the first two years of WARIDI, the sanitation team comprised only two persons; this was increased to four only in April/May 2018. The appointment of the sub-grantee only took place in August/September 2017⁵⁵ and, then only for a one-year contract period. Therefore, despite the slow start, which should demand an acceleration of efforts to scale up activities, the sub-grantees received short-term contracts requiring limited outcomes. From the outset, it appears that the WARIDI management, once they had assessed the “project landscape,” was intent on making the case with USAID for a reduction in targets.

The WARIDI team lacked a senior WASH Partner with expertise in implementing large-scale WASH activities (e.g., INGOs, UNICEF, etc.) and so had to learn “on the job.” As noted, the sub-grantees⁵⁶ implementing ODF and COWSO activities are engaged as service providers and, although experienced in WASH, are not part of the project decision-making. They have an important, though relatively junior role in the project.

In the area of budgeting and resourcing, the WARIDI management has also proved to be cautious in their scaling up actions. WARIDI has a budget of \$48.8 million, allocated according to Key Result areas as shown in Table 7. Table ⁵⁷ At the mid-project stage, only 27.2 percent of the budget has been incurred for Key Result I, the most critical project component.⁵⁸

⁵³ EG WaterAID, Plan International.

⁵⁴ WARIDI First Annual Report (January – September 2016), March 2017.

⁵⁵ Effective start of Project was January 2016.

⁵⁶ Who were experienced local NGOs.

⁵⁷ Data provided by WARIDI dated September 11, 2018.

⁵⁸ Key Result I is also referred in various WARIDI documents by the labels “Component I” and “Intermediate Result I (IRI).”

Table 7: WARIDI Budget Allocations and Actual Expenditure to Date

Cost Elements by Key Result Area	% Actuals to Date	Actuals to Date	Total	% Budget
Key Result 1	27.2%	7,404,842	27,251,183	55.82%
Key Result 2	52.9%	2,241,339	4,234,014	8.67%
Key Result 3	37.5%	1,998,514	5,323,699	10.90%
Key Result 4	0.0%	0	363,252	0.74%
Other Direct Costs*	45.2%	1,965,345	4,348,944	8.91%
Indirect Costs**	29.5%	1,491,025	5,059,382	10.36%
Total Estimated Cost	32.4%	15,101,065	46,580,474	95.41%
Fixed Fee	32.3%	724,866	2,243,345	4.59%
Total Estimated Cost Plus Fixed Fee		15,825,931	48,823,819	100.00%

In addition, under the Key Result 1, the budget allocation for rehabilitation of water services, in pursuit of the target of “1.5 million persons gaining access to basic drinking water services” is \$5.97⁵⁹ million or only 12.2 percent of the total WARIDI budget (Table 8).

Table 8: WARIDI Budget Allocations and Actual Expenditure to Date

Key Stage 1 Component	Round 1 USD	Rounds 2 & 3 USD	Total	% of WARIDI Budget (\$48.8m)
Community Water Services	1,438,933	4,528,760	5,967,693	12.22%
Sub-Grantee – COWSOs	498,442	902,082	1,400,524	2.87%
Sub-Grantee – ODF	527,366	867,276	1,394,641	2.86%

Equally, WARIDI estimates it will achieve only 50 percent of the sanitation and ODF targets of 1.5 million and 3 million persons, respectively, by the end of the project. The allocated budget for ODF sub-grantees, the frontline agencies contracted to implement sanitation and ODF activities and achieve targets, is \$1.4 million, or 2.9 percent of the total WARIDI budget.

Failure to achieve the targets is not related to the skills composition of the key personnel team, and is more likely related to the following factors:

- Management challenges related to the timely scaling-up requirements of the project;
- Inadequate resource allocation (budget and personnel), particularly for the IRI activities that are most directly related to project targets and outcomes; and
- The belief, from the outset, that the targets were unrealistically ambitious.

The WARIDI management landscape has changed from the beginning of the project, with the current management focused on maximizing the targets to be achieved by the end of the project. Improvements in management and communication are evident, lessons have been learned, and there is greater urgency⁶⁰ to increase targets within the existing budget arrangement. However, WARIDI’s projections show that it will still fall well short of the project targets and that a re-assessment of the targets and approach is required. This is further discussed in Section 4.10.1.

⁵⁹ Originally this was \$4.1 million but has been increased to \$5.97 million in WARIDI latest proposals.

⁶⁰ WARIDI is being strongly directed in this endeavor by USAID.

4.9.3 Conclusions

- The WARIDI IP underestimated the bureaucratic complexity and time needed to establish and scale-up activities to achieve targets, especially regarding IRI activities.
- The extent to which WARIDI has missed targets is not due to a lack of skills among the personnel, but rather can be attributed to other factors, such as the complexity and reach of the project, the challenges related to the scaling up effort as well as inadequate resource allocation (budget and personnel) for IRI activities.
- The WARIDI IP has learned lessons from its first year of operations. Management and key personnel have been strengthened. Changes in project management, communication, and operations have been implemented and this has improved understanding of the project as an integrated whole. There is now a greater focus and urgency to achieve results. This is expected to result in improved progress in the second half of the project. However, WARIDI's projections show that it will still fall well short of the project targets and that a reassessment of the targets and approach is required.

4.10 OTHER FINDINGS

4.10.1 WARIDI Targets

Table 9 compares the WARIDI targets with several international large-scale WASH projects. The largest WASH project to date internationally, in terms of targets, is said to be the World Bank-funded National Rural Water Supply and Sanitation Project (PAMSIMAS) Project, which reached 4.8 million beneficiaries with improved water and 5.5 million beneficiaries with improved sanitation. The USAID Indonesia Urban Water, Sanitation, and Hygiene (IUWASH) Project, also in Indonesia, reached 2.4 million beneficiaries with improved water for a budget of \$40.7 million. IUWASH engaged primarily with small urban water utility organizations to achieve its water target (but had a much more modest sanitation target of 250,000 which it exceeded).

Table 9: Comparison of Targets

Project	Budget (USD)	Y1	Y2	Y3	Y4	Y5	Y6	Total
WARIDI (USAID) 2016-2020, Tanzania.	49M	-	-	-	-	-	-	-
Population with Improved Water	-	0	100k	200k	500k	500k	-	1.5M
Population with Improved Sanitation	-	0	100k	200k	500k	500k	-	1.5M
Population ODF	-		200k	800k	1M	1M	-	3M
<i>Per Capita cost water only USD13.54 (rehabilitation)</i>	-	-	-	-	-	-	-	-
iWASH (USAID) 2010-2015, Tanzania	19.5M	-	-	-	-	-	-	-
Population with Improved Water	-	-	-	-	-	-	200k+	-
Population with Improved Sanitation	-	-	-	-	-	-	40k+	-
Population with Improved Water and Sanitation	-	-	-	-	-	-	260k	260,000
<i>Per Capita cost water & sanitation USD80</i>	-	-	-	-	-	-	-	-
SUWASA⁶¹ (USAID) 2011-2016, multi-country Africa	41.5M	-	-	-	-	-	-	-

⁶¹ USAID's Sustainable Water and Sanitation in Africa Project (SUWASA).

Project	Budget (USD)	Y1	Y2	Y3	Y4	Y5	Y6	Total
Population with Improved Water	-	0	0	75k	75k	100k	120k	370,000
Population with Improved Sanitation	-	0	0	10k	20k	30k	40k	100,000
IUWASH (USAID) 2011-2016, Indonesia	40.7M	-	-	-	-	-	-	-
Population with Improved Water*	-	-	-	-	-	-	-	2.4M
Population with Improved Sanitation (Actual Achieved).	-	-	-	-	-	-	-	250,000 305,000
*capacity building only (no hardware support)	-	-	-	-	-	-	-	-
PAMSIMAS (World Bank)⁶² 2006-2011, Indonesia	275M	-	-	-	-	-	-	-
Population with Improved Water	-	-	-	-	-	-	-	4.8M
Population with Improved Sanitation	-	-	-	-	-	-	-	5.5M
Cost per beneficiary water only USD31	-	-	-	-	-	-	-	-

In an African context, WARIDI appears to be one of the largest WASH projects undertaken to date, in terms of its targets and budget. International experience demonstrates that WASH programs can be delivered on a large scale and that the WARIDI project is not exceptional in its scale.

Text Box 3: Cost Estimates (water supply only)

- Hand pumps on shallow wells: \$25-33 per capita
- Gravity-fed water schemes: \$29-80 per capita
- Borehole-fed pumped schemes: \$34-90 per capita

Ref: WSDP Project Implementation Manual

Taking a mid-range costing from the WSDP Project Implementation Manual (see Text Box 3) of \$60 per beneficiary (for piped/pumped schemes), to reach 1.5 million persons with improved water would require a budget of \$90 million (for new build), which comfortably exceeds the total WARIDI budget of \$48.82 million. A comparison can

also be made to the iWASH Project, which was the pre-cursor to WARIDI, and which achieved a cost per beneficiary for water and sanitation provision of \$80.⁶³ While the cost per beneficiary is a blunt measure that should be quoted with care, it gives an approximate indication of the total cost of service delivery. The WARIDI cost per beneficiary (for water) is currently \$13.54 or 80 percent lower than iWASH. Clearly, the available WARIDI budget is determining the approach to be used by the IP, namely to seek low-cost solutions. As a result, the “rehabilitation model” used by the IP is a logical and reasonable approach, given the available budget.

The WARIDI rehabilitation model (i.e., the rehabilitation of nonfunctioning or partly functioning water schemes) at a cost per beneficiary of \$13.54 would require \$20.3 million or 41.6 percent of the total WARIDI budget. From a budgeting perspective, the target for water access would seem achievable based on the WARIDI rehabilitation model, assuming that sufficient water schemes exist within the target areas that fulfill the requirement for rehabilitation. However, WARIDI has allocated only \$5.97 million (or 12.2 percent of the WARIDI budget) for water infrastructure works, and this is acting as a limiting factor on the achievement of targets.

⁶² <http://www.worldbank.org/en/results/2013/04/04/indonesia-expanding-access-to-clean-water-for-the-poor>. PAMSIMAS was the largest rural water and sanitation project in the world.

⁶³ USAID, iWASH Program Tanzania, Close-out Learning Review. Florida International University, October 16, 2015.

Sanitation/ODF is a low-cost⁶⁴ activity estimated at \$1.86 per person.⁶⁵ The cost to achieve the project target of 1.5 million persons accessing basic sanitation amounts to \$2.79 million. Currently, WARIDI has budgeted only \$1.39 million (Table 8) for this activity.

As previously noted, the IP underestimated the scaling up challenges and this has put the project behind on achieving the targets and placed further pressure on the IP to scale up activities in the short time left. WARIDI's recent performance is encouraging; however, further scaling up efforts as well as more time will be required if it is to achieve its targets.

Conclusions

The WARIDI Project has set ambitious targets (for IRI activities) to be achieved but has been given a budget that essentially prescribes low-cost solutions for water provision. The rehabilitation model adopted by the IP is a logical and appropriate strategy to maximize numbers of beneficiaries in pursuit of the targets. However, to achieve the project targets would require WARIDI to allocate 41.6 percent of the total budget for water services, and this is significantly more than the current allocation of 12.2 percent of the total budget. Additional funding will also be required to achieve the sanitation/ODF targets.

The targets will only be achievable if WARIDI: (i) is allowed more time to completion, such as a one-year no-cost extension of its contract; and (ii) is able to re-allocate significantly more funding towards IRI activities, while maintaining its low-cost rehabilitation strategy for water services.

However, there is also value in USAID and WARIDI moving away from a preoccupation with targets, and low-cost solutions, to one that prioritizes outcomes. A reduction in targets (particularly in the case of the IRI activities) can be justified in the pursuit of improved outcomes, such as “improved sustainability” and targeting “the most needy.” This would allow the project some element of flexibility beyond the purely low-cost rehabilitation model currently being implemented.

4.10.2 WARIDI Design

Although WARIDI is designed as an integrated project, with related components contributing to and reinforcing the project goal, only Component I is required to achieve significant scale. Fundamentally WARIDI is an at-scale WASH program and is being judged primarily on the extent to which it meets its Component I targets, which are numbers-focused and require WARIDI to achieve “*numbers of people gaining access to basic...*” The project budget and focus on numbers rather than outcomes drives the project to choose “easy wins” when available, and low costs solutions.

Targeted communities

The WARIDI rehabilitation model⁶⁶ is a logical approach given the limited budget allocation for water service provision. WARIDI does not therefore specifically target the most in need who may require more costly solutions.

LGAs understand that WARIDI will only undertake rehabilitation of existing water schemes and they actively participate in the identification and selection of schemes on this basis. Feedback from LGAs and DWEs indicates that they would prefer if WARIDI were more flexible in their selection of schemes and could include “*those remote communities that currently don't even have water.*”

⁶⁴ Households are responsible for the cost of their latrine. WARIDI provides software support only (i.e., awareness raising to trigger households to have a latrine, with follow-up monitoring).

⁶⁵ Based on achieving 750,000 persons (i.e., 50 percent of the project target) at a cost of \$1,394,641 (see Table 10, and source: Complete WARIDI Indicator Analysis June 2018).

⁶⁶ WARIDI selects only existing partly functioning or non-functioning water schemes for rehabilitation and extension.

WARIDI pursues a demand-driven approach to water supply, with communities required to formally express interest in receiving support and make commitments (which can include finance, labor, and materials provision). A demand-driven approach ensures community commitment, though it takes time to build the necessary community awareness, organizational reputation, and sense of trust to generate that demand.⁶⁷ Experience from the iWASH Program is that a purely demand-driven approach to water provision may not be sufficient to engage the least served and most vulnerable:

“There is a risk that marginalized and hard-to-reach communities, despite often facing the most serious water supply challenges, may be less proactive in applying for assistance than those that are accessible, knowledgeable, and well capacitated. They may be more remote and their supply challenges more intractable.”⁶⁸

WARIDI should consider adopting a more flexible approach to the current demand-driven/rehabilitation model that considers those most in need, even though this may incur a higher per capita cost.

Conclusions

WARIDI’s design (its goal and theory of change) is ambitious in trying to accomplish many things and link many related components into an integrated whole. However, the WARIDI targets primarily identify it as an at-scale WASH project required to achieve, in the key Component I (IRI) activities, high numbers of people having access to water and sanitation services. The available WARIDI budget, however, limits the IRI options to primarily lower cost solutions for water services and this may exclude those communities most in need.

Sanitation and hygiene behavior: The lack of an appropriate indicator for hygiene behavior in the monitoring framework has resulted in hygiene receiving relatively low priority under WARIDI. The sanitation indicator measures the number of people gaining access to basic sanitation facilities. The project focus is on those areas that are being monitored through indicators and targets. Data on the presence of handwashing facilities and soap are being collected on a quarterly basis by the National Sanitation Campaign register, and this data can be used as a proxy indicator for hygiene behavior.

