

## TERMS OF REFERENCE

### Verification Firm for the Sustainable Rural Water Supply and Sanitation Program (SRWS), Tanzania

---

#### 1. INTRODUCTION

In 2006, Tanzania launched its ambitious and overarching Water Sector Development Program (WSDP) covering the period 2006-2025 and encompassing all relevant water sub-sectors including: i) water resources management; ii) rural water supply; iii) urban water supply; iv) sanitation and hygiene, and v) program delivery support. WSDP phase I (2006-2015) placed emphasis on the decentralization of the water sector activities, shifting responsibilities for rural water supply and sanitation service provision from the Central Government to Local Government Authorities (LGAs), in line with the GoT's Decentralization by Devolution policy. LGAs became responsible for the implementation of rural water supply. The ownership and management responsibilities of village water schemes were delegated to autonomous, community-elected, Community Owned Water Supply Organizations (COWSOs) as stipulated in the National Water Policy (NAWAPO) of 2002 and the 2009 Water Act. Supervision and capacity building of COWSOs are the responsibility of LGAs along with major rehabilitation and repair of rural water schemes.

The WSDP is implemented by the following three main Ministries: Ministry of Water Irrigation (MoWI) leads the rural water supply activities and the coordination of the WSDP; Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEG) is responsible for the implementation of the National Sanitation Campaign (NSC); and the Ministry of Education Science and Technology (MoEST) holds the overall responsibility for delivering water, sanitation and hygiene (WASH) services to public schools. The President's Office, Regional Administration and Local Government (PO-RALG) plays a coordinating role in the implementation of community water supply and sanitation services.

#### Rural Water Supply

Goal 6 of the Sustainable Development Goals (SDGs) calls for universal and equitable access to water supply by 2030. In 2015, access to improved water supply was at 46 percent in Tanzania (Joint Monitoring Programme, 2015), below the Sub-Saharan Africa average of 56 percent and virtually at the same level as in 1990. Approximately 40 percent of rural households spent more than 30 minutes to fetch drinking water (Demographic Health Survey, 2016) and a national water point mapping survey conducted in 2013 found that among Tanzania's 86,000 rural water points<sup>1</sup>, 55 percent were functional, 7 percent needed repair and

---

<sup>1</sup> In Tanzania, there are three main types of water schemes: shallow wells equipped with hand pumps, gravity-fed schemes and deep-well boreholes with piped distribution systems. Household connections are uncommon in rural areas.

38 percent were non-functional<sup>2</sup>. In recognition of the sustainability challenges, an implementation completion report for WSDP I stated that “achieving sustainable water service delivery continues to be a major challenge”.

Water points break down for reasons common to other similar public assets in districts, but there are three sector-specific lessons from WSDP I. First, the LGAs’ incentives were heavily skewed towards the construction of new infrastructure. Second, the decision to move from hand pumps and other simple pumping technologies to large multi-village schemes powered by diesel generators exacerbated the need for higher village-level competencies and technical backstopping support mechanisms, which were not always available. Third, the lack of means to collect timely and accurate data on water point status affected the ability to address the growing backlog of non-functional water points. WSDP I was implemented across all 132 LGAs (now 185), which made supervision, coordination and capacity building efforts difficult. Moreover, each LGA is on average responsible for 80 village-level COWSOs. At the village level, COWSOs have various capacity gaps, especially in tariff setting, fund and asset management including preventative maintenance.

WSDP I made some progress in addressing the sustainability of rural water supply. In 2016, MoWI launched a Sustainability Strategy that aims at, among other things, strengthening the COWSOs’ capacity. Unfortunately, scarcity of resource and lack of attention to economies of scale and efficiencies in capacity building debilitated these efforts. Water Point Mapping (WPM) survey was carried out in 2013, followed by establishment of a Central Data Management Team (CDMT) in 2015 to be the custodian for all data pertaining to the rural water sub-sector. Although data management and monitoring have historically been a challenge and substantial work on M&E is still needed, there has never been better data on rural water supply in Tanzania than there is now.

### **Recent and Anticipated Institutional Changes to the Rural Water Sector**

In order to focus on improving and sustaining access to water supply in rural areas, the Government is in the process of amending the institutional arrangements of the rural water sector. As recently announced by the government, all water sector activities performed by District Water Engineers (DWEs) previously under the oversight of PO-RALG, have been transferred to MoWI. This directive is a significant change to the current water sector management in the Tanzania. In addition, MoWI is in the process of making substantial amendments to Water Act and its regulations which may affect those activities performed by MoHCDGEC, MoEST as well as PO–RALG. As an example, due to issues and challenges on the sustainability of rural water schemes, the ownership and management responsibilities of water schemes in the villages might no longer be subjected to COWSO.

---

<sup>2</sup> The survey covered all water points in Tanzania and was not limited to the schemes constructed under WSDP I.

Lastly, the Government is considering establishing a Rural Water Agency (the Agency) to be responsible for development, management and ensuring sustainability of rural water supply schemes. The responsibilities of the proposed Agency may include the following:

- a. advising the Government on policy matters related to rural water supply and sanitation services provision;
- b. planning, designing, implementing, monitoring and evaluating water supply and sanitation projects in the rural areas;
- c. facilitating establishment of a mechanism to support management, operation and maintenance of rural water supply schemes in order to promote sustainability;
- d. facilitating private sector participation in the provision of water and sanitation services and hygiene promotion in rural areas;
- e. collaborating with Basin Water Boards and other stakeholders in protection and conservation of water sources;
- f. building capacity of private and public sector for provision of rural water and sanitation services;
- g. facilitating and supporting resource mobilization and enabling effective management and control of the financial resources allocated for implementation of rural water supply projects; and
- h. supervising, monitoring and evaluating the provision of clean and safe water services to rural communities.