4.10.3 Sustainability

According to the WARIDI Sustainability Plan, USAID/WARIDI has put sustainability at the center of its approach to increasing access to rural water services. However, this emphasis on sustainability is not supported by the project design, and by appropriate indicators and targets which can track and monitor sustainability outcomes. In the case of Component I, the indicators are “*numbers of people gaining access to basic...*” not “*...numbers of people gaining access to basic services, and using, managing, and sustaining them effectively.*” This is influencing the IP’s approach to pursuing target numbers over sustainable outcomes. While WARIDI will contribute to sustainability, by raising skills levels, it is not fundamentally configured to seriously address sustainability. A project aimed at sustainable outcomes would require a different approach that (in the case of water services) would provide a more comprehensive program of COWSO training with follow up monitoring over a longer timeframe (using sustainability indicators), with a focus also on strengthening the institutional and governance environments at the local government, Ward, and village levels.

4.10.4 Conclusion

The IP’s approach and implementation strategy is fundamentally determined by the project design (and

⁶⁷ iWASH Program, Tanzania Close-out Learning Review, USAID/ Global Water for Sustainability Program, Florida International University, October 2015.

⁶⁸ Ibid.

associated targets and indicators), and the available budget. The WARIDI project design, indicators, and targets⁶⁹ largely dictate a numbers-driven approach rather than one aimed at achieving sustainable outcomes and gives preference to low cost approaches targeting “easy wins” instead of serving those most in need.

WARIDI needs to refocus in order to place sustainability at the center of its approach to increasing access to rural water services. A refocus on outcomes will require improved partnership arrangements, enhanced training and monitoring, and new indicators to track progress against sustainability. This will also necessitate a review of the targets.

⁶⁹ Specifically in the case of Component I.

5.0 RECOMMENDATIONS

The following recommendations are organized by primary recommendations which involve the overarching design and focus of the program which are directed primarily to USAID in its direction of WARIDI. Secondary recommendations are primarily activity focused and are directed for WARIDI implementation in the second half of the program.

- I. **Primary Recommendations.** Overall the project should refocus its efforts on WASH services, and the provision of improved water supply infrastructure, which is considered by local governments and communities to be a priority area of need. Water services require further scaling up and a broader reach to include those most in need. This will require a more flexible and nuanced approach—one that is more focused on outcomes rather than being numbers-driven. USAID should consider realigning the water services program to include the following:
 - Allocating a greater share of the WARIDI budget to water service provision (i.e., construction). Under the current arrangement, water services receive only 12.2 percent of the WARIDI budget. In order to prioritize and further scale up water provision, this percentage should be increased to between 40-50 percent of the total WARIDI budget. This will require reallocations from other project areas.
 - Consideration should be given to drastically scaling up the interventions, which may require extending the project timeline beyond five years. While WARIDI is already increasing the pace of implementation, USAID should consider allowing a one-year no-cost extension as part of a revised approach to allow further scaling up of IRI activities and to make up on the progress deficit in the first half of the project.
 - WARIDI needs to pivot from its current focus on target “numbers of beneficiaries” to one based on sustainable outcomes. In the future, the selection criteria should give greater weighting to those communities considered most in need. This may result in higher costs per beneficiary in some cases. Beneficiary target numbers should be reduced to accommodate this more flexible approach. Partnerships should be explored with LGAs to potentially have them co-fund rehabilitation and new water schemes.

Secondary Recommendations per Activity

2. **Hygiene.** Hygiene behavior change needs a greater focus under WARIDI and an expanded set of sanitation and hygiene-related indicators. The hygiene component should include issues such as handwashing with soap; household water treatment, storage, and handling; water safety planning (for COWSOs); and household waste disposal. WARIDI should develop a dedicated Hygiene Behavior Change Communication and Action Plan that sets forth the overall strategy, direction, and detailed activities for hygiene promotion and communication through to project completion. This should include appropriate indicators to enable monitoring and report of progress.
3. **Institutional WASH.** The current sanitation/ODF program does not have a specific focus on WASH at schools or institutions. Some of the sub-grantees have included schools and teachers in the sanitation awareness activities carried out, but this has not been consistently done by all sub-grantees, and, when it has been done, has excluded hardware support to improve schools’ WASH facilities. This is a missed opportunity to include teachers as WASH influencers. WARIDI should consider synchronizing its sanitation/ODF program with the National Sanitation Campaign via the inclusion of institutional WASH. Institutional WASH could be carried out on a pilot scale in selected wards. A key part of the Institutional WASH should be a Schools WASH program that:
 - Includes grants/hardware support to upgrade was facilities in selected schools (that can act as models for schools WASH);
 - Engages with Government, teachers, students, and parents;
 - Positively influences hygiene practices in schools with a view to influencing practices in

- their homes, among family members, and in the wider community; and
 - Includes MHM which particularly benefits girls' education performance.
- 4. Support for COWSOs.** Support for COWSOs is too thinly spread over many COWSOs. While a few COWSOs receive training as well as infrastructure improvements, the majority receive only limited training. The support to COWSOs needs to be broadened beyond training only, to include:
- Hardware support through grants, with technical assistance support (as required).
 - More detailed awareness of tariff setting and revenue collection for financial sustainability.
 - Mentoring and ongoing support. Newly formed COWSOs need to learn lessons from more experienced and successful COWSOs. Twinning arrangements allowing for exchange visits to observe successful COWSOs in operation, and mentoring programs should be considered.
 - Monitoring of COWSO progress and performance. A COWSO baseline assessment with follow-up monitoring using a range of indicators would allow for more rigorous performance tracking of COWSOs and help determine the factors contributing to sustainable operations.
 - Village and sub-village leaders should be included in the COWSOs training so that they have a greater understanding of the function of COWSOs, their legal mandates, and institutional challenges. COWSOs need to have greater support of the local leadership especially in the area of tariff setting and collections.
- 5. Support for LGAs & DWEs.** To date, WARIDI-supported LGAs have not been highly successful in accessing PbR funds. This needs a greater focus. WARIDI can leverage added benefit by supporting LGAs to obtain access to PbR funds and hence increase access to water in the respective LGAs.
- 6. Support for WUAs.** Training for WUAs should be expanded to deepen knowledge and skills in finance, leadership, and management skills as well as planning and governance.
- 7. Gender.** WARIDI's GIYI activities have been effective in achieving gender integration and youth inclusion through effective training of COWSOs and LGAs. For sustainability purposes, WARIDI should engage the trained government officials in training as co-facilitators so that they will be able to continue GIYI training when USAID funding ends.
- 8. Data Collectors.** WARIDI should explore financial and non-financial incentives that will adequately reward Data Collectors and act as an incentive to CHWs to sustain the regular and accurate collection of data for the Sanitation Registers. There is a need for improved visibility (uniform or T-shirts, backpacks, etc.) to raise the status of the data collectors to improve community recognition of their function in collecting accurate information on sanitation and hygiene. There is scope for improved procedures, use of digital technologies,⁷⁰ and incentives for data collection, which will reduce the time burden in collecting and manually recording and transposing the data.
- 9. Coordination**
- WARIDI needs to strengthen the coordination and collaboration among WSDP actors and stakeholders at the LGA, and at the sectoral ministries. The collaboration can be sustained through regular meetings to discuss challenges facing integrated water resources management. It is important for WARIDI to increase transparency and openness with DWEs' office and enable them to correctly report to the higher levels at PO-RALG and MOWI. Increasing coordination with DWE and DHO offices would help make sure activities are reported correctly.

⁷⁰ E.g., mobile phone apps, as trialled under in the iWASH Project.

- WARIDI should engage with LGAs in IWRM forums whose agenda should include issues pertaining to sustainable water resources management, water resources assessment and planning, water quality management, and reports from the COWSOs and WUAs. The LGAs and the Basins should take responsibility to ensure the forum is held quarterly to help sustain coordination and respond to community water issues raised in these meetings.

10. Private Sector

- Private sector partnerships are intended to result in improved efficiency and sustainability of WASH services. For sustainability of this activity, there needs to be a strong consumer demand for products and services. WARIDI needs to address the consumers' end of the value chain by creating greater awareness of the necessity and advantage of using water supply, hygiene, and sanitation products offered by these private sectors. This would then create demand for those products and services while linking them to the relevant ME. To date, awareness of this activity is low, and it is highly unlikely that it will contribute to meaningful results.

ANNEXES

ANNEX I: EVALUATION STATEMENT OF WORK

MIDTERM EVALUATION OF USAID WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI)

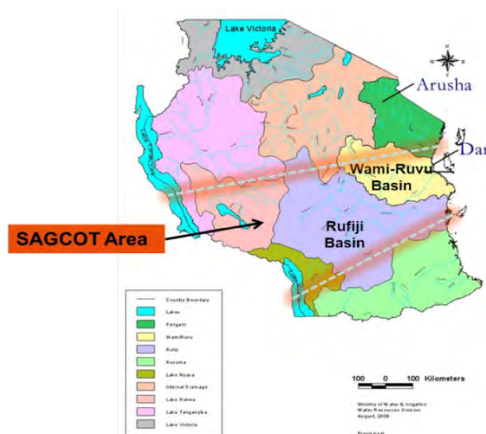
A. PURPOSE OF THE EVALUATION

The purpose of this evaluation is to assess the progress of the implementation of USAID/WARIDI activity. The activity is designed to be implemented for 60 months within the two most important water basins of the Tanzania, Rufiji basin and Wami Ruvu. WARIDI has been on the ground for over 24 months; this midterm evaluation is planned to measure the progress towards achieving the results targets, make overall judgement about the effectiveness of the approaches used towards achieving sustainable services and inform course correction and future designs.

The midterm evaluation findings will provide the Mission and the Implementing Partner inputs in the development of Year 3 and other subsequent years' work plans to ensure resources are available and approaches are targeted towards achieving the results targets, the activity is supporting the wider Water Sector Development Program (WSDP) of the Government of Tanzania (GOT) and implemented in collaboration with the Local Government, it is expected the findings will be shared with the host Government Ministries and Districts in order to improve the implementation and share any learnings, approach, or products obtained at the mid line of the activity implementation for scaling up good practice beyond USAID area of influence.

B. TARGET BENEFICIARIES AND GEOGRAPHICAL AREA OF COVERAGE

Water Basin Level intervention: WARIDI activities are implemented in the two major river basins that overlap with Tanzania's Southern Agricultural Growth Corridor (SAGCOT): the Rufiji and Wami-Ruvu. A systems-based approach is utilized to shape the selection of field sites within these two basins. The activity is strategically integrating activities at multiple scales to achieve sustainable and catalytic impact. Activities at basin levels are cross-cutting policy, governance, and capacity-related issues at the national or basin-wide scale.



Local Government Authority (LGA) Selection: For site-based activities, a demand-led approach was adopted utilized to select WARIDI Local Government Authorities (LGAs) within the two basins, LGAs had to apply to WARIDI explaining the “goodness of fit” of their LGAs to information provided by the WARIDI. Twenty (20) LGAs were selected based on an objective assessment of the applications by WARIDI and government officials, one from Mbeya Region, nine from Morogoro Region, three from Njombe Region, five from Iringa Region, and two from Coastal Regional. Subsequent intensive engagement with LGA officers is happening and they are jointly identifying key communities and activities for WARIDI engagement.

List of WARIDI Participating LGAs and the Responsible Office

WARIDI Office Location	LGA Name
Morogoro Office	8. Kilosa District Council 9. Mvomero District Council 10. Gairo District Council 11. Morogoro Municipal Council 12. Morogoro District Council 13. Bagamoyo District Council 14. Chalinze District Council
Ifakara Office	1. Ulanga District Council 2. Kilombero District Council 3. Malinyi District Council 4. Ifakara Town Council
Iringa Office	10. Njombe District Council 11. Njombe Town Council 12. Mafinga Town Council 13. Mufindi District Council 14. Iringa Municipal Council 15. Kilolo District Council 16. Wanging'ombe District Council 17. Mbarali District Council 18. Iringa District Council

Target beneficiaries: The minimum numbers of beneficiaries for the key services provided by WARIDI are:

- 1,500,000 people gain access to improved drinking water source
- 1,500,000 people gain access to improved sanitation facilities
- 3,000,000 people living in ODF environments

C. EVALUATION QUESTIONS

These questions are either in order of priority, or priority is otherwise indicated. Evaluators will review and finalize questions in collaboration with USAID prior to finalizing the evaluation design.

Implementation Approaches

10. To what extent is the *leading with sanitation* approach used to implement the activities of WARIDI resulting in increased utilization of multiple-use of water and sanitation services in the targeted LGAs?

In answering this question, the evaluator is encouraged to also collect data from communities trained by WARIDI to form COWSO but not directly supported with infrastructure development, in order to determine whether such communities are utilizing multiple-use of water and sanitation services.

11. To what extent are WARIDI-supported LGAs performing as compared to other LGAs in Tanzania according to the standardized measurements used by the GOT?

In answering this question, the evaluator is encouraged to collect data relating to reasons or incentives for well-performing LGAs vs. investment costs.

Sustainability

1. To what extent is the training and technological support provided by WARIDI to strengthen capacity at Basin, District, and Community level resulting in the improved skills required for management, operation, and maintenance of the facilities for water resources management, water supply, sanitation, and hygiene promotion?

On improved skills, the evaluator will be required to get training and other capacity building reports from WARIDI in order to understand on what they are expected to be performing as a result of capacity building.

Also, in answering this question, the evaluator is encouraged to determine the arrangements that exist between the LGAs and local communities, and how these are expected to impact local capacity to manage the construction and maintenance of water and sanitation infrastructures.

2. In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown and how this can help to inform a development of sustainability plan for new water schemes by WARIDI and other WSDP actors?
3. To what extent is WARIDI enhancing collaboration among other WSDP actors at the Basin and LGA level (e.g., community members, government officials, donors, NGOs, and CSOs) and how does this support the Basins and LGAs to achieve their plans?

Private Sector

1. To what extent is WARIDI enhancing the participation of the private sector in the implementation of activities and how does that contribute towards achieving different activity milestones and results targets?

Role of gender and Youth

1. To what extent is WARIDI involving women and youth in the implementation processes? And how are the gender integration and youth inclusion activities mainstreamed with the activity key components?

Management, Leadership, and Communications

1. To what extent is the communications and decision-making process facilitating or inhibiting implementation of activities in a timely manner?
2. To what extent is the skills composition of the key personnel team sufficient towards achieving the results targets within the timeframe?

D. EVALUATION DESIGN AND METHODOLOGY

This performance evaluation calls for both quantitative and qualitative approach methods that will provide answers to the questions. These mixed methods will include in-depth analyses of documents, key informant interviews, focus group discussions, community level individual interviews, and on-site observations, when appropriate. If the evaluation team sees an opportunity to implement a survey, its inception report (see below) would flesh out the modalities.

Questions	Suggested Data Sources*	Suggested Data Collection Methods	Data Analysis Methods
<p>To what extent is the <i>leading with sanitation</i> approach used to implement the activities of WARIDI resulting in increased utilization of multiple-use of water and sanitation services in the targeted LGAs?</p> <p>[In answering this question, the evaluator is encouraged to also collect data from communities trained by WARIDI to form COWSO but not directly supported with infrastructure development, in order to determine whether such communities are utilizing multiple-use of water and sanitation services.]</p>	<p>Documents (monitoring data, monthly, quarterly and annual reports, MEL plan), national statistics, WARIDI key personnel staff, USAID WASH Specialist, stakeholders, expert knowledge, beneficiaries</p>	<p>KIIs with LGA and community leaders, community surveys, FGDs, direct observation, desk review</p>	<p>-</p>
<p>To what extent are WARIDI-supported LGAs performing as compared to other LGAs in Tanzania according to the standardized measurements used by the GOT?</p> <p>[In answering this question, the evaluator is encouraged to collect data relating to reasons or incentives for well-performing LGAs vs. investment costs.]</p>	<p>GOT standard measurement tools, WASH policy and guidelines</p>	<p>KIIs with GOT (ministries) and LGA staff, document review</p>	<p>Comparative analysis</p>
<p>To what extent are the trainings and technological support provided by WARIDI to strengthen capacity at the Basin, District, and Community level resulting in the improved skills required for the management, operation, and maintenance of the facilities for water resources management, water supply, sanitation, and hygiene promotion?</p>	<p>Training modules, training reports</p>	<p>Document review, KIIs with LGA staff and community leaders, FGD with training beneficiaries</p>	<p>-</p>
<p>In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown and how this can help to inform a development of sustainability plan for new water schemes by WARIDI and other WSDP actors?</p>	<p>LGA assessment report, WARIDI implementation plan, implementation reports and MEL plan</p>	<p>KII with LGA staff, interviews with local community leaders and individual community members, FGD</p>	<p>-</p>

Questions	Suggested Data Sources*	Suggested Data Collection Methods	Data Analysis Methods
To what extent is WARIDI enhancing collaboration among other WSDP actors at the Basin and LGA level (e.g., community members, government officials, donors, NGOs, and CSOs) and how does this support the Basins and LGAs to achieve their plans?	Documents (monitoring data; monthly, quarterly and annual reports), national statistics, WARIDI key personnel staff, USAID WASH Specialist, stakeholders, expert knowledge, beneficiaries	KII with GOT and LGA staff, donors, CSO leaders, and community leaders	-
To what extent is WARIDI enhancing the participation of the private sector in the implementation of activities and how does that contribute towards achieving different activity milestones and results targets?	WARIDI activity documents (activity description/SOW, implementation plan and reports) and interview with the private sector available in the districts	KII with private sector owners in the districts, LGA staff, and WARIDI staff	-
To what extent is WARIDI involving women and youth in the implementation processes? And how are the gender integration and youth inclusion activities mainstreamed with the activity key components?	Documents (monitoring data; monthly, quarterly, and annual reports), national statistics, WARIDI key personnel staff, USAID TUMAINI GROUP, COR, stakeholders, expert knowledge, LGAs beneficiaries	KII with women and youth group leaders, FGD with women and youth groups, individual interviews with youth and women community members	-
To what extent is the communications and decision-making process facilitating or inhibiting the implementation of activities in a timely manner?	Documents (monitoring data; monthly, quarterly, and annual reports), national statistics, WARIDI key personnel and non-key personnel staff, WARIDI COR & AOR, USAID EG Office Director	KIs, questionnaires or surveys, FGDs, direct observation, desk review	-
To what extent is the skills composition of the key personnel team sufficient towards achieving the results targets within the timeframe?	-	-	-

E. EVALUATION DELIVERABLES

1. The work plan will include:
 - Draft schedule and logistical arrangements;
 - Members of the evaluation team, delineated by roles and responsibilities;
 - Evaluation milestones;
 - Anticipated schedule of evaluation team data collection efforts;
 - Locations and dates for piloting data collection efforts, if applicable; and
 - Proposed evaluation methodology including selection criteria for comparison groups, if applicable.
2. **Evaluation Design:**
 - Detailed evaluation design matrix that links the Evaluation Questions from the SOW (in their finalized form) to data sources, methods, and the data analysis plan;
 - Draft questionnaires and other data collection instruments;
 - List of potential interviewees and sites to be visited and proposed selection criteria and/or sampling plan; and
 - Dissemination plan (designed with USAID).
3. In-briefing/Inception Report
4. Final Exit Briefing
5. Preliminary Presentation/Workshop including WARIDI, key project stakeholders, and USAID
6. Draft Evaluation Report with key findings and recommendations
7. Final Evaluation Report
8. Facilitate the development of the utilization plan of the key evaluation recommendations.

ANNEX 2: WARIDI PERFORMANCE EVALUATION DESIGN AND WORK PLAN



USAID
FROM THE AMERICAN PEOPLE

USAID/Tanzania Data for Development Project EVALUATION PLAN AND WORK PLAN

MIDTERM PERFORMANCE EVALUATION FOR USAID WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI)

Contract No. AID-OAA-I-15-00024/AID-621-TO-17-00005

April 25, 2018

This document was produced for review by the United States Agency for International Development Tanzania Mission (USAID/Tanzania).

EVALUATION PLAN AND WORK PLAN

MID-TERM PERFORMANCE EVALUATION FOR USAID WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI)

USAID/Tanzania Data for Development Project

Submission Date: April 25, 2018

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

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

TABLE OF CONTENTS

LIST OF ACRONYMS.....	60
1.0 PROJECT OVERVIEW AND OBJECTIVES.....	61
1.1 Project Background.....	61
1.1.1 Target Beneficiaries and Geographical Area of Coverage.....	61
2.0 EVALUATION DESIGN AND METHODOLOGY.....	63
2.1 Purpose of the Evaluation.....	63
2.2 Evaluation Questions	65
2.3 Evaluation Approach	65
2.4 Target Areas and Sampling.....	70
2.5 Required Mission and Implementer Inputs	75
3.0 EVALUATION LIMITATIONS.....	75
4.0 EVALUATION TIMELINE AND DELIVERABLES	76
5.0 PROPOSED STAFFING	76

LIST OF ACRONYMS

Acronym	Description
ACOR	Alternate Contracting Officer Representative
CO	Contracting Officer
COR	Contracting Officer Representative
COWSO	Community Owned Water Supply Organization
CSO	Civil Society Organization
DEC	Development Experience Clearinghouse
DO	Development Objective
FGD	Focus Group Discussions
GoT	Government of Tanzania
HQ	Headquarters
IP	Implementing Partner
IR	Intermediate Result
KII	Key Informant Interviews
LGA	Local Government Authority
LOE	Level of Effort
M&E	Monitoring and Evaluation
MEL	Monitoring, Evaluation, and Learning
NGO	Non-Governmental Organization
NORC	National Opinion Research Center at the University of Chicago
PMP	Performance Management Plan
SAGCOT	Southern Agricultural Growth Corridor
SOW	Statement of Work
STTA	Short Term Technical Assistance
USAID	United States Agency for International Development
USG	United States Government
WARIDI	USAID Water Resources Integration Development Initiative (WARIDI)
WSDP	Water Sector Development Program

I.0 PROJECT OVERVIEW AND OBJECTIVES

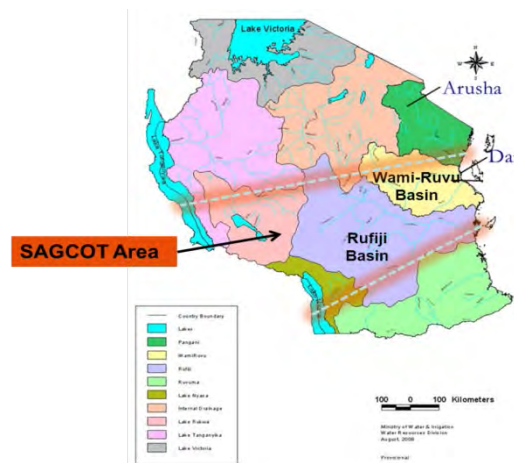
As part of the Contract/Task Order Number AID-OAA-I-15-00024/AID-621-TO-17-00005 Data for Development Activity, USAID has asked Data for Development to design and budget for a Mid-term Evaluation of the USAID Water Resources Integration Development Initiative (WARIDI), implemented by TetraTech and its sub-contractors with funding from USAID for five years (60 months), 2016-2021.

I.1 Project Background

I.1.1 Target Beneficiaries and Geographical Area of Coverage

Water Basin Level Intervention: WARIDI activities are implemented in the two major river basins that overlap with Tanzania’s Southern Agricultural Growth Corridor (SAGCOT): the Rufiji and Wami-Ruvu (see Figure 1). A systems-based approach is utilized to shape the selection of field sites within these two basins. The activity is strategically integrating activities at multiple scales to achieve sustainable and catalytic impact. Activities at basin levels are cross-cutting policy, governance, and capacity-related issues at the national or basin-wide scale.

Figure 1: Map of WARIDI Intervention Areas



Local Government Authority Selection: For site-based activities, a demand-led approach was adopted. Utilized to select WARIDI Local Government Authorities (LGAs) within the two basins, LGAs had to apply to WARIDI explaining the “goodness of fit” of their LGAs to information provided by the WARIDI. Twenty LGAs were selected based on an objective assessment of the applications by WARIDI and government officials: one from Mbeya Region, nine from Morogoro Region, three from Njombe Region, five from Iringa Region, and two from Coastal Regional. Subsequent intensive engagement with LGA officers is happening and jointly identifying key communities and activities for WARIDI engagement.

Table 1: List of WARIDI Participating LGAs and Responsible Offices

WARIDI Office Location	LGA Name <i>*Italicized are those LGAs (all rural) which began implementation at the outset of the program. The rest have been engaged over the last 3-6 months.</i>
Morogoro Office	<ul style="list-style-type: none"> 15. <i>Kilosa District Council</i> 16. <i>Mvomero District Council</i> 17. Gairo District Council 18. Morogoro Municipal Council 19. Morogoro District Council 20. Bagamoyo District Council 21. Chalinze District Council
Ifakara Office	<ul style="list-style-type: none"> 1. Ulanga District Council 2. <i>Kilombero District Council</i> 3. Malinyi District Council 4. Ifakara Town Council
Iringa Office	<ul style="list-style-type: none"> 19. Njombe District Council 20. Njombe Town Council 21. Mafinga Town Council 22. Mufindi District Council 23. Iringa Municipal Council 24. <i>Kilolo District Council</i> 25. Wanging'ombe District Council 26. Mbarali District Council 27. <i>Iringa District Council</i>

Target beneficiaries: Minimum numbers of beneficiaries for the key services provided by WARIDI are:

- 1,500,000 people gain access to improved drinking water sources
- 1,500,000 people gain access to improved sanitation facilities
- 3,000,000 people living in ODF environments

WARIDI applies a multi-sector approach that aligns with all three of the Mission's current Development Objectives (DOs), and with a clear focus on women and youth as target beneficiaries (see Figure 2).

Under the CDCS **DOI: *Tanzanian women and youth empowered***, WARIDI contributes to the following Intermediate Results (IR) and Sub-Intermediate Results:

- IR 1.1 Gender equality increased
 - Sub-IR1.1.1: Enabling environment promoting gender equality strengthened
 - Sub-IR1.1.2: Leadership and community platforms strengthened
- IR 1.2 Health status improved

- Sub-IR1.2.2: Adoption of healthy behaviours, including healthcare seeking behaviour and balanced nutrition improved

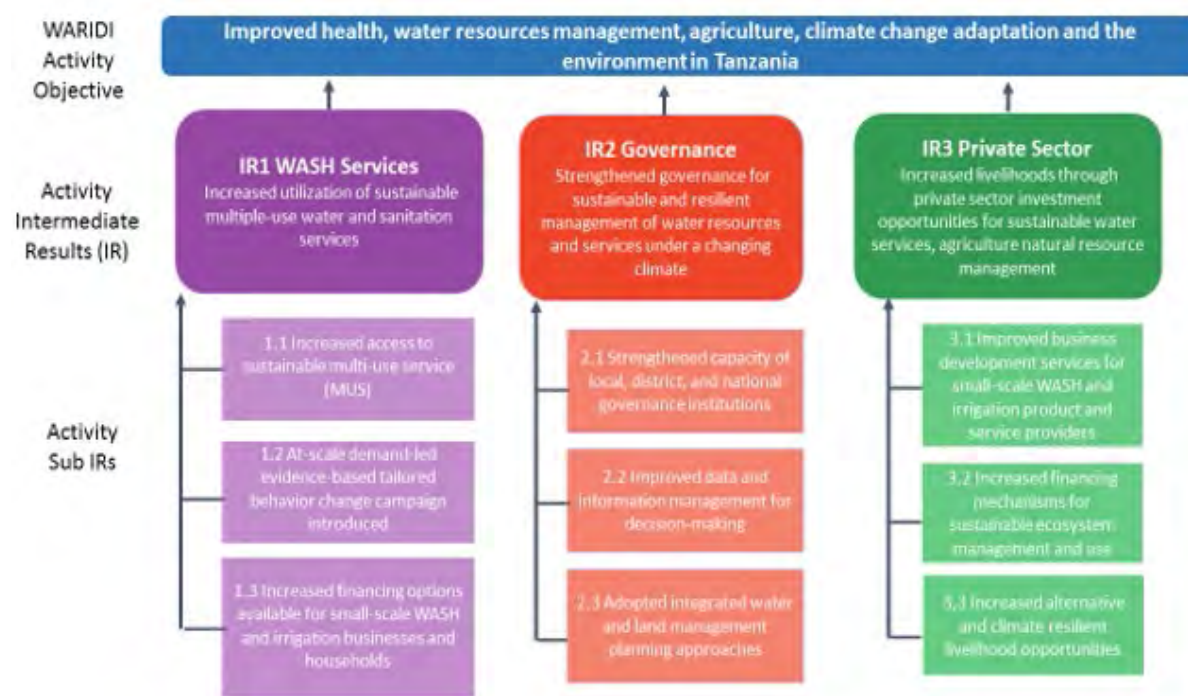
Under **DO2: Inclusive broad-based economic growth sustained**, WARIDI contributes to the following Intermediate Results (IR) and Sub-Intermediate Results:

- IR 2.3: Stewardship of natural resources improved
 - Sub-IR 2.3.1: Governance, institutions and policy for landscape scale natural resources management improved
 - Sub-IR 2.3.3: New technologies and approaches for climate resilience introduced and adopted by communities

Under **DO3: Effective democratic government improved**, WARIDI contributes to the following Intermediate Results (IR) and Sub-Intermediate Results:

- IR 3.2: Government delivery of services improved
 - Sub-IR 3.3.2: Institutions of accountability strengthened at the national and subnational level

Figure 2: WARIDI Results Framework



2.0 EVALUATION DESIGN AND METHODOLOGY

2.1 Purpose of the Evaluation

The purpose of this mid-term evaluation of WARIDI is to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. WARIDI was designed to be implemented for 60 months within the two most important water basins of Tanzania – Rufiji basin and Wami Ruvu – and has been on the ground for over 27 months.