## **Rural Sanitation and Hygiene**

In 1973, President Nyerere led the nationwide “*Mtu Ni Afya*” (Healthy Man) campaign which was highly successful in moving sanitation practices from open defecation to fixed-point defecation (unimproved latrines). From 1973 to 1978, the use of unimproved latrines rose from 20 percent to over 80 percent. Since then, little attention was given to rural sanitation until 2012 when the Government of Tanzania (GoT), launched the National Sanitation Campaign (NSC). The NSC's goals were to encourage households to build improved sanitation facilities<sup>3</sup> and facilitate the transformation to Open Defecation Free (ODF) communities, through a mix of the globally recognized community-led total sanitation (CLTS) approach, sanitation marketing, behavior change communication (BCC) campaign, and school toilet rehabilitation and construction. Unfortunately, the NSC received limited funding and the BCC campaign was never fully realized. According to the 2016 DHS, 86 percent of rural households still have unimproved sanitation facilities almost four decades after the “*Mtu Ni Afya*” campaign. This results in large costs to Tanzanians in terms of premature death, productivity losses and health care costs, amounting to 1 percent of GDP (WSP, 2012).

A recent process evaluation of phase 1 of the NSC (2012-2015), found several barriers to successful implementation, including: weak supply chain of sanitation hardware; lack of funding for sanitation; capacity gaps and limited incentives for reliable monitoring of NSC

---

<sup>3</sup> Under the Sustainable Development Goals (SDG) framework, the term "improved" is replaced with the term "basic", but shall be used throughout the document for ease of understanding.

activities; and delays in the development of the BCC campaign component<sup>4</sup>. As a result, DfID decided to finance the development of a nationwide sanitation and hygiene BCC campaign, which will be rolled out as part of the second phase of the NSC (2017-2019). The campaign will be developed by the "Project CLEAR" consortium, funded by DfID, and carried out in close collaboration with the MoHCDGEC from December 2017.

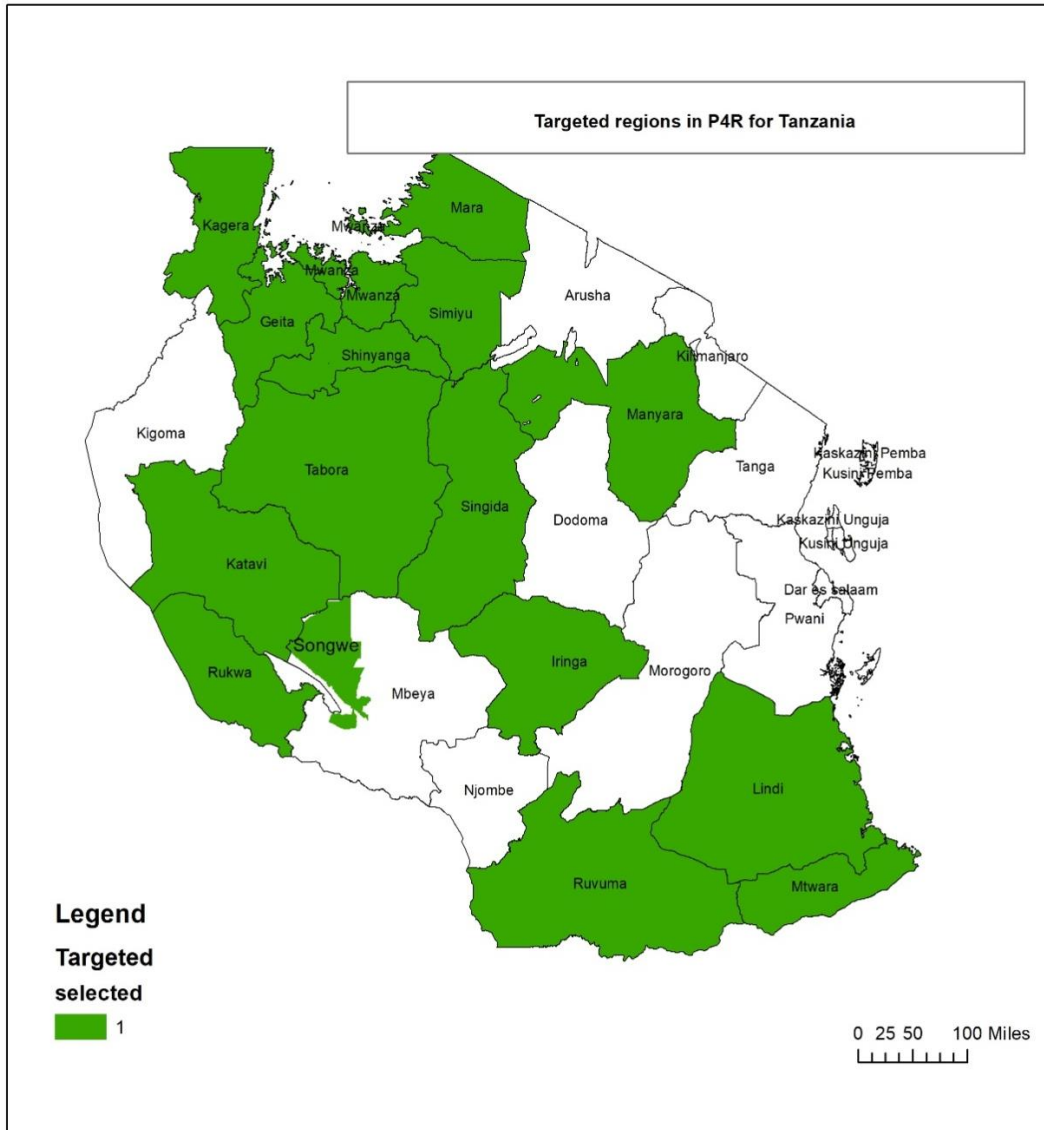
### **The Sustainable Rural Water Supply and Sanitation Program**