The mid-term evaluation findings will provide the Mission and the Implementing Partner (IP) inputs in the development of Year 3 and other subsequent years' work plans to ensure resources are available and approaches are targeted towards achieving the results targets. The findings of the activity, which is supporting the wider Water Sector Development Program (WSDP) of the Government of Tanzania (GoT) and implemented in collaboration with the Local Government, are expected to be shared with the host Government Ministries and Districts to improve implementation and share lessons learned for scaling up good practice beyond USAID's area of influence.

The team proposes to conduct the evaluation using a participatory approach, engaging the USAID Mission, WARIDI implementers, project beneficiaries, and other stakeholders through various phases of the evaluation. This includes working collaboratively to:

- 1) Identify appropriate questions, keeping in mind users and uses of the evaluation for Mission, IP, and GoT decision making;
- 2) Identify pertinent documentation for desk review, including existing data from quarterly and annual reports;
- 3) Plan field work and review sample framework for data collection, including assisting the team to identify participants for key informant interviews (KIIs) and focus group discussions (FGDs);
- 4) Review questions for KIIs, FGDs, and the participant questionnaire that solicit responses that address target research objectives;
- 5) Select appropriate data collection methods and analysis to answer evaluation questions and best meet the decision-making needs of the users of the evaluation;
- 6) Participate in a participatory workshop to review findings, conclusions, and recommendations to ensure feasibility and utilization; and
- 7) Serve as feedback providers for reports and other deliverables.

At the same time, the Evaluation Team will remain independent and will take steps to maximize the quality of the information and minimize the impact of various potential sources of bias on the evaluation. Accordingly, IP staff will not be involved directly in data collection activities for the purpose of maintaining objectivity and ensuring respondent/beneficiary confidentiality as they provide feedback.

The evaluation will take into consideration the local context and project implementation results by analyzing the achievements of targeted results revealed in existing reporting documents, considering the opinions and recommendations elicited during the KIIs and FGDs and undertaking quantitative analysis of the results from secondary data provided by the IP.

The Evaluation Team will use these different sources of data to triangulate findings and answer the main evaluation questions outlined in the statement of work (SOW) document provided by USAID. Available data and primary source collection will be disaggregated by appropriate demographics, including age and gender/sex, as well as by region and occupation whenever possible.

The team expects the evaluation to take 16-18 weeks starting in early May 2018. The 3-4 week data collection period would begin the first week of June and close with a debriefing session in Dar es Salaam with USAID staff the third or fourth week of June to review preliminary findings and discuss conclusions and recommendations. Final submission of the report is planned by August 2018 after USAID draft review. More details are provided in Table 6.

2.2 Evaluation Questions

The Evaluation Team will collect and analyze the qualitative information in order to answer the questions below.

These questions are either in order of priority, or priority is otherwise indicated. Evaluators will review and finalize questions in collaboration with USAID prior to finalizing the evaluation design.

Implementation Approaches

12. To what extent is the *leading with sanitation* approach used to implement the activities of WARIDI resulting in increased utilization of multiple-use of water and sanitation services in the targeted LGAs? Is this approach affecting other components of the project? Is the approach integrated to address all project components such as governance, climate change, agriculture, gender and youth?
13. To what extent has WARIDI supported LGAs' performance compared to other LGAs in Tanzania according to the standardized measurements used by the GOT?

Sustainability

4. To what extent is the training and technological support provided by WARIDI to strengthen capacity at Basin, District and Community level resulting in improved skills required for management, operation and maintenance of the facilities for water resources management, water supply, sanitation, and hygiene promotion?
5. In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown and how can this help to inform a development of sustainability plan for new water schemes by WARIDI and other WSDP actors.
6. To what extent is WARIDI enhancing collaboration among other WSDP actors at the Basin and LGA levels (e.g. community members, government officials, donors, NGOs and CSOs) and how does this support the Basins and LGAs to achieve their plans?

Private sector

2. To what extent is WARIDI enhancing the participation of the private sector in the implementation of activities and how does that contribute towards achieving different activity milestone and results targets?

Role of gender and youth

2. To what extent is WARIDI involving women and youth in the implementation processes, and how are the gender integration and youth inclusion activities mainstreamed with the activity key components?

Management, leadership and communications

3. To what extent are the communications and decision making processes facilitating or inhibiting implementation of activities in a timely manner?

2.3 Evaluation Approach

The evaluation will include the following methods:

- Structured desk review of materials related to WARIDI, such as the SOW, Performance Management Plan (PMP), technical designs, water prioritization reports, inspection reports, and other materials recovered from WARIDI and District, Municipal and Town Council LGAs;
- Up to 42 KIIs total (30 in catchment areas) will be conducted with District, Municipal and Town Council LGAs where the interventions were implemented, community owned water supply

organization (COWSO) leaders and youth group leaders, and USAID and WARIDI staff. Interviews will be conducted with:

- District LGA staff
 - Municipal/town LGA staff
 - Women and Youth Group Leaders
 - National Level Ministries and GOT: MOWI, MOH, PORALG, Regional Secretariate and other DPs supporting WSDP
 - WARIDI Field Staff
 - USAID Staff in Dar es Salaam
 - WARIDI HQ Staff in Morogoro including WINROCK, IRIS, Tetra Tech, and Water for Life.
- Up to 30 FGDs will be conducted with water association members, community members in COWSOs, and women and youth over age 18, with separate FGDs for male and female participants. Four FGD protocols will be developed, for each of the aforementioned groups including:
- FGD 1- Water Association/COWSO Members
 - FGD 2- Private Sector Suppliers
 - FGD 3- Community Members-Male
 - FGD 4- Community Members-Female
 - FGD 5-Youth (over 18)-Male
 - FGD 6-Youth (over 18)-Female
 - FGD 7 – Water Users Association

The Evaluation Team will invite up to 15 participants for each FGD, keeping in mind refusals and no-shows. Data for Development will aim to have 10 participants per FGD and will require a minimum of four participants to conduct the FGD; if fewer than four participants participate, we will change to having a group interview or KII instead, following the same discussion guide as the FGD. The FGD will be conducted by Swahili speaking facilitators who are knowledgeable of the program content and the Tanzanian context around water and sanitation. Facilitators will be well trained in conducting FGDs to solicit responses from the participants by asking neutral questions and without introducing their own biases. The Evaluation Team will provide facilitators with training (e.g., role playing) and materials to ensure that they understand the project and FGD guide and can moderate the discussion to obtain maximum response and discussion.

The methodology used by the team in conducting FGDs/IIIs is outlined in the figures below.

Table 2: Methodology for Conducting FGDs

- Each FGD will include a maximum of 15 participants who will engage in an open discussion structured around predetermined questions (included in a discussion guide) led by a moderator.
- The moderator will be assisted by a note taker, and all FGDs will be recorded with informed consent obtained from all participants prior to the start of the discussion. The note taker will record key words, expressions, silences, and non-verbal language of the participants.
- Prior to the discussion, each participant will fill out a brief questionnaire containing 10-12 closed-ended, quantitative questions that will supplement the qualitative data.
- The discussion guide will include 9-12 questions for a 90-minute FGD, starting with water questions and moving on to narrower or key questions. The following types of questions will be used: opening, introductory, transition, key, and ending. The questions will be neutrally worded and neutral questions will be used.
- Reporting of the FGD will include a general summary of participants' responses to each question, highlighting the range of responses and experiences. This will be supported by quotes from participants.

Table 3: Methodology 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 15-20 open-ended questions, starting with water questions and moving into narrower or key questions. The questions will be neutrally worded and neutral probes will be used. The interview guide will also include 10-12 closed-ended, quantitative questions that the interviewer will pose to each participant to supplement the open-ended, qualitative data.
- Reporting of the KII will include quotes from the interviewee.

The following figure illustrates our approach to answering each evaluation question.

Table 4: Evaluation Design

Questions	Suggested Data Sources*	Suggested Data Collection Methods	Data Analysis Methods
<p>1. To what extent are the <i>leading with sanitation</i> approach used to implement the activities of WARIDI resulting in increased utilization of multiple-use water and sanitation services in the targeted LGAs? Is this approach affecting other components of the project? Is the approach integrated to address all project components such as governance, climate change, agriculture, gender and youth?</p> <p><i>In answering this question, the evaluator is encouraged to also collect data from communities trained by WARIDI to form COWSO but not directly supported with infrastructure development, in order to determine whether such communities are utilizing multiple-use water and sanitation services.</i></p>	<p>Documents (monitoring data, monthly, quarterly and annual reports, monitoring, evaluation and learning (MEL) plan); national statistics if applicable; WARIDI key personnel staff; USAID WASH Specialist; WUA, Ministry of Water and Irrigation, Ministry of Health.</p>	<p>KIIs with LGAs and community leaders; FGDs; document review on leading with sanitation approach (workplans and MEL plans).</p>	<p>Qualitative analysis of FGD and KII discussions; thematic coding and triangulation of responses between COWSO communities and secondary data sources.</p>
<p>2. To what extent are WARIDI-supported LGAs performing compared to other LGAs in Tanzania according to the standardized measurements (WSDP indicators for WASH performance, LGA Performance Reports etc.) used by the Government of Tanzania?⁷¹</p> <p><i>In answering this question, the evaluator is encouraged to collect data relating to reasons or incentives for well performing LGAs vs. investment costs.</i></p>	<p>GoT standard measurement tools; WASH policy and guidelines; WSDP indicators for WASH performance; Sector Performance Monitoring Reports; Water Point Mapping</p>	<p>KIIs with LGA staff, MOWI (WSDP), MOH, PORALG and Regional Secretariat; document review, including if possible review of any available GoT/MoHSW data available across LGAs.</p>	<p>Comparative analysis of LGA secondary data sources; qualitative analysis of KII discussions with WARIDI LGAs.</p>

⁷¹ The WSDP definition of ODF will be used for the purpose of this evaluation.

Questions	Suggested Data Sources*	Suggested Data Collection Methods	Data Analysis Methods
<p>3. To what extent are the trainings and technological support provided by WARIDI to strengthen capacity at Basin, District and Community level resulting in improved skills required for management, operation and maintenance of the facilities for water resources management, water supply, sanitation and hygiene promotion?</p>	<p>Training modules; training reports</p>	<p>Document review; KIs with WARIDI Office Staff, LGA staff, WSDP Basin Staff and community leaders; FGDs with water user associations and Community Water Supply Association members (COWSOs)</p>	<p>Qualitative analysis of FGD and KII discussions; thematic coding of responses.</p>
<p>4. In communities with rehabilitated water infrastructure, to what extent does WARIDI address the reasons for failure and breakdown? How can this help to inform a development of sustainability plan for new water schemes (16 existing) and technical designs by WARIDI and other WSDP actors? For those COWSOS that had a water committee prior to WARIDI, how does their function in maintaining water sources compare to before WARIDI?</p>	<p>LGA assessment report; WARIDI implementation plan; implementation reports and MEL plan</p>	<p>KIs with LGA staff and local community leaders; interviews with individual community members; FGDs; systematic document review; review of the initial assessment reports on LGAs; review of rehabilitation performed; review of ongoing maintenance data on failure or breakdown incidents, etc; review of data on cost recovery at water points</p>	<p>Qualitative analysis of FGD and KII discussions; thematic coding of responses</p>
<p>5. To what extent is WARIDI enhancing collaboration among other WSDP actors at Basin and LGA levels (e.g. community members, government officials, donors, NGOs, and CSOs) and how does this support the Basins and LGAs to achieve their plans?</p>	<p>Documents (monitoring data, monthly, quarterly and annual reports, council water and sanitation plans (CWSP), water resources management and development plan (WSDMP)); national statistics; WARIDI key personnel staff; USAID WASH Specialist; stakeholders; expert knowledge; beneficiaries</p>	<p>KIs with GoT and LGA staff, donors, CSO leaders, and community leaders</p>	<p>Qualitative analysis of FGD and KII discussions; thematic coding of responses</p>

Questions	Suggested Data Sources*	Suggested Data Collection Methods	Data Analysis Methods
6. To what extent is WARIDI enhancing the participation of the private sector (IR3) in improving business development services for small scale wash and irrigation products and service providers (IR3.1); increased financing mechanisms for sustainable eco system management and use (IR3.2); and increasing alternative climate resilient livelihood opportunities (IR3.3) in the implementation of activities and how does that contribute towards achieving different activity milestone and results targets?	WARIDI activity documents; activity description/SOW; implementation plan and reports; private sector owners available in the districts; LOCs that WARIDI has signed with private sector	FGD or KIIs with private sector owners in the districts (sanitation or water suppliers); LGA and WARIDI staff	Qualitative analysis of FGDs; thematic coding of responses
7. To what extent is WARIDI involving women and youth in the implementation processes?	Documents (monitoring data, monthly, quarterly and annual reports; Gender Integration and Youth Inclusion Strategy (GIYI); Gender Integration Framework (GIF); national statistics; WARIDI key personnel staff (IRIS); USAID TUMAINI Group; COR, stakeholders; expert knowledge; LGAs; beneficiaries	KIIs with women and youth group leaders; FGDs with women and youth group members; individual interviews with women and youth group leaders	Qualitative analysis of FGDs with women and youth and KIIs with group leaders; thematic coding of responses
8. To what extent are communications and decision making processes facilitating or inhibiting implementation of activities in a timely manner?	Documents (monitoring data, monthly, quarterly and annual reports); national statistics; WARIDI key personnel and non-key personnel staff; WARIDI COR & ACOR; OAA; USAID Economic Growth Office Director	KIIs; FGDs; direct observation; desk review and the existing capacity/management needs assessment; interview with the COR, Office of Agreements and Acquisition (OAA); Economic Growth Office	Qualitative analysis of KIIs; thematic coding of responses

2.4 Target Areas and Sampling

A total of 19 FGDs and 58 KIIs are proposed in 6 sites, including all five of the first of the programs activity sites which targeted rural districts and one urban district in three WARIDI locations in two regions. The rural sites will include: (1) Kilombero District Council, Morogoro; (2) Mvomero District Council, Morogoro; (3) Kilosa District Council, Morogoro (4) Iringa District Council, Iringa; and (5) Kilolo District Council, Iringa. The urban municipality will include Iringa Municipal Council. Also, KIIs will take place with WARIDI staff in Morogoro and Iringa, as well as field agents in the district councils (1 per village site); the

team will also reach basin staff and board members and water scheme designers (sub-contractors). In addition, two KIIs will take place with USAID staff in Dar es Salaam.

Morogoro Region will serve as a pilot location for instruments, including all FGD protocols and some KIIs. Pilot data will be included in the analysis unless there are significant data quality issues or significant changes needed to instruments.

The team plans to select village/community level KII and FGD participants at random to avoid introducing bias. Participants of FGDs targeting water association members will be randomly selected from lists provided by WARIDI from each district site. A single village will be selected in each of the district councils based on a random selection of grants focused at the village level. If this option is found to be infeasible, a water invite will be sent with assistance from LGA/IP or Mission staff for community participation. Upon FGD participants' arrival, the team will randomize the selection of 10-15 participants for each FGD. If turnout is greater than the number of people required per site, the remaining prospective participants not selected will be thanked for their participation and a brown bag lunch (and in some cases a travel reimbursement) will still be provided.

Table 5: Data Collection Methods and Sample Frame

Data Collection Methods	Kilombero District Council (Morogoro)	Mvomero District Council (Morogoro)	Iringa District Council (Iringa)	Kilosa District Council (Morogoro)	Kilolo District Council (Iringa)	Iringa Municipal Council (Iringa)	Total	Comments
	One selected village per site							
FGD1 - Members of Community Water Supply Organizations (COWSO)- Male						-	5	25 FGDs total; 250-375 participants (assuming 10-15 participants per FGD)
FGD2 - Members of Community Water Supply Organizations (COWSO)- Female						-	5	-
FGD 3 - Private Sector Suppliers						-	5	-
FGD 4 - Youth Community Members (age 18-35) - Male						-	5	-
FGD 5 - Youth Community Members (age 18-35) - Female						-	5	
KIIs								
District LGA staff (District Engineers, District Health Officers, CDO)	2-3	2-3	2-3	2-3	2-3	-	10-15	Up to 63 KIIs total
Municipal/Town LGA staff	-	-	-	-	-	2-4	4	

Data Collection Methods	Kilombero District Council (Morogoro)	Mvomero District Council (Morogoro)	Iringa District Council (Iringa)	Kilosa District Council (Morogoro)	Kilolo District Council (Iringa)	Iringa Municipal Council (Iringa)	Total	Comments
	One selected village per site							
Water Basin Board Members; Wami/Ruv Basin in Morogoro and Rufiji Basin in Iringa Town	-	-	-	-	-	-	2	
Water Basin Staff; Wami/Ruv Basin Water Office in Morogoro and Rufiji Basin Water Office in Iringa Town (MOWI) ⁷²	-	-	-	-	-	-	2	
Subcontractors/ Designers of Water Schemes	1	1	1	1	1	-	5	
Water User Association Leaders in Iringa Town and Morogoro town	-	-	-	-	-	1-2	2	
Women and Youth Group Leaders	1-2	1-2	1-2	1-2	1-2	-	5-10	
GOT: MOWI (WSDP), MOH, PORALG, Regional Secretariate (RAS)	-	-	-	-	-	-	6-10	

⁷² Depends on the administrative boundaries of the catchment/basin

Data Collection Methods	Kilombero District Council (Morogoro)	Mvomero District Council (Morogoro)	Iringa District Council (Iringa)	Kilosa District Council (Morogoro)	Kilolo District Council (Iringa)	Iringa Municipal Council (Iringa)	Total	Comments
	One selected village per site							
WARIDI, District Council Agents, Field Staff						!?	4-6	
USAID Staff in Dar es Salaam: OAA, COR, Director of Economic Growth etc	-	-	-	-	-	-	2-4	
WARIDI Basin and HQ Staff in Morogoro*	-	-	-	-	-	-	2-3	

*Note: TetraTech prime staff. Subs include Winrock International for WASH activities, Water for Life-Water Resources Management and Climate Change; and Iris Group for Gender and Youth Inclusion.

2.5 Required Mission and Implementer Inputs

The Evaluation Team will need an accurate list with contact information (name, title, institutional affiliation, telephone number, email, physical address, and gender) for technical and leadership staff within WARIDI and LGA partner staff. In addition, the IP would be requested to provide assistance and outreach to water association leaders, water association members, youth group leaders, and other community members (e.g. women and youth) whom the team should organize KIIs or FGDs with. In addition, each site in which a site visit will be held will also need to provide a list of community leaders/authorities, sanitation private sector suppliers, and water association members. These lists will be used to develop a final sampling frame from which the FGD participants and community leader KII participants will be randomly picked.

The Evaluation Team will also need USAID and WARIDI assistance to encourage participation in data collection efforts, to help increase response rates so that the Evaluation Team has as complete information as possible to evaluate the effectiveness of the project. An introduction letter from USAID will be needed to encourage participation in FGDs and to ensure IP participation in KIIs.

Furthermore, additional documentation will be requested by the team to complete the checklist of documents for review mentioned in the SOW. A checklist of all documents received to date has been compiled with notation on missing or partial documentation. The team will continuously update this checklist based on documents received.

Mission and IP staff will regularly be asked to meet with the team in the design and scoping phase and updated on key deliverables. Quick review and turn around in providing feedback on intermediate deliverables will help the team meet its tight timeline for completion.

3.0 EVALUATION LIMITATIONS

It is important to identify here some limitations inherent to the design of this evaluation:

- **Data availability and data quality:** While the implementer and Evaluation Team will collect and generate primary data, some administrative data that will inform the evaluation may be difficult to obtain or be of questionable quality.
- **Selection bias:** As some key informants may decline to be interviewed, there is a possibility of selection bias, i.e. those respondents who choose to be interviewed might differ from those who do not in terms of their attitudes and perceptions, affiliation with government/non-government structures, and socio-demographic characteristics and experience. In addition, the purposive nature of the site selection process introduces additional selection bias.
- **Recall bias:** Since a number of questions raised during the interviews will address issues that took place from 2016-2018, *recall bias* may affect the responses provided.
- **Halo bias:** There is a known tendency among respondents to under-report socially undesirable answers and alter their responses to approximate what they perceive as the social norm, called halo bias. The extent to which respondents will be prepared to reveal their true opinions may also vary for some questions that call upon the respondents to assess the attitudes and perceptions of their colleagues or people upon whom they depend for the provision of services. To mitigate this limitation, the Evaluation Team will outline confidentiality and anonymity statements to all who participate in KIIs and FGDs with water association or community members. The Evaluation Team will also conduct the interviews in as neutral a setting as possible where respondents feel comfortable. The women and youth FGDs that target both men and women will also be conducted separately for each gender.

4.0 EVALUATION TIMELINE AND DELIVERABLES

The Evaluation Team’s anticipated work schedule is provided below. Data for Development will have weekly meetings with the Evaluation Team for the duration of the work, supervising and managing the process and ensuring smooth progress of the evaluation. The schedule is designed to provide USAID with preliminary findings at the end of fieldwork in early July, and a first draft of the evaluation by the first week of August. The evaluation is anticipated to be complete by the end of August upon submission and dissemination of the final report.

Table 6: Timeline and Deliverables

Timing (Anticipated Dates)	Proposed Activities (SOW)
April 9-13, 2018	Discussion of SOW with Mission
April 9-25	Preparation of the work plan and evaluation design
April 25-30	USAID review of the work plan and evaluation design
May 5-17	Preparation and submission of instruments/tools and final work plan and evaluation design
May 5-15	COR and CO approval of all members of the team
June 4 th -15 th	Piloting, Kiswahili translation, finalization of instruments, and preparations for data collection
June 14-15 th	STTA travel and in-brief preparation
June 14-15	Team planning meeting/ mobilization/in-briefing
June 18- July 6 th nd	Data collection (2-3 weeks of collection with one day between each site for preliminary analysis of findings)
July 9 th	Participatory findings, conclusions and recommendations meeting
July 9-23	Data analysis (with concurrent work on analysis during the collection period)
July 23 rd	Preliminary Findings, Conclusions, and Recommendations Matrix
July 23-Aug 6 th	Report writing
August 6th	Submit Draft Report
Aug 6 th -20 th	USAID review of Draft Report
August 20 th -30 th	Incorporate USAID comments and submit Final Report
August 30th	Final Report submitted
August 30 th -Sept	Utilization and action planning, after-action review session/meeting and dissemination
Sept- TBD on Mission Directive	Upload to DEC

Note: Given the short overall timeline, this schedule is predicated on timely approval of USAID/Tanzania for the Evaluation Team proposed in this document, as well as the timely feedback by USAID/Tanzania of deliverables including the instruments and the draft evaluation report.

5.0 PROPOSED STAFFING

Data for Development has selected an exceptionally qualified team to conduct the performance evaluation of WARIDI. The team consists of one expatriate STTA member, Water Expert Tom Ryan, who will serve as Team Leader and who will travel to Tanzania; and three local STTAs: Dr. Winfred Baptist Mbungu, and

TBD -Yunusu Rugeiyamu who will serve as a researcher and subject matter expert for the evaluation during all phases of instrument development, data collection, and analysis and report writing; and Peter Lorri, a Monitoring and Evaluation (M&E) and Natural Resource Management Specialist.

Data for Development staff includes Shakila Mayumana (Gender Specialist) and Nasson Konga (M&E Specialist) who will provide technical support in evaluation, the research clearance process with NBS, and data collection. Jacob Laden (Evaluation Advisor) will advise the evaluation design and analysis, provide coordination and management support for field work, and review deliverables. Data for Development staff will support all logistics and data collection efforts in the four project sites and support the team in overall design, facilitate client and IP communication, design the quantitative survey, conduct sampling, and conduct the data analysis to be used in the evaluation report. Data for Development will also facilitate the review of interim findings and draft and final reports.

In addition, NORC and ME&A HQ will provide operational and technical support and editing and branding on final deliverables.

To meet the tight time constraints of the evaluation, the following is a detail of the level of effort (LOE) for the primary Evaluation Team members and extended team.

Table 7: Estimated LOE per Team Member (Total LOE: 248 Days)

Task	Team Lead and Water Expert (Tom Ryan)	Water SME (Winfred Baptist Mbungu)	WASH Engineer SME (Yunusu Rugeiyamu)	M&E and Natural Resource Management Specialist (Peter Lorri)	Evaluation Advisor & Senior Research Scientist (Jacob Laden)	Data for Development M&E Specialist (Nasson Konga)	Data for Development Gender Specialist (Shakila Mayumana)	Translator (TBD)
Document review/desk review/work planning (evaluation design remote or in-country)	3 days	3 days	2 days	2 days	2 days	2 day	2 day	-
Preparations for travel and organizing data collection (contracting translators, vehicles, etc.).	1 day	1 day	1 day	1 day	-	1 day	1 day	-
Instrument Development, Evaluation Design and clearances (including meetings with USAID)	2 day	2 day	1 days	2 day	3 days	1 day	1 day	-
Preparations for data collection (scheduling)	3 days	3 days	1 days	1 days	1 day	1 day	1 day	-

Evaluation Plan and Workplan: Midterm Performance Evaluation of USAID Water Resources Integration Development Initiative (WARIDI)

Task	Team Lead and Water Expert (Tom Ryan)	Water SME (Winfred Baptist Mbungu)	WASH Engineer SME (Yunusu Rugeiyamu)	M&E and Natural Resource Management Specialist (Peter Lorri)	Evaluation Advisor & Senior Research Scientist (Jacob Laden)	Data for Development M&E Specialist (Nasson Konga)	Data for Development Gender Specialist (Shakila Mayumana)	Translator (TBD)
<i>Data collection days by method by site</i>	20 days	20 days	20 days	20 days	1 day	20 days	20 day	20 days
<i>Data analysis</i>	5 days	4 days	2 days	4 days	-	4 days	4 days	-
<i>Out-briefing</i>	1 day	1 day	1 day	1 day	1 day	1 day	1 day	-
<i>Draft report and debrief to USAID</i>	6 days	3 days	1 days	2 days	2 days	1 day	1 day	-
<i>Final report after USAID comments</i>	4 days	1 days	1 days	-	2 days	-	-	-
Totals	45 days	42 days	30 days	33 days	12 days	31 days	31 days	20 days

ANNEX 3: EVALUATION METHODS AND LIMITATIONS

The WARIDI midterm evaluation was guided by the methodology presented in the SOW provided by the USAID/Tanzania Mission. The evaluation deployed a mixed methods approach encompassing qualitative and quantitative methods allowing the ET to triangulate the findings. The fieldwork phase of the evaluation took place over the period of June 18-July 6, 2018, at approximately the half way stage of the project implementation timeline. Construction of the water system rehabilitation works was ongoing at the time of the field visits, enabling the ET to inspect works in progress. Since there were no completed (i.e., rehabilitated) water systems in place, there were no communities benefitting from improved water access at the time of this evaluation's field visits.

Data for Development deployed a participatory and collaborative approach by engaging the USAID/Tanzania Mission and the WARIDI staff throughout the evaluation; however, they were not part of data collection so as to maintain appropriate level of study independence and to ensure respondent confidentiality.

The evaluation's mixed methods approach included the following:

- **Document Review:** The ET reviewed documents including the activity reports, SOW, PMP, technical designs, inspection reports, and other materials recovered from WARIDI and District councils;
- **Key Informant Interviews:** The ET conducted KIIs with the key stakeholders, the Regional Administrative Secretary staff, and the LGA staff where the interventions were implemented as well as GOT staff from the responsible Ministry department and agencies and USAID and WARIDI staff. These included:
 - LGA staff;
 - Women and Youth Group Leaders at the community level;
 - Private sector stakeholders;
 - National Level Ministries/GOT staff: MOWI, MOH, PORALG, Regional Secretariat and other DPs supporting WSDP;
 - WARIDI HQ staff in Morogoro and field staff in Iringa; and
 - USAID Staff in Dar es Salaam.
- **Focus Group Discussions:** FGDs were carried out with the WUA members, general community, COWSO members, and women and youth over age 18, with separate FGDs for male and female participants. Accordingly, FGDs were carried out for each of the aforementioned groups in Mvomero, Kilombero, Kilosa, Kilolo, and Iringa districts.

The methodology used by the ET in conducting FGDs/KIIs is outlined in the tables below.

Table 1: Methodology for Conducting FGDs

<ul style="list-style-type: none">• Each FGD will include a maximum of 15 participants who will engage in an open discussion structured around predetermined questions (included in a discussion guide, see Annex III) led by a moderator.• COWSO selection: The ET randomly selected 14 COWSOs from the list of all the COWSOs within a particular LGA, disaggregated by new and existing organizations. For each of the selected COWSOs, two members (one male and one female) were invited to participate in the FGD. Random selection of COWSOs and gender balance in participants was used to ensure meaningful representation and inclusion of more diverse voices from the COWSOs across the LGAs.• General community: As with the COWSO selection, general communities were randomly selected from the list of villages whose COWSOs participated in the FGDs. Participating villages needed to have a water scheme supported by USAID through WARIDI, as the FGD was accompanied by a field visit to observe the water schemes and other sanitation and hygiene practices at the community. For each selected community, 28 community members (14 male and 14 female) were invited to participate in the FGD.• All FGDs were recorded with informed consent obtained from all participants prior to the start of the discussion, and in each FGD the moderator was assisted by a note taker. The note taker recorded key words, expressions, silences, and non-verbal language of the participants.• The 90-minute FGDs were guided by 14-20 open-ended questions, starting with water questions and moving on to narrower or key questions using the following order: opening, introductory, transition, key, and ending. The questions were neutral in wording and structure.
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Table 2: Methodology for Conducting KIIs

<ul style="list-style-type: none">• Purposive selection of the participants for the KIIs was done based on the role of each related stakeholder in the WARIDI activity and the water sector at various levels (National and the two water basin levels).• Each KII included an interviewer and participant(s) for a semi-structured discussion around predetermined questions (included in an interview guide, see Annex III).• All KIIs were recorded following an informed consent obtained from the participants prior to the start of the discussion, and the interviewer was assisted by a note taker.• The interview guide included 15-20 open-ended questions, starting with water questions and moving on to narrower or key questions. The questions were neutrally worded and used neutral probing. The interview guide also included 10-12 closed-ended, quantitative questions to supplement the open-ended, qualitative data.