The World Bank have recently launched the Sustainable Rural Water Supply and Sanitation (SRWS) Operation ("the Operation") to support WSDP on the component of rural water supply and sanitation in Tanzania through results-based financing, an aid modality that is increasingly being used due to its transformative potential. The Operation aims to incentivize national- and local-level stakeholders to improve and reform the rural water and sanitation sub-sectors. The proposed Operation uses the World Bank's "Program for Results" (PforR) results-based financing instrument which will support WSDP with US\$ 350 million over six years from 2019 to 2024. This will be transferred to the GoT as un-earmarked funds upon achievement of targeted results against Disbursement Linked Indicators (DLIs). The Operation supports rural water supply and sanitation services in 17 out of Tanzania's 26 regions, see Figure 1 below. As detailed in Annex 6, the 17 regions have been selected against the criteria of low access to water and sanitation as well as high poverty and high stunting rates. Achievement of the results will be verified annually by the Internal Auditor General (IAG) as the Independent Verification Agent for the Program.

---

<sup>4</sup> "Process evaluation of Tanzania's National Sanitation Campaign", SHARE (Sanitation and Hygiene Applied Research for Equity), London School of Hygiene and Tropical Medicine.

**Figure 1: Selected Regions**



**Disbursement-linked Indicators (DLIs)**

The Operation’s incentive model consists of eight DLIs grouped into three results areas across six disbursement periods. DLIs have been developed according to the following criteria: (a) importance for successful Operation implementation, (b) potential to incentivize improvements within the Government program, and (c) practicality and cost effectiveness of verification. The DLIs are presented in Table 1 below.

**Table 1. Disbursement-Linked Indicators**

<b>DLI</b>	<b>Rationale for Selection of DLIs</b>
<b>Results Area 1: Sustainable access to improved water services in rural areas</b>	
DLI 1. Number of people with access to an improved water supply	<ul style="list-style-type: none"> <li>• Access to reliable, functioning water supply is low in the Operation areas.</li> <li>• The GoT's focus has been on constructing new water supply schemes rather than sustaining existing schemes.</li> </ul>
DLI 2: Number of sustainably functioning water points	
<b>Results Area 2: Increased access to improved sanitation services in rural areas</b>	
DLI 3. Number of people with access to an improved sanitation facility	<ul style="list-style-type: none"> <li>• Access to improved sanitation and handwashing practices is low in the Operation areas and challenges exist in ensuring adequate access to improved sanitation and hygiene in schools.</li> </ul>
DLI 4. Number of public schools with access to improved sanitation and hygiene facilities	
DLI 5. Number of villages that achieve and sustain community-wide sanitation (CWS) status	
<b>Results Area 3: Strengthen the capacity of sector institutions to sustain service delivery in rural areas</b>	
DLI 6. Number of villages with a COWSO with improved O&M capacity for water supply services	<ul style="list-style-type: none"> <li>• At the village level, there is a need to support the O&amp;M capacity. Core gaps include lack of legal status, inadequate tariffs structure, and lack of alternatives from the community-managed delivery model.</li> <li>• Data quality within the national M&amp;E systems is weak and requires sustained improvement.</li> <li>• The GoT requires support to establish, resource, and operate the Agency on time.</li> </ul>
DLI 7. Number of districts submitting accurate and complete sector M&E data	
DLI 8. Agency established and operationalized	

The Operation has three groups of DLIs:

- **DLIs 1–2: Sustainable access to improved water services in rural areas.** These DLIs disburse according to the results achieved by districts in increasing access to improved rural WASH. DLI 1 rewards the districts for supplying people in rural areas with water, by rehabilitating, expanding or building new improved functional water points. DLI 1 is designed such that the districts have a financial incentive to prioritize rehabilitation and value-for-money/quality investments which reliably provide a sufficient volume of chlorinated water. Through the definition of improved water points, the DLI further incentivizes quality assurance, quality control, and female involvement

in the COWSOs' leadership. DLI 2 rewards the districts for sustaining their entire inventory of improved functioning water points (including those constructed or rehabilitated under DLI 1). Through DLI 2, the districts are incentivized to constantly maintain their functioning water points and repair broken-down systems.

- **DLIs 3-5: Increased access to improved sanitation services in rural areas.** DLI 3, DLI 4, and DLI 5 are closely interlinked through a stepped approach that is designed to increase and sustain access to sanitation and improve hygiene practices in rural Tanzania. This approach rewards districts for moving rural households up the sanitation ladder to improved sanitation. Districts are specifically incentivized to improve sanitation and hygiene in schools and address menstrual hygiene. Achievement of DLI 3 and DLI 4 contributes to the achievement of CWS villages (DLI 5).
- **DLI 6-8: Strengthen the capacity of sector institutions to sustain service delivery in rural areas.** DLI 6 is focused on developing the capacity of water and sanitation institutions at the district level to enable them to carry out their mandates effectively. The DLI will be considered fulfilled by the following: Officially registering COWSOs, improving COWSO financial management and record keeping, achieving a sustainable operating cost ratio for COWSOs, improving water quality, ensuring female participation in leadership positions, and establishing local backstopping mechanisms for rural water supply. The fundamental objective of this DLI is to enhance institutional strengthening of the districts, resulting in sustainable, long-term improvements in the management of rural water supply. DLI 7 disburses according to results achieved in strengthening the accuracy and completeness of sector M&E data and gradually introduces core sustainability indicators. DLI 8 supports the establishment and operationalization of the Agency according to specific milestones, thus ensuring that sustainability becomes its core institutional focus.

### **Results verification**

The Internal Auditor General (IAG) has been selected to verify the Operation's results using a verification protocol approved by the World Bank. IAG has experience in acting as the IVA for the World Bank's Tanzania Strengthening Primary Health Care for Results Program (P152736) since 2015 and IAG will subcontract verification activities for which it does not have the technical expertise in-house.

### **National, Regional and Local Contextual Framework**

Under the Operation, MoWI will implement efforts to achieve sustainable access to improved water supply. At the national level, the MoHCDGEC will lead the implementation of the sanitation and hygiene promotion activities. School WASH (SWASH) will be implemented by MoEST in coordination. LGAs will be the main executing entity with support from the regional secretariats, MoEST, MoHCDGEC, MoWI and PO-RALG.

## 2. OBJECTIVES

The objectives of this consultancy are to verify on an annual basis, for the first three years of the Operation, that the results as laid out in the DLI matrix pre-agreed outputs have been physically delivered, in an approved manner, and properly documented. Results will be verified annually through desk review and physical inspection that tests the accuracy and quality of results claimed. In accordance with good audit practice, verification will take place against a sampling framework and frequency, described in detail in the Verification Protocol (Annex 4).

Support for the delivery of this assignment will be provided by these separate but parallel Strategic Program Support Consultancy (SPSC). This support will include assisting the IAG to develop sound verification reports.

## 3. RECIPIENTS

The IAG will be the principal recipient of the consulting services.

## 4. SCOPE

The scope of work under this assignment includes:

- I. Collection, desk-based review and analysis of documentation and records required for the verification of DLIs 1, 2, 4, 5, 6, 7 and 8.
- II. Physical verification of a sample of units for DLIs 1, 2, 3, 4, 5 and 8 taken from official results reported by MoWI containing corresponding lists and records provided by the districts, identification of all water points, sampled villages, institutions and households, administration of inspection/survey format using mobile data collection, delivery of quality data from the physical verification exercise in STATA format (or equivalent soft copy flat file), review and verification of provincial plans and implementation reports, and preparation of an Annual Verification Report (AVR) by the firm, that will be reviewed by IAG and presented to the World Bank in order to guide the disbursement amount of the loan to GoT.

The detailed scope of work includes at the start of the contract:

- Establish a baseline for DLI 2, DLI 3, DLI 4 and DLI 5 through desk-based analysis of existing data sets and reports on an annual basis:
- **DLI 1:** For all new / extension / rehabilitated water points reported, carry out desk-based review of associated water scheme documentation and records. Phone calls to all COWSO Chairpersons or Treasurers of the submitted water schemes (estimated 400 phone calls), for verbal verification of the functioning of all water points in a village as reported by the Central Data Management Team (CDMT). Physical visits to a random sub-set of villages, stratified by water scheme, to verify CDMT and verbal data. Sample size will be around 400 villages. Estimation of population served by each water point will be carried out by the IVA firm using GIS analysis of GoT census data.



- **DLI 2:** Phone calls to all COWSO chairpersons or treasurers (estimated phone calls: 4,000-5,000), for verbal verification of functioning of all water points in a village as reported by the CDMT. Physical sampling of water points reported as functional. Physical visits to villages will take place on a random basis to verify CDMT and verbal data. The sample size for physical verification will be approximately 4,200 water points, covering an estimated 7 villages per district and an average of 7 water points in each village equivalent to 49 water points per district. GIS analysis of census data will be used to verify that water points serve a population.
- **DLI 3:** Physical inspection of household sanitation facilities in a sample of 154 households per district. Households should be randomly selected using two-stage cluster sampling. Clusters should be 7 villages, selected at random from a full list of villages in the district. In each selected village/cluster 22 households will be randomly selected and surveyed. The sample should be designed to provide estimates of coverage of improved sanitation representative at the district level, within a 5% margin of error (95% confidence level). Samples may overlap with DLI 5.
- **DLI 4:** Desk review of reports and data maintained by the district and the Education Management Information System (EMIS); physical inspection of all facilities in 100 percent of schools with access to improved sanitation and hygiene facilities. The sample size may be modified based on results reported and budget available.
- **DLI 5:** Desk review of reports and data maintained by the district and the CDMT. Physical verification in a random selection of approximately 172 villages per year reported to have achieved Community Wide Sanitation (CWS) status. Physical inspection of all facilities in 100 percent of schools in sampled villages. Random inspection of no less than 5 percent of households in sampled villages to check coverage of domestic sanitation and handwashing facilities. Sampled villages may overlap with DLI 3.
- **DLI 6:** Level I: Review of COWSO registration records at the district level and CDMT data. Phone calls to COWSO chairperson and treasurer. The biannual community of practice meeting will be verified through review of meeting minutes and outputs. Review of cash book, tariff, and COWSO bank statements: The records will be collected during the biannual community of practice meeting at the district level. Level II: Review of COWSO registration records at the district level and CDMT data. Phone calls to COWSO chairperson and treasurer. The biannual community of practice meeting will be verified through review of meeting minutes and outputs. Review of cash book, tariff, and COWSO bank statements. The records will be collected during the biannual community of practice meeting at the district level. Review of backstopping mechanism assessment visit checklist and meeting minutes. Background check of all third-party service providers.
- **DLI 7:** Desk-based assessment of reported data against performance criteria for water supply and sanitation M&E data accuracy and completeness.