3.1 Key Informant Interviews

The ET conducted a total of 45 KIIs across the project regions of Iringa and Morogoro and the five project districts (Mvomero, Kilombero, Kilosa, Kilolo, and Iringa) with a range of project stakeholders and beneficiaries (see Table 3). All KIIs used semi-structured open-ended interview guides tailored to the type of project stakeholder interviewed.

The KIIs in Mvomero district took place in the villages of Hembeti and Melela, in Kilosa district in the village of Dumila, in Kilombero district in the village of Mwaya, those in Iringa district in the villages of Nzihi and Tanangozi Kalengaetc, and in Kilolo district in the village of Kidabaga. These villages were selected by the ET—based on discussions with USAID—to capture information from a variety of beneficiaries.

Table 3: Breakdown of KIIs Conducted by Project Stakeholder Type, Region, and District

KII Type	Districts and Region									Total
	Morogoro Region	Iringa Region	Mvomero DC	Kilosa DC	Kilombero DC	Iringa DC	Kilolo DC	Dar es Salaam	Dodoma Region	
RAS Staff	1	2	-	-	-	-	-	-	-	3
LGA Staff	-	-	3	2	2	3	3	-	-	13
Basin Staff	1	1	-	-	-	-	-	-	-	2
WUAs	2	-	-	-	-	-	-	-	-	2
National Level Ministries/GOT staff (MOWI, MOH, PORALG)	-	-	-	-	-	-	-	-	4	4
Private Sector	-	-	1	-	-	-	-	-	-	1
Data Collectors	-	-	1	1	-	1	1	-	-	4
Youth and Women Group Leaders	-	-	1	-	-	-	-	-	-	1
Sub Grantees	-	-	1	1	1	0	1	-	-	4
WARIDI Staff	8	1	-	-	-	-	-	-	-	9
USAID Staff	-	-	-	-	-	-	-	2	-	2
Total	12	4	7	4	3	4	5	2	4	45

Focus Group Discussions

The ET conducted a total of 24 FGDs in several villages and towns across the five project districts. Two types of FGDs were held: one targeting COWSO members and one targeting community members more broadly. As shown in Table 4 below, the FGDs in Mvomero district took place in the villages of Hembeti and Melela, in Kilosa district in the village of Dumila, in Kilombero district in the village of Mwaya, those in Iringa district in the villages of Nzihhi and Tanangozi Kalenga, and in Kilolo district in the village of Kidabaga. These villages were selected by the ET—based on discussions with USAID—to capture information from a variety of beneficiaries.

Table 4: Breakdown of FGDs by FGD Type and District

FGD Type	District and Region					Total
	Mvomero, Morogoro	Kilosa, Morogoro	Kilombero, Morogoro	Iringa DC, Iringa	Kilolo, Iringa	
COWSO	4	2	2	2	2	12
General Community	3	2	2	2	2	11
Best Performing COWSO	-	-	-	1	-	1
Total	7	4	4	5	4	24

The proposed evaluation design included a total of 30 FGDs and 42 KIIs in five LGAs, the first program activity sites, USAID/Mission, the responsible Ministries, and in the Morogoro and Iringa regions. The ET was able to interview all of the planned stakeholders with the exception of women, youth, and the private sector. Women’s and youth groups were not part of the potential data sources in the evaluation because there were no formal groups of women and youth working with either WARIDI or their subgrantees in WARIDI activities at the time of data collection. Therefore, the women’s and youth groups were not distinguishable from the general community; and the only group leaders of women and youth the ET interviewed occurred in Hembeti village, Mvomero district during instrument piloting. Similarly, the private sector was not fully engaged with the WARIDI activity at the time of data collection, hence the questions were considered not relevant at that time. During instrument piloting, the ET realized the need to include community health workers at the village level as they are playing a very important role of sanitation and hygiene data collection. Thus, the ET added data collectors as one of the potential KIIs because of their role and importance in the WARIDI activity. At the close of data collection, the ET had conducted a total of 24 FGDs and 45 KIIs.

Evaluation Limitations

There were several important limitations inherent to the design selected for this evaluation:

- *Time and location constraints:* The time and procedures required to get interviews at the Ministerial level was underestimated and the ET had limited access to these respondents. To mitigate this limitation, the ET interviewed some of the respondents over the weekend (Saturday). *Data availability and data quality:* Private sector stakeholders as well as youth and women’s group leaders were not yet fully engaged in the activity and were not included in the KIIs. In addition, some of the sub grantees⁷³ were unavailable for interview since staff were off-site attending training

⁷³ Namely: IECA and CEMDO in Iringa district and Kilombero district respectively.

workshops and other activities. In addition, at the time of the evaluation field work, the communities were not yet benefitting from improved water availability, since rehabilitation works were still ongoing. To mitigate this limitation, the ET deployed triangulation of methods in data collection to substantiate the findings including addition of data collectors/community health care workers who played a key role of collecting sanitation and hygiene data at the village and sub village levels.

- *Selection bias*: As some key informants were unavailable to be interviewed, there was a possibility of selection bias, i.e., those respondents who accepted to be interviewed may differ in some important dimensions from those who did not, for example in terms of their attitudes and perceptions, affiliation with government/non-government structures, socio-demographic characteristics, and experience. In addition, the purposive nature of the site selection process introduces additional selection bias. To mitigate this limitation, the ET deployed randomization in the selection of COWSOs in each of the LGA to participate in the data collection and the male and female representation from each of the selected COWSO were drawn to have a true representation of the respondents.
- *Recall bias*: KIs and FGDs relied on self-reporting about events and perceptions that may date back several years. This reporting could be incomplete due to lapses in memory and inaccurate or incomplete recall. The ET had experienced no recall bias in the KIs and FGDs conducted as the questionnaires consisted of easy to understand questions by the respondents.
- *Response bias*: KIs and FGDs relied on self-reporting about events and perceptions that may be biased due to social desirability or to respondents wanting to provide the answers they thought interviewers “want to hear.” To mitigate this limitation, the ET outlined confidentiality and anonymity guarantees to all who participated in KIs and FGDs.
- *Halo bias*: There is a known tendency among respondents to under-report socially undesirable answers and alter their responses to approximate what they perceive as the social norm, called halo bias. The extent to which respondents will be prepared to reveal their true opinions may also vary for some questions that call upon the respondents to assess the attitudes and perceptions of their colleagues or people upon whom they depend for the provision of services. To mitigate this limitation, the ET outlined confidentiality and anonymity statements to all who participate in KIs and FGDs with water association or community members. Where possible, the ET conducted the interviews in as neutral a setting as possible where respondents felt comfortable. FGDs that targeted both men and women were conducted separately for each gender to minimize the influence of gender and traditional societal norms.

ANNEX 4: DATA COLLECTION INSTRUMENTS

ANNEX 4.A: FGD PROTOCOL QUESTIONS – COMMUNITY WATER SUPPLY ASSOCIATION MEMBERS (COWSOS)

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years' work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

COWSOs Operation

1. What are the main challenges in carrying out your duties?

Knowledge/Skills and Equipment for Water System Maintenance and Breakdown Prevention

2. Did/do you receive any training or equipment for water system maintenance at your area? If YES, who provided such training/equipment support (WARIDI/Government/LGA or Others)?
3. Was the training useful/sufficient? What equipment? Is it sufficient?

Water Situation Before and Now

4. Is there sufficient water for people's needs in your areas? How was it before?
5. What were the major challenges you experienced before the WARIDI project?
6. What has been changed? Who took that initiative and what has been done?
7. How have you benefited from the WARIDI project?
8. What can be improved to make things go better?

Rehabilitation of Water Infrastructures

9. What is the condition of the water point in your area? Is it functional? How was it before WARIDI project?
10. What were the major causes of failure and breakdown of the water infrastructure?
 - a. Are there mechanisms in place to address the causes?

- b. Do you believe the mechanisms are sustainably able to address reasons for failure and breakdown of the rehabilitated water infrastructure? Clarify your response.
- I1. Are there any fees charged to water users? Is this sufficient to cover operation and maintenance costs? Is water provided at a subsidized cost?
 - I2. What should be done differently to improve and sustainably rehabilitate water infrastructure?

Women and Youth Participation

- I3. What mechanisms are in place to ensure women and youth are fully engaged in the formulation and operation including decision making of the COWSOs?

Closing.

- I4. Are there any other issues or additional comments you would like to make?

ANNEX 4.B: FGD PROTOCOL QUESTIONS – GENERAL COMMUNITY

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years' work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Water Situation Before and Now

1. Is there sufficient clean water for people's needs in your areas? How was it before?
 - ✓ *Explain the success and challenges in having sufficient clean water in your area before and after two years of WARIDI implementation.*
 - ✓ *In your opinion, what has changed? Is the change of benefit to your side? How? [Probing variables; quality,⁷⁴ access and availability, cost, awareness, distance from the point, etc.]*
2. What can be improved to make things go better?
3. What are the procedures of supplying water at your area? And what is your opinion on that?

Water Supply Payment Systems

4. Does your household pay/contribute any fee for operation and maintenance of the water supply system?
5. How much do you pay for water (per month or per quantity)? Who is setting the payment?
6. Do you think the payment you are offering is reasonable? Why/how much should people pay for water?
7. Who collects the money? Are there problems in collecting money from people?
8. Are you aware of the use of the money collected?

⁷⁴ Quality water means clean and safe water.

Sanitation Situation

9. Does your household have a latrine (what type)? Who provided it? Has your household had to do any maintenance on it? Do you use it? Is it okay for your family needs?
10. Where did your household go for defecation before the WARIDI project?
11. Are you facing any problems with your toilet?
12. What other interventions targeting sanitation services are you involved with in your area? Who is leading implementation of those interventions?
13. Are you benefiting from these interventions? In what ways?

Community Involvement

14. Did you or any members of your household attend any meetings about water and sanitation projects in your area? Who provided the meetings and how were you engaged?
15. Have you or any household member been active in any of the community water user committees or groups? [Probe to determine if the members of the water users are gender-balanced.]
16. Did you take part in decisions that were made about the water and sanitation project in your village? If yes, in your opinion, do you feel your voice has been heard and respected?
17. What can be done differently to improve community involvement on water and sanitation projects in your area?

Sustainability

18. What were the major causes of failure and breakdown of the water infrastructure?
 - a. Are there mechanisms in place to address the causes?
 - b. Do you believe the mechanisms are sustainably able to address the reasons for failure and breakdown of the water scheme rehabilitated? Clarify your response.
19. What should be done differently to improve and sustainably rehabilitate and maintain the water infrastructure?

Closing

20. Are there any additional comments you would like to make?

ANNEX 4.C: FGD PROTOCOL QUESTIONS – WOMEN AND YOUTH GROUPS

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years' work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Water Situation Before and Now

1. Is there sufficient clean water for people's needs in your area? How was it before?

- ✓ *Explain the success and challenges in having sufficient clean water in your area for the past two years and what it was like before that.*
- ✓ *To your opinion, what has changed? Does the change of benefit you? How? [Probing variables: quality, access, and availability; cost; awareness; distance from the point; etc. How has it been useful in terms of women and the decision-making process, women in leadership, reduce workload, new technology/best practices, etc.??]*

2. What can be improved to make things go better?

Sanitation Situation

3. What were the challenges related to sanitation and hygiene two years ago and what is the current situation?

4. In what sets of interventions are women and youth participating in your area that target improving sanitation and hygiene?

5. What should be done differently by WARIDI to improve sanitation and hygiene in your area?

Women and Youth Engagement

6. Do you participate to the women's and youth interventions at your area?

7. If YES, what are those interventions? How are you involved?

8. What interventions does WARIDI support for women and youth in your area? Are there any sets of stand-alone activities targeting women and youth implemented by the WARIDI activity?

9. If YES, what are those? How have you benefited from those interventions?

10. How do you assess women's and youth participation in decision-making pertaining to water resource management, COWSOs' leadership, etc.? [Probe about the factors that hinder participation and the causes of those factors.]
11. What can be done differently to ensure the meaningful participation of women and youth?
12. What is the role of WARIDI in forming WUAs and COWSOs?
13. What mechanisms are in place to ensure women and youth are fully engaged in the formulation of WUAs and COWSOs?

Sustainability

14. What were the major causes of failure and breakdown of the water infrastructure?
 - a. Are there mechanisms in place to address the causes?
 - b. Do you believe the mechanisms are sustainably able to address reasons for failure and breakdown of the rehabilitated water infrastructure? Clarify your response.
15. What should be done differently to improve and sustainably rehabilitate and maintain the water infrastructure?

Closing

16. Are there any additional comments you would like to make?

ANNEX 4.D: KII PROTOCOL QUESTIONS – WARIDI STAFF

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years’ work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Interview Datasheet	
Interviewee full name _____	Interviewer _____
Title _____	Note taker _____
Site _____	Date _____
Circle Data Source	Interview start time _____
WARIDI Staff	Interview end time _____

Do you agree to participate in this interview today? **Yes** **No**

Opening

1. Please describe briefly your role in the WARIDI project.

Implementation Approaches

2. Do you know the “Leading with Sanitation” approach implemented by WARIDI? If YES, describe what is it and how it works. Do you think the current implementation approach will lead to attainment of WARIDI life of project goals? Please explain your answer. What can be done to ensure that WARIDI achieve its targets?
3. Is the approach integrated to address all project components such as governance, climate change and adaptation, agriculture, and food security? If YES, describe how.
4. Do you think the implementation approach of Leading with Sanitation can lead to increased utilization of multiple-use of water and sanitation services in the targeted LGAs? Please explain your answer.
5. Are there other approaches WARIDI is using? If YES, mention them?
6. In the past two years, what is the WARIDI support to the LGAs’ water and sanitation interventions?

7. Do you think the WARIDI support is adequate? What are the gaps? Are there other areas that WARIDI support has not reached and are they significant in helping LGAs achieve the water and sanitation targets? Describe them. What can be done better?
8. What are the criteria used in ratings and ranking performances of LGAs in Water and Sanitation?
9. How are the WARIDI LGAs performing compared to other LGAs?
10. For the best performing LGAs, what are the motivations behind such performance?
11. For those that are not performing, why are they not performing?
12. What should be done differently for WARIDI LGAs to perform?
13. What is your plan and strategy behind urban LGAs? What has been done so far? How different will the implementation be in urban LGAs?