- **DLI 8:** Review of documentation relating to the establishment of the Agency and verify via phone calls to the COWSOs the technical support from the Agency.

Inspection/survey formats for physical verification will be developed with the support of the SPSC and the Bank. All data collection will be carried out using handheld mobile Personal Digital Assistants (PDAs) based on formats developed and tested in the field. This includes mobile data collection on AndroidOS mobile phones and the Open Data Kit (ODK)<sup>5</sup> data collection application supported by the secure cloud based service Formhub<sup>6</sup>(or equivalent) for capture and storage of the data. The scope of work will be carried out in accordance with the following tasks:

### **Task 1. Coordination, logistics and support**

1. As needed, and working through the support and collaboration with MoWI, the firm will obtain all necessary permissions for implementing the data collection activities required for the physical verification portion of the exercise
2. Adhere to local formalities and obtain any required permits related to logistics of survey implementation, as well as health and accident insurance, salary and taxes for all enumerators and supervisors.

**Deliverables:** Evidence of permissions, insurances (if necessary), ethical and other permits as needed for implementing data collection activities.

### **Task 2. Sampling**

Random selection of sampling units using agreed methodology, on an annual basis

**Deliverables:** (all require submission on an annual basis)

1. Electronic listing of selected districts, villages, and households, including replacement villages and households and unique IDs
2. Electronic listing of schools (kindergarten, primary and secondary) in the sampled villages, with unique IDs
3. Stata do files documenting random selection and sampling procedures

### **Task 3. Support for data collection using mobile hand-held data capture device**

1. Transcribing changes to the paper-based data using Microsoft Excel into the Xform compliant forms through the Formhub service.
2. Translation of forms into Kiswahili.
3. Configuring automated skip logic, validation logic, and open ended or 'other' textual responses that in the inspection/survey formats.
4. Ensuring that variable names generated by the program correspond clearly and logically to the question labels used in the inspection/survey formats and that a coding strategy is used that maintains consistent, unique identifiers for water points,

---

<sup>5</sup><http://opendatakit.org/>

<sup>6</sup><http://formhub.org/>

households and institutional facilities which are linked where appropriate to the unique identifiers used in the Comprehensive Results Report.

The firm should ensure that the data capture application is integrated into data collection procedures and field protocols. In addition, the firm should assist the individual consultant to carry out training on the mobile data capture system during the main enumerator training.

**Deliverables:** Completed configuration of mobile data capture application in the Android-based mobile handheld devices. If the firm does not have Android-based mobile handheld devices they will be responsible for procuring or renting one device per enumerator (mobile data capture application to be submitted on an annual basis).

#### **Task4. Training of enumerator teams**

Training materials, including an enumerator field procedure manual, used for the baseline verification will be developed by the firm. The firm will be expected to administer a 4-day training course to enumerators and supervisors covering all inspection/survey formats, key concepts and field protocols. Recruitment and training of enumerator teams on an annual basis, to include:

1. Recruitment of a sufficient number of qualified enumerators and field supervisors
2. Training (re-training) of enumerators and supervisors in the specifics of the field protocols, however, it is anticipated that the firm will utilize a roster of experienced in-house staff to minimize the need for re-training.
3. Administration of an exam covering key concepts and protocols to all enumerators and supervisors and selection of top performing enumerators and supervisors

**Deliverables:** (all require submission on an annual basis)

1. Written training agenda
2. Enumerator test scores and final list of selected enumerators and supervisors

#### **Task5. Verification Pilot Test**

Conduct a successful verification pilot test prior to each annual data collection exercise. Immediately after classroom training (Task 4), the firm will carry out a data collection field pilot (including water point, household and institutional facility verification surveys) in two rural enumeration areas, the locations of which must be agreed by the World Bank. Each enumerator is expected to independently administer and record at least 2 complete household surveys, and supervisors should each independently administer and record at least 1 institutional facility during the pilot data collection exercise. The objective of the field pilot is as follows:

- a) Field teams correctly identify and interview households in the selected pilot clusters using mobile hand-held devices for data enumeration
- b) Data captured on hand-held devices is automatically uploaded to a server
- c) Field team members understand their roles
- d) Field team members understand, and correctly follow interviewing protocols in all sampled units (water points, households, schools)
- e) Data from all sampled units (water points, households, schools) are successfully transferred to tab-delimited format readable in STATA (or equivalent)

**Deliverables:** (all require submission on an annual basis)

1. Pilot test data successfully transferred to IAGand World Bank team

2. A brief report identifying issues encountered (if any)
3. A final plan and detailed schedule for field data collection indicating dates in each enumeration area and expected schedule of data transmission