Sustainability

14. How has the capacity building and technological support by WARIDI helped the water users' groups and water user's associations to perform differently? How sustainable is it?
15. What WARIDI mechanisms are in place for the management and maintenance of the rehabilitated water infrastructure? Please explain how WARIDI sustainably addresses the recurrence in failure and breakdown of the water infrastructure.
16. How have these mechanisms improved learning both within and outside WARIDI?
17. What are the areas of collaboration with key stakeholders to enhance the sustainability of WARIDI intervention at the Basin and LGA level?
 - ✓ *Who are the key stakeholders for collaboration and implementation of WSDP at the Basin and LGA levels?*
 - ✓ *Describe their added value for the WARIDI program in terms of content and frequency.*
 - ✓ *Is there any specific stakeholder that you feel is missing at this moment? Who and why is s/he missing?*
 - ✓ *What are the activities WARIDI is doing to enhance collaboration at the Basin and LGA?*
 - ✓ *How do these activities support the Basin and LGAs to achieve their plans?*
 - ✓ *Which institution(s) is coordinating these?*
 - ✓ *How do you assess this collaboration: strength and areas of improvement?*
 - ✓ *How does this collaboration enhance the sustainability of WARIDI intervention at the Basin and LGA?*
18. How do you assess the level of project/intervention ownership of the key stakeholders? What, if anything, should be done to improve this ownership?
19. How are WARIDI program components integrated into the WSDP? What else could be done to ensure sustainability?
20. How are LGAs engaged for collaboration into the WARIDI implementation (what is the process)? What are the LGA selection criteria? Is there any involvement of Basins or the Ministry in the selection decisions of the LGAs?
21. Are there any other sources of funding that support the WASH program at the Basin and LGA level?

Private Sector

22. Are there any other actors/players/institutions/companies who work with WARIDI in your area? What are they?

23. How are they engaged in the program implementation? Describe how they get into the WARIDI program cycle and what their roles and responsibilities are.
24. What are the milestones and targets set for these institutions? Are the LGAs involved (jointly planning) in setting targets and milestones? What factors are considered in setting targets and milestones?
25. What are the main roles played by institutions in achieving the milestones and targets that are set? How are they supported by WARIDI? Do you think the support provided by WARIDI is adequate to ensure smooth implementation and attainment of the milestones/targets?
26. In your opinion, do you think these targets and milestones are achievable? Please describe your answer.
27. What should be done differently to improve engagement and attainment of the milestones/targets?

Role of Gender and Youth

28. What women's and youth interventions does WARIDI support? Describe your answer.
29. Are there any sets of stand-alone activities targeting women and youth implemented by the WARIDI program? If YES, what are they?
30. If NO, how are gender integration and youth inclusion activities mainstreamed within WARIDI components?
31. How do you assess women's and youth participation in various decision-making pertaining to water resource management, COWSOs' leadership, etc.?
32. What are the main challenges hindering successful implementation of women's and youth interventions in the WARIDI project?
33. What can be done differently to ensure the meaningful participation of women and youth?
 - ✓ What is the role of WARIDI in forming WUAs and COWSOs?
 - ✓ What mechanisms are in place to ensure that women and youth are fully engaged in the formulation of WUAs and COWSOs?

Management, Leadership, and Communications

34. As prime, how does Tetra Tech communicate with its sub-contractors/partners on the WARIDI project?
35. How effective are the communication channels between the lower level and management to ensure smooth program implementation?
36. What are the communication and decision-making challenges you encountered in implementation of the WARIDI activities?
37. What should be done differently in communication and decision-making to ensure smooth implementation of the WARIDI activities?
38. How many key staff do you have to implement the WARIDI project?
39. How are they distributed to each of the WARIDI components?
40. Do all the staff in your section/department have the relevant skills to perform their roles and responsibilities? If YES, what skills composition do your key staff have for the achievement of the WARIDI-set targets?
41. Are there capacity building initiatives provided to your staff to increase their competencies to better perform their roles and responsibility? If YES, what kind of capacity building did they attend?

42. What do you think has specifically changed after the capacity building activity?
43. What should be done differently to improve the skills and knowledge of your key personnel team towards achieving the results targets?

Closing

44. Are there any additional comments you would like to make?

ANNEX 4.E: KII PROTOCOL QUESTIONS – WATER BASIN STAFF

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years’ work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Interview Datasheet	
Interviewee full name _____	Interviewer _____
Title _____	Note taker _____
Site _____	Date _____
Circle Data Source	Interview start time _____
— Water Basin Staff	Interview end time _____

Do you agree to participate in this interview today? **Yes** **No**

Opening

1. Please describe briefly your role in the WARIDI project.

Implementation Approaches

2. In the past two years, what is the WARIDI support to water resource management interventions in your catchment area?
3. Do you think the WARIDI support is adequate? What are the gaps? Are there other areas that WARIDI support has not reached and they are significant in helping your Basin? Describe them. What can be done better?

Sustainability

4. Did you receive any training and technological support?
5. What type of training did you receive?
6. Who provided the training?

7. How has the capacity building and technological support by WARIDI helped the water user's associations to perform differently? How sustainable is it?
8. What else can be done to improve the training and technological support provided by WARIDI?
9. How differently is the Basin performing after the WARIDI investment?
10. What is the status of replication of the technology in your Basin?
11. Is the current technology sufficient and applicable to water sectors and/or to maintain water resources management?
12. What WARIDI mechanisms are in place for the management and maintenance of the rehabilitated water infrastructure? Please explain how WARIDI sustainably addresses the recurrence in failure and breakdown of the water infrastructure.
13. What are the areas of collaboration with key stakeholders to enhance sustainability of the WARIDI intervention at the Basin?
 - ✓ *Who are the key stakeholders for collaboration and implementation of the WSDP at the Basin?*
 - ✓ *Describe their added value for the WARIDI program in terms of content and frequency.*
 - ✓ *Is there any specific stakeholder that you feel is missing at this moment? Who and why is s/he missing?*
 - ✓ *What are the activities WARIDI is doing to enhance collaboration at the Basin?*
 - ✓ *How do these activities support the Basin plans?*
 - ✓ *Which institution(s) is coordinating these?*
 - ✓ *How do you assess this collaboration: strength and areas of improvement?*
 - ✓ *How does this collaboration enhance the sustainability of the WARIDI intervention at the Basin?*
14. How do you assess the level of project/intervention ownership of the key stakeholders? What, if anything, should be done to improve this ownership?
15. How are WARIDI program components integrated to the WSDP? What else could be done to ensure sustainability?

Private Sector

16. Are there any other actors/players/institutions/companies who work with WARIDI in your area? What are they?
17. How are they engaged in the program implementation? Describe how they get into the WARIDI program cycle and what their roles and responsibilities are.

Role of Gender and Youth

18. What women's and youth interventions does WARIDI support? Describe your answer.
19. How are women's and youth activities mainstreamed within WARIDI components?
20. What can be done differently to ensure the meaningful integration of women's and youth activities into the WARIDI activity?

Closing.

21. Are there any additional comments you would like to make?

ANNEX 4.F: KIIS PROTOCOL QUESTIONS – SUBGRANTEE/CONTRACTORS

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years’ work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Interview Datasheet	
Interviewee full name _____	Interviewer _____
Title _____	Note taker _____
Site _____	Date _____
Circle Data Source	Interview start time _____
— Contractors (Local Rehabilitation Contractor & Sub grantees).	Interview end time _____

Do you agree to participate in this interview today? **Yes** **No**

Opening

1. Please describe briefly your role in the WARIDI project.

Engagement

2. How do you engage with the WARIDI project? Describe your engagement in the program cycle and what roles and responsibilities you are playing. [Probe engagement with the community and LGAs.]
3. Describe the set of interventions, milestones, and targets you are implementing.
4. Are you getting support from the WARIDI project? If YES, what kind/form of support are you receiving from WARIDI? Do you think the support provided by WARIDI is adequate to ensure the smooth implementation and attainment of the milestones/targets?
5. In your opinion, do you think these targets and milestones are achievable? Please describe your answer.
6. What should be done differently to improve engagement and attainment of the milestones/targets?

Role of Gender and Youth

7. In the implementation of the project, how are women's and youth activities mainstreamed in your interventions?
8. What can be done differently to ensure the meaningful integration of women's and youth activities in the WARIDI activity?

Closing

9. Are there any additional comments you would like to make?

ANNEX 4.G: KIIS PROTOCOL QUESTIONS – PRIVATE SECTOR

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years’ work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Interview Datasheet	
Interviewee full name _____	Interviewer _____
Title _____	Note taker _____
Site _____	Date _____
Circle Data Source	Interview start time _____
— Private Sector	Interview end time _____

Do you agree to participate in this interview today? **Yes** **No**

Opening

1. Please describe briefly your role in the WARIDI project.

Sustainability

2. Did you receive any training and technological support?
3. What type of training received?
4. Who provided the training?
5. How has the capacity building and technological support by WARIDI helped you to perform your duties? How sustainable is it?

Private Sector

6. How do you engage with the WARIDI project? Describe your engagement in the program cycle and what roles and responsibilities you are playing.
7. Describe the set of interventions, milestones, and targets you are implementing.

8. Are you getting support from the WARIDI project? If YES, what kind/form of support are you receiving from WARIDI? Do you think the support provided by WARIDI is adequate to ensure the smooth implementation and attainment of the milestones/targets?
9. In your opinion, do you think these targets and milestones are achievable? Please describe your answer.
10. What should be done differently to improve the engagement and attainment of the milestones/targets?

Role of Gender and Youth

11. What women's and youth interventions does WARIDI support? Describe your answer.
12. How are women's and youth activities mainstreamed within WARIDI components?
13. What can be done differently to ensure the meaningful integration of women's and youth activities into the WARIDI activity?

Closing.

14. Are there any additional comments you would like to make?

ANNEX 4.H: KII PROTOCOL QUESTIONS – USAID TANZANIA STAFF

To start the interview, please read the following script:

Hello and thank you for agreeing to speak with us. My name is _____ (interviewer name) and this is my colleague _____. We work with the Data for Development project, a USAID-funded platform that seeks to improve the quality and use of data in decision-making in Tanzania. We are undertaking an evaluation to assess the progress of the implementation of the activity by measuring its progress towards achieving the results targets, making overall judgement about the effectiveness of the approaches used towards achieving sustainable services, and informing course correction and future designs. The project and the evaluation are funded by USAID.

In the context of this evaluation, we would like to interview you about the implementation of this project. This discussion will last approximately one hour. Your participation in this interview is entirely voluntary and you can choose not to answer a question and to skip it or stop the interview at any moment without providing a reason. Your perspective is very important to USAID/Tanzania and WARIDI in inputting the development of Year 3 and other subsequent years’ work plans in supporting the wider Water Sector Development Program (WSDP) of Tanzania.

The information we will be collecting through this interview will be kept safe by our team. Your responses will be kept anonymous and not linked to your name—each person interviewed will be given a unique identification number. Your identity will be kept confidential and will not be shared outside of the evaluation team. Other information that could identify you (e.g., position, community, district) will be excluded from reports and other documents produced by our team and shared with USAID.

Interview Datasheet	
Interviewee full name _____	Interviewer _____
Title _____	Note taker _____
Site _____	Date _____
Circle Data Source	Interview start time _____
— USAID STAFF	Interview end time _____

Do you agree to participate in this interview today? **Yes** **No**

Opening

1. Please describe briefly your role in the WARIDI project.

Implementation Approaches

2. Do you know the “Leading With Sanitation” approach implemented by WARIDI? If YES, describe what is it and how it works. Do you think the current implementation approach will lead to the attainment of WARIDI life of project goals? Please explain your answer. What can be done differently to ensure that WARIDI achieves its targets?
3. Is the approach integrated to address all project components such as governance, climate change and adaptation, agriculture, and food security? If YES, describe how.
4. Are there other approaches WARIDI is using? If YES, describe them.
5. Do you think the implementation approach of the Leading With Sanitation approach can lead to increased utilization of multiple-use of water and sanitation services in the targeted LGAs? Please explain your answer.

6. In the past two years, what is the WARIDI support to LGAs' water and sanitation interventions? How many LGAs were supported during this period and why?
7. Do you think the WARIDI support is adequate? What are the gaps? Are there other areas that WARIDI support has not reached and are they significant in helping LGAs achieve the water and sanitation targets? Describe them. What can be done better?
8. What are the criteria used in ratings and ranking performances of LGAs in Water and Sanitation?
9. How are the WARIDI LGAs performing compared to other LGAs?
10. For the best performing LGAs, what is the motivation behind such performance?
11. For those that are not performing, why are they not performing?
12. What should be done differently for WARIDI LGAs to perform?

Sustainability

13. How has the capacity building and technological support by WARIDI helped the water users' groups and water user's associations to perform differently? How sustainable is it? (In your opinion, do you think the capacity building and technological support by WARIDI to water users' groups and water users' associations have helped them to perform differently? If YES, do you see any sustainability aspect as a result of the support? Please explain your answer.)
14. What WARIDI mechanisms are in place for the management and maintenance of the rehabilitated water infrastructure? Please explain how WARIDI sustainably addresses the recurrence in failure and breakdown of the water infrastructure
15. How have these mechanisms improved learning both within and outside WARIDI?
16. How do you assess the level of project/intervention ownership of the key stakeholders? What, if anything, should be done to improve this ownership?
17. How are WARIDI program components integrated to the WSDP? What else could be done to ensure sustainability?
18. How are LGAs engaged for collaboration into the WARIDI implementation (what is the process)? What are the LGAs' selection criteria? Is there any involvement of Basins or Ministry in the selection decisions of the LGAs?
19. Are there any other sources of funding that support the WASH program at the Basin and LGA level?

Private Sector

20. Are there any other actors/players/institutions/companies who work with WARIDI? What are they?
21. How are they engaged in the program implementation? Describe how they get into the WARIDI program cycle and what their roles and responsibilities are.
22. What should be done differently to improve engagement and attainment of the milestones/targets?

Role of Gender and Youth

23. What women's and youth interventions does WARIDI support? Describe your answer.
24. How are women's and youth activities mainstreamed within WARIDI components?
25. What are the main challenges hindering successful implementation of women's and youth interventions in the WARIDI project?

26. What can be done differently to ensure the meaningful integration of women's and youth activities into the WARIDI activity?

Management, leadership and communications

27. As prime, how does Tetra Tech communicate with USAID Tanzania? How effective is this communication?

28. What are the communication and decision-making challenges you encountered in implementation of the WARIDI activities? Do you think the challenges might be slowing down the implementation pace? If YES, how?

29. What should be done differently in communication and decision-making to ensure smooth implementation of the WARIDI activities?

Closing

30. Are there any additional comments you would like to make?

ANNEX 5: WARIDI TARGETS AND ACHIEVEMENT TO DATE

Performance Indicators		Y1	Y2	Y3	Y4	Y5 ⁷⁵	Target for Life of Activity	Percent of Target Completed to Date by Year 2
IR1 Services: Increased utilization of sustainable multiple-use water and sanitation services								
1.1	Number of people gaining access to an improved drinking water source	0	100k	300k	500k	600k	1.5M	0%
1.2	Number of people gaining access to an improved sanitation facility	0	100k	300k	500k	600k	1.5M	16%
1.3	Number people living in ODF environments	0	200k	800k	1M	1M	3M	3%
1.4	Number of new or improved commercial water or sanitation products or services available in target LGAs	0	5	10	20	5	40	25%
IR2 Governance: Strengthened governance for sustainable and resilient management of water resources and services under a changing climate								
2.1	Number of integrated laws/policies, strategies, plans, agreements, or regulations addressing climate change and/or biodiversity conservation officially proposed, adopted, or implemented	0	0	0	1	1	2	150%
2.2	Number of national and local policies that have input from CSOs	0	0	0	1	1	2	0%
2.3	Number of policy reforms implemented and/ or initiated due to informed use of data, evidence	0	0	0	1	1	2	0%
2.4	Number of institutions, committees, and associations with improved capacity in land and water management	0	10	20	50	50	130	3%

⁷⁵ Year 5 includes “Year 6” – the first quarter of FY 21, the final Q of the Task Order.