### **Task6: Verification**

Successful implementation and completion of data collection in all planned/substitute sample locations for the water point, household, school verification, including:

- a) Dataset containing all water point, household, school data coded from the selected sample areas, clearly linked at the village and district level
- b) Electronic supervisor's log that documents:
  - i. Dates of arrival and completion of the cluster/PSU
  - ii. Any notable difficulties or deviations from the standard field plan
  - iii. Record of each substitution of sampling unit that may have been required, including the reasons for substitution
  - iv. Any other notable occurrences
- c) Compile and submit a complete database of all data, including household and institution verification data in STATA format, or equivalent
- d) Conduct spot-check, cleaning and archiving of data
- e) Survey completion report with dates on which preparation and training was conducted, list of staff, dates on which villages were visited, any changes made to the inspection/survey format mid-field (e.g. additions of codes and the like), special observations, consolidated list of supervisors' observations as well as a guide to the structure of data set including how files link together; and short presentation to IAG and the World Bank team

**Deliverables:** (all require submission on an annual basis)

1. Data and reporting for all enumeration areas will be submitted electronically to the server in batches at regular time intervals (preferably daily) starting from initiation of field activities
2. Final delivery of completed and clean database in STATA, including household, water scheme and institution verification data in all sample locations and survey completion report
3. Short presentation to IAG and World Bank team

### **Task7. Annual Verification Report**

Completion of an Annual Verification Report in accordance with the Verification Protocol (see Annex 4) that will be reviewed and finalized by the World Bank in consultation IAG and MoWI. The report should be concise (approximately 20 – 30 pages in length excluding annexes) and include the following main components:

1. Executive summary of key findings, including the figures for the annual targets achieved for each DLI.
2. Methodology used for verification and analysis of data collected
3. Summary descriptive statistics for each district in the form of tables, figures and accompanying text.
4. Demonstration and assessment of the accuracy of the information reported by the districts using appropriate statistical tests, in accordance with the Verification Protocol

**Deliverables:** (all require submission on an annual basis)

1. Preliminary tables of frequencies and summary statistics in Excel for review by IAG and the World Bank team
2. Draft Verification Report for comment by IAG and the World Bank team
3. Final Verification Report, one version with track-changes and written response to comments and a final, clean version

**Summary table of deliverables**

<b>Task</b>	<b>Deliverables</b>
1. Coordination, logistics and support	- Evidence of permissions, insurances (if necessary), ethical and other permits as needed for implementing data collection activities.
2. Sampling	- Electronic listing of selected districts, villages, and households, including replacement villages and households and unique IDs - Electronic listing of schools (kindergarten, primary and secondary) in the sampled villages, with unique IDs - Stata .do files documenting random selection and sampling procedures
3. Support for data collection using mobile hand-held data capture device	- Transcribing changes to the paper-based data using Microsoft Excel into the Xform compliant forms through the Formhub service. - Translation of forms into Kiswahili - Configuring automated skip logic, validation logic, and open ended or 'other' textual responses that in the inspection/survey formats. - Ensuring that variable names generated by the program correspond clearly and logically to the question labels used in the inspection/survey formats and that a coding strategy is used that maintains consistent, unique identifiers for water points, households and institutional facilities which are linked where appropriate to the unique identifiers used in the Comprehensive Results Report.
4. Training of enumerator teams	- Written training agenda - Enumerator test scores and final list of selected enumerators and supervisors
5. Verification pilot test	- Pilot test data successfully transferred to IAG and World Bank team - A brief report identifying issues encountered (if any) - A final plan and detailed schedule for field data collection indicating dates in each enumeration area and expected schedule of data transmission
6. Verification	- Data and reporting for all enumeration areas will be submitted electronically to the server in batches at regular time intervals (preferably daily) starting from initiation of field activities - Final delivery of completed and clean database in STATA, including household, water scheme and institution verification data in all sample locations and survey completion report - Short presentation to IAG and World Bank team
7. Annual verification report	- Preliminary tables of frequencies and summary statistics in Excel for review by IAG and the World Bank team - Draft Verification Report for comment by IAG and the World Bank team

- Final Verification Report, one version with track-changes and written response to comments and a final, clean version

## 5. PROPOSED PAYMENT SCHEDULE

The Consultant will be paid by the World Bank through using the Bank's "Direct Payment Method". The Ministry of Water and Irrigation provides documentation showing that such expenditures have been incurred at the time a request for payment to the third party is made. The payment will follow the following schedule:

Stage	Description Summary	Payment	Proportion of total amount
<b>INCEPTION</b>	Contract signature	# 1	10.0%
<b>Annual Verification Year 1</b>			
<b>TASKS 1-5</b>	Evidence of permissions, insurances, and approvals	# 2	15.0%
	Electronic listing of selected sample units (villages, households, schools) with replacement units and unique IDs		
	Enumerator training agenda and final list of selected staff		
	Pilot test data and report on adjustments needed/made (if any) using hand-held data capture device		
	Detailed field plan and schedule and short presentation of field plan to IAG and World Bank team		
<b>TASK 6</b>	Completed, clean STATA database	# 3	5.0%
	Survey completion report		
	Short presentation to IAG and World Bank team		
<b>TASK 7</b>	Final Verification Report to be delivered	# 4	10.0%
<b>Annual Verification Year 2</b>			
<b>TASKS 1-5</b>	Evidence of permissions, insurances, and approvals	# 5	15.0%
	Electronic listing of selected sample units (villages, households, schools) with replacement households and unique IDs		
	Enumerator training agenda and final list of selected staff		
	Pilot test data and report on adjustments needed/made (if any) using hand-held data capture device		
	Detailed field plan and schedule and short presentation of field plan to IAG and World Bank team		
<b>TASK 6</b>	Completed, clean STATA database	# 6	5.0%
	Survey completion report		
	Short presentation to IAG and World Bank team		
<b>TASK 7</b>	Final Annual Verification Report	# 7	10.0%
<b>Annual Verification Year 3</b>			
<b>TASKS 1-5</b>	Evidence of permissions, insurances, and approvals	# 8	15.0%
	Electronic listing of selected sample units (villages, households, schools) with replacement households and unique IDs		
	Enumerator training agenda and final list of selected staff		
	Pilot test data and report on adjustments needed/made (if any) using hand-held data capture device		
	Detailed field plan and schedule and short presentation of field plan to IAG and World Bank team		
<b>TASK 6</b>	Completed, clean STATA database	# 9	5.0%
	Survey completion report		
	Short presentation to IAG and World Bank team		
<b>TASK 7</b>	Final Annual Verification Report	# 10	10.0%
<b>Total</b>			100.0%

## **6. METHOD OF SELECTION**

The method used to select the firm/consortium for this assignment will be Quality and Cost Based Selection (QCBS).

## **7. SCHEDULE OF DELIVERY**

The verification field exercise is expected to take place between May and June each year. The firm will deploy multiple teams working in parallel, in order to complete the field exercise within the specified timeframe. A final database and verification report from each annual verification exercise should be submitted no later than 2 weeks after field data collection is completed each year.

## **8. REPORTING LINKAGES AND WORKING ARRANGEMENTS**

The firm will be supervised by the IAG under the Operation. Deliverables and routine reporting will be submitted to the IAG. Additional support will be provided by the SPSC, as needed.

## **9. CLIENT INPUTS**

IAG and the World Bank will provide the following inputs to the firm:

- The Program's Operations Manual
- Inspection/survey formats in Xform compliant forms in English
- Staff training curriculum, materials and field enumerator manual
- Field protocol

## **10. REQUIRED QUALIFICATIONS**

The selected firm is expected to demonstrate the firm's capability to implement the data collection effort as requested by the client and to exhibit quality standards as required by this activity. More specifically, the selected firm shall possess:

- Legal status recognized by the Government of Tanzania, enabling the organization to perform the above-mentioned tasks
- Extensive experience in conducting household surveys in Tanzania in recent years
- Knowledge of local formalities and customs in the implementation of household surveys, including ability to obtain all necessary permissions and permits related to the logistics of survey implementation
- Strong background in the preparation of household listings for random selection
- Good network of experienced interviewers and supervisors, preferably full-time staff
- Background and expertise in both quantitative and qualitative research methodology
- Demonstrated experience in the design, implementation, and analysis of surveys in water supply and sanitation
- Demonstrated experience in sample design, inferential statistics and econometrics

- Ability to clearly communicate, both oral and written, in English and Kiswahili.

The qualifications of the proposed survey implementation team should be clearly stated in the technical proposal and should include the following:

- Survey Manager: A person with at least 10-years of working experience and a proven track record of overseeing field data collection, experience managing large household surveys, developing and coordinating enumerator training, and knowledge of rural Tanzania
- Field Coordinator(s): Support staff with at least 3-5 years of working experience and experience overseeing survey data collection in the field, experience pretesting and piloting inspection/survey formats, and coordinating enumerator training
- Data Analyst: A person with at least 5-years working experience and a proven track record of handling quantitative surveys and analysis
- Formhub /ODK Trainer: A person with experience training data enumerators in the use of Formhub and ODK for data collection. The person should have demonstrated knowledge of account creation, form creation including validation and skip logic, and training.

The following qualifications of professional staff will be key to success:

- Strong capacity and experience in planning and organizing large survey logistics.
- Strong capacity in data management and statistics.
- Strong knowledge of statistical software (Stata or equivalent)
- Knowledge of XForms, Formhub and ODK data collection tools and services.
- Strong interpersonal skills and a team oriented spirit
- Strong commitment to quality

All proposed professional staff must work directly on the activity.

Non-professional staff assigned to the activity may include a reasonable number of additional support staff, as well as enumerators/supervisors. In all cases enumerators and supervisors will be:

- a) Fluent in Kiswahili;
- b) Have good numeracy and literacy skills sufficient for data collection requirements;
- c) Be fit enough to walk around the community and access households with ease;
- d) Have excellent social skills (in particular able to demonstrate a professional and respectful attitude to people of all socio-economic backgrounds and an ability to put people of all ages at ease); and
- e) Have sensitivity to cultural norms and appropriate behaviors (as appropriate to the activity).

Knowledge of water supply and sanitation will be a distinct advantage



## **11. MINIMUM QUALITY CONTROL AND REPORTING STANDARDS**

The following procedures and standards are minimum expectations. Survey firms will be provided with additional guidance material after the contract is awarded.