Performance Indicators		Y1	Y2	Y3	Y4	Y5 ⁷⁵	Target for Life of Activity	Percent of Target Completed to Date by Year 2
2.5	Number of community leaders and resource personnel promoting gender equity and women and youth empowerment within their spheres of influence	TBD	TBD	TBD	TBD	TBD	TBD	N/A
2.6	Number of CSOs receiving United States Government (USG) assistance engaged in advocacy interventions	0	5	10	10	5	30	0
2.7	Number of institutions with improved capacity to address climate change issues	1	3	4	4	2	14	157%
2.8	Number of stakeholders with increased capacity to adapt to impacts of climate change	0	5,000	10,000	10,000	5,000	30K	17%
IR3 Private Sector: Increased livelihoods through private sector investment opportunities for sustainable water services and resource management								
3.1	Percent of women and youth participating in USG-assisted programs designed to increase access to productive economic resources	0	50%	55%	60%	60%	55%	96%
3.2	Number of WASH and MUS service providers are assisted with technical, business capacity or access to finance (CUSTOM)	0	150	200	350	300	1,000	33%
3.3	Number of public private partnerships (PPPs) established for water provision, water resource management, and/or stewardship	0	1	2	2	1	6	83%
3.4	Number of farmers and others who have applied new technologies or management practices	0	1,000	3,000	3,000	3,000	10,000	3%

ANNEX 6: SOURCES OF INFORMATION/BIBLIOGRAPHY

- WARIDI. (Feb 2016). Climate Analysis and Institutional Assessment for 2 River Basins.
- WARIDI. (2017). Annual Workplan-Tetra Tech, et al. (October 2017 – September 2018).
- WARIDI. (2017). Annual Report: Approved.
- WARIDI. (2016) Gender Integration and Youth Inclusion Strategy.
- WARIDI. (January 2018). Monitoring, Evaluation, and Learning Plan-Revision Jan. 2018-to USAID I.26.18.
- WARIDI. (2017). Semi Annual Report for year 2-Oct 2016-March 2017.pdf
- WARIDI-Progress Report for Year 1-Quarter 2.
- WARIDI-Semi Annual Progress Report for Year 1-Quarter 3.
- WARIDI-Annual Progress Report for Year 1, Quarter 4.
- WARIDI-Progress report for Year 2, Quarter 1.
- WARIDI-Semi Annual Progress Report for Year 2, Quarter 2.
- WARIDI-Progress Report for Year 2, Quarter 3.
- WARIDI. (2018). Wami Ruvu and Rufiji Basins Climate Vulnerability Mapping.
- WARIDI. (2017). A report for Baseline Capacity Assessments for Kisangata, Ngerengere Juu B, Mtitu, and Lukosi Chini Water Users Associations in the Wami Ruvu and Rufiji Basins.
- USAID. (2014). Natural Resource Management (NRM) Project Appraisal Document (PAD).
- USAID/Tanzania. (2017). Final Evaluation Report-Tanzania Whole-of-Project Evaluation (WOPE) of the Natural Resources Management Project.
- URT. (2014). Water Sector Development Program II-Final August-Signed.
- USAID. (2012). Gender Equality and Empowerment Policy.
- USAID/Tanzania. (2014). Country Development Cooperative Strategy, Tanzania's Socio-Economic Transformation Toward Middle Income Status by 2025 Advanced: October 3, 2014-October 3, 2019
- WARIDI. (2017). Gender Social Norms Change. Intervention Package Overview.
- ULUTI Land Use Plan, 2017.
- WARIDI. (2018). Approved WARIDI Indicators: WARIDI Technical Team.
- USAID/Tanzania. (2017). Performance Indicator Reference Sheet.
- WARIDI (2018). MTR Technical Note Final: Gender Integration and Youth Inclusion.
- URT (2015). (Ministry of Water, Water Sector Development Programme Phase II, Programme Implementation Manual, Main PIM Document, November 2015
- URT (2016). Ministry of Health, Community Development, Gender, Elderly and Children: National Guidelines for Rural Community-Led Total Sanitation (R-CLTS), April 2016.
- USAID (2015) iWASH Program, Tanzania - Close-out Learning Review, Global Water for Sustainability Program, Florida International University. October 16, 2015.
- USAID, Indonesia Urban Water Sanitation and Hygiene Project, Final Evaluation Report, April 2016.
- URT (2016) Ministry of Water and Irrigation Tanzania, December 2016, A Trainers Manual for Community-Managed Water Supply Organizations in Tanzania.

Ministry of Water and Irrigation Tanzania, December 2016-August 2017. List of LGAs That Qualified for DFID-Supported Payment by Results Scheme in 2016 and 2017.

ANNEX 6: BIOS FOR WARIDI PERFORMANCE EVALUATION TEAM MEMBERS

Tom Ryan, Team Lead and WASH Subject Matter Expert

Mr. Ryan has over 25 years' experience in international development and humanitarian aid covering 23 countries in Asia, the Pacific and Africa. His expertise encompasses urban and rural water supply and sanitation, water quality monitoring, hydrology and drainage, and river basin management. His experience includes all aspects of the project cycle: planning, needs assessment and project design; technical and financial feasibility studies; institutional studies, project implementation; monitoring and evaluation. Ryan has extensive experience in project reviews and evaluations, and project design missions, on behalf of many of the major international donor agencies.

His qualification include: M.Sc Water Resources, B.Sc Civil Engineering and; Post Graduate Diploma in Applied Economics.

Jacob Laden, Evaluation Advisor & Senior Research Scientist

Mr. Laden is an evaluator and organizational development professional with over ten years of experience in supporting international agencies, private firms, non-profits and multinational organizations. He currently serves as Evaluation Advisor for USAID's Data for Development activity in Tanzania. He is well versed in the full range of M&E tools and approaches, include quasi-experimental designs, quantitative and qualitative data collection and analysis, complexity aware monitoring, political economy analysis, and CLA practices. Mr. Laden has broad regional experience, having worked in East Africa and the Great Lakes Region (Tanzania, Uganda, Angola), Latin America (Colombia, Honduras), and South Asia (Pakistan and India). He holds an MA in International Affairs from American University, Washington DC.

Winfred Mbungu, Water Resources Subject Matter Expert

Dr. Mbungu is a water resources engineer and hydrologist with over 10 years' experience in research and evaluation surveys. Dr. Mbungu currently works as a lecturer and researcher in the Department of Engineering Sciences and Technology at Sokoine University of Agriculture. He has carried out research in areas of water resources management, rainwater harvesting, irrigation management, climate change, water supply, natural resources management, water quality monitoring, groundwater management, sanitation, and agricultural water management, remote sensing applications in Agriculture, food security and nutrition as well as sustainable agricultural intensification. Dr. Mbungu has extensive experience overseeing surveys and qualitative data collection including baseline survey, monitoring and evaluation of projects.

Dr. Mbungu holds a PhD in Biological Systems Engineering (Land and Water Resources Engineering) from Virginia Tech, USA; Masters of Science in Water Resources Engineering from KU Leuven and VU Brussels, Belgium and a Bachelor of Science in Agricultural Engineering from Sokoine University of Agriculture, Morogoro, Tanzania.

Eng. Yunusu L. H. Rugeiyamu

Eng. Yunusu L. H. Rugeiyamu is a Registered Independent Consulting Engineer Civil (Water Resources Management), with a combination of Civil-Sanitary (WASH), Water resources management expertise, and decentralization by devolution and governance skills in the implementation and management of in country and regional WASH programs. Has a long time working experience East Africa, especially in Tanzania where he has held senior positions in government and has participated in water sector related activities' boards and committees, and contributed to the formulation and implementation of the Local Government Reform Program. . He has vast experience in projects supervision and evaluation.

Eng. Rugeiyamu holds a Post Graduate Diploma in Sanitary Engineering with Distinction, International Institute for Hydraulic and Environmental Engineering, (IHE UNESCO) Delft, The Netherlands and a Bachelor of Engineering, Civil, University of Roorkee. (IIT Roorkee), Roorkee, India.

Nasson Konga, Monitoring and Evaluation Specialist

Nasson Konga is an Economist and Monitoring & Evaluation Specialist with over 10 years of experience working with Local government authorities (LGA's), both local and International Organizations (NGO's) and the firms in Project Management, Monitoring, Evaluation and Learning. Konga's core competencies area include Project designing, designing Performance Monitoring plan and its execution. Moreover, Konga has extensive experience in managing and execution of both quantitative and qualitative evaluation; including structuring and deployment of questionnaires, focus group discussions (FGDs) and key informant's interviews (KIs), as well as doing data analysis and presenting findings for decision making.

Konga holds Masters of Arts in Monitoring and Evaluation, Masters of Science in Agricultural Economics and Bachelor of Science in Food Science & Technology.

Shakila Mayumana, Local Gender & GBV Specialist

Shakila Mayumana is the Gender Specialist for the Data for Development activity and served as Local Gender and GBV Specialist for this evaluation. Ms. Mayumana has expertise in project implementation and monitoring and evaluation in the areas of gender, human rights and education for local and national government as well the private sector in East Africa. She has over 5 years of experience in international development coordinating, implementing, and conducting internal monitoring and evaluation for various donor funded projects. She is experienced in conducting qualitative data collection, including interviews and focus groups discussions and conducting training on qualitative methods.

Ms. Mayumana holds a BA in Education and a Master of Public Administration.

Peter Lorri


Peter Lorri has 10 years of working experience in Integrated Water Resource Management and Community Based Natural Resources Management (CBNRM) transboundary projects and programs while with IUCN, WWF Tanzania, UNDP GEF, EU and DFID. His core skills are in Mixed Method Research, developing M&E plans, M&E data collection and reporting, data quality assessment (DQA), develop project work plans, milestone tracking and data collection. Developed M&E system for integrated projects in the field of environment, agriculture, water and energy contributed in the development and piloting of an internal and integrated data quality assessment (DQA) tools. Throughout his career in Natural Resources projects and programs he has developed responsible professional experience in project management particularly in providing Monitoring & Evaluation (M&E) technical backstopping and leadership to the management, in the development and implementation of monitoring, evaluation and learning systems and processes to support accountability and adaptive management of program through learning.

Mr. Lorri holds BSc. In Forestry, MSc. In Biodiversity Conservation and Advance certificate in Monitoring and Evaluation.

ANNEX 7: DISCLOSURE OF ANY CONFLICTS OF INTEREST


Name	Thomas Ryan
Title	Water Supply Specialist
Organization	ME&A
Evaluation Position?	<input checked="" type="checkbox"/> Team Leader <input type="checkbox"/> Team member
Evaluation Award Number (contract or other instrument)	-
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	<ol style="list-style-type: none"> Mid-Term Evaluations of Monitoring Agriculture and Water Resources Development (MAWRED) Project and Water Information System Platforms (WISPS) Project, implemented by the National Aeronautics and Space Administration (NASA) in USA, and the International Centre for Bio saline Agriculture (ICBA) based in Dubai Final Evaluation for Institutional Support and Strengthening Program (ISSP), Jordan. Implemented by International Resources Group (IRG) USAID/Mid-Term Performance Evaluation for Sustainable Water and Sanitation in Africa. Implemented by Tetra Tech.
I have real or potential conflicts of interest to disclose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i></p> <ol style="list-style-type: none"> 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. 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. 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. 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. 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. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation. 	No conflict of interest to disclose

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	Friday, 15 June 2018

Name	Nasson Exaudy Konga		
Title	Monitoring & Evaluation Specialist		
Organization	Mendez England & Associates (ME&A)		
Evaluation Position?	<input type="checkbox"/> Team Leader	<input checked="" type="checkbox"/> X	Team member
Evaluation Award Number (contract or other 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 RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI)		
I have real or potential conflicts of interest to disclose.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> V	No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> <ol style="list-style-type: none"> 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. 	No conflict of interest to disclose		

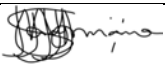
I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized 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	18th June, 2018

Evaluation Plan and Workplan: Midterm Performance Evaluation of USAID Water Resources Integration Development Initiative (WARIDI)

Name	Shakila Mayumana
Title	Gender Specialist
Organization	Data for Development
Evaluation Position?	<input type="checkbox"/> Team Leader <input checked="" type="checkbox"/> Team member
Evaluation Award Number (contract or other instrument)	-
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	Water Resources Integration Development Initiative (WARIDI) by Tetrattech
I have real or potential conflicts of interest to disclose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> <ol style="list-style-type: none"> 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. 	No conflict of interest to disclose

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Signature	
Date	June, 2018

Name	Winfred Mbungu
Title	Subject Matter Expert (WASH)
Organization	Data for Development
Evaluation Position?	<input type="checkbox"/> Team Leader <input checked="" type="checkbox"/> Team member
Evaluation Award Number <i>(contract or other instrument)</i>	AID-OAA-I-15-00024/AID-621-TO-17-00005
USAID Project(s) Evaluated <i>(Include project name(s), implementer name(s) and award number(s), if applicable)</i>	WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI)
I have real or potential conflicts of interest to disclose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> <ol style="list-style-type: none"> 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. 	No conflict of interest to disclose
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Signature	
Date	

Name	PETER LORRI
Title	M&E and Natural Resource Management Specialist
Organization	MENDEZ ENGLAND & ASSOCIATES (ME&A)
Evaluation Position?	<input type="checkbox"/> Team Leader <input checked="" type="checkbox"/> Team member
Evaluation Award Number (contract or other 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 RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI) BY TETRATECH
I have real or potential conflicts of interest to disclose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.	No conflict of interest to disclose

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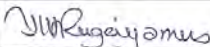
Signature	
Date	June 18, 2018

ANNEX VI: DISCLOSURE OF ANY CONFLICTS OF INTEREST

[The Evaluation Policy requires that evaluation reports include a signed statement by each evaluation team member regarding any conflicts of interest. A suggested format is provided below.]

Name	Mr. Yunusu L. H. Rugeiyamu
Title	Water and Sanitation Expert
Organization	Mendez England & Associates (ME&A)
Evaluation Position?	<input type="checkbox"/> Team Leader <input checked="" type="checkbox"/> Team member
Evaluation Award Number (contract or other instrument)	AID-OAA-1-15-00024/AID-621-TO-17-00005
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	WATER RESOURCES INTEGRATION DEVELOPMENT INITIATIVE (WARIDI)
I have real or potential conflicts of interest to disclose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i>	
<ol style="list-style-type: none"> 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. 	

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Signature	
Date	18 th June, 2018