### **Field data collection**

- Final modifications to the inspection/survey format occur after the field test and no changes to the inspection/survey format thereafter except corrections of errors in questions, filters, or lookups.
- The survey firm will be expected to submit a detailed explanation of key procedures and approaches for data quality control that clearly outlines the roles and responsibilities of enumerators, team leaders and supervisors.
- The survey firm is expected to conduct comprehensive tests of enumerator skills, including mobile data entry, and understanding of the inspection/survey formats and to select a maximum of 20 percent of new applicants (i.e. those who were never previously employed by the firm) for the enumeration. New staff should be selected from top performers (maximum of 80%).
- The firm must make a minimum of 2 attempts to find the survey units and will organize return visits to all units.
- If replacement units are sampled, then the replacement households should be visited only after every reasonable effort has been made to locate the original sample unit.
- The start date and time and end date and time of all inspections must be recorded accurately.
- The firm must conduct return visits to all units where inspections/surveys were determined to be sub-standard.
- All field data must be checked for completeness, quality and consistency in the field on the same day/evening as the enumeration.
- Survey supervisors/team leaders should back-check one unit per EA to verify data collected. This is to ensure the enumerators are not curbstoning – i.e., sitting around making up answers.
- The World Bank team may visit field teams and conduct checks on data entry quality at any time during the field work or data entry. If requested, the survey firm must provide full details of field plan and facilitate the World Bank team members if they wish to undertake back checks, review data quality or assess any other aspect of the quality control processes.
- The survey firm must complete a weekly online progress report for the duration of the field work and data entry. The progress report will consist of weekly supervision files.
- All enumerators should be given a unique code. All new staff should be given a new code. Specifically, numbers will be assigned on a team basis.

## ANNEXES

### **Annex 1: Confidentiality Agreements (Non-binding example)**

One key element in preserving confidentiality is to have all persons involved in the survey sign a non-disclosure statement before entering into employment. Screenshot -1below shows an example of non-disclosure statement for local survey firms (LSF) to use for field staff. The non-disclosure agreement should:

- Restrict the Survey Staff (field and data entry) from discussing responses with colleagues unless expressly authorized by the Supervisor.
- Restrict the Survey Staff from discussing the responses with any intentions of malice.
- Restrict the Survey Staff from discussing the responses with non-survey team members.
- Restrict the Survey Staff to discussing responses only with the Respondent or the Supervisors only when seeking clarification.
- Clearly outline the consequences of non-adherence to the rules of confidentiality.

#### **Screenshot -1: Sample Non-Disclosure Agreement**

##### **SUPERVISOR/ENUMERATOR CONFIDENTIALITY AGREEMENT**

In consideration of my employment by *[Survey Firm]* for the duration of *[the Survey]*, and the compensation now and hereafter paid to me, I hereby agree as follows:

###### **1. RESPONDENTS INFORMATION**

I understand that the *[Survey Firm]* has received, and in the future will receive, from Respondents confidential or proprietary information ("Third Party Information") subject to a duty on the *[Survey Firm]* part to maintain the confidentiality of such information and to use it only for certain limited purposes.

During the term of my employment and thereafter, I will hold Third Party Information (e.g., from Respondents) in the strictest confidence and will not disclose their information to anyone (except in connection with my work for the *Survey Firm*), unless expressly authorized by an executive office *[Survey Manager/Supervisor]* of the Company in writing.

###### **2. RECOGNITION OF SURVEY FIRM'S RIGHTS; NONDISCLOSURE**

At all times during the term of my employment and thereafter, I will hold in strictest confidence and will not disclose, use, lecture upon, or publish in any way any of the *[Survey Firms]* proprietary Information except as such disclosure, use, or publication may be required in connection with my work for the *[Survey Firm]*, or unless an executive officer (Supervisor/Survey Manager) of the *[Survey Firm]* expressly authorizes

such in writing.

The term "Proprietary Information" shall mean trade secrets, confidential knowledge, software code, data or any other information of the *[Survey Firm]*. By way of illustration but not limitation, "Proprietary Information" includes

(a) inventions, mask works, trade secrets, ideas, processes, formulas, source and object codes, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques (hereinafter collectively referred to as "Inventions");and

(b) information regarding plans for research, development, new products, regulatory matters, marketing and selling, business plans, budgets and unpublished financial statements,

licenses, prices and costs, suppliers and customers; and information regarding the skills and compensation of other employees of the *[Survey Firm]*.

### 3. CONSEQUENCES OF NON-ADHERENCE

I understand that violation of respondent confidentiality will result in immediate termination of my employment as a Survey Supervisor/Enumerator. If the survey has been completed, violation of respondent confidentiality can result in legal proceedings against me.

## **Annex2: Phone Specifications**

- Quad-Band GSM cell phone compatible with 850/900/1800/1900 GSM and HSDPA 850/1900 MHz 3G frequencies plus GPRS/EDGE capabilities
- WiFi
- Real GPS capability
- Camera - 2 MP or better

One major consideration to take into account is the battery life of the phone.

**Annex3: Disbursement-Linked Indicator Matrix [Table A3.1 from Project Appraisal Document]**

	<i>Total DLI Allocation (US\$, millions)</i>	<i>As % of Total Financing Amount</i>	<i>DLI Baseline</i>	<i>Timeline for DLI Achievement</i>					
				<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6<sup>7</sup></i>
<b>DLIs 1–2: Sustainable access to improved water services in rural areas</b>									
DLI 1: Number of people with access to an improved water supply	75	23	0	450,000	690,000	690,000	690,000	480,000	
Allocated amount:				11.2	17.3	17.3	17.3	11.9	0
DLI 2: Number of sustainably functioning water points	30	9	31,811	33,611	36,371	39,131	41,891	43,811	
Allocated amount:				5.2	5.5	6.0	6.4	6.9	0
<b>DLIs 3–5: Increased access to improved sanitation services in rural areas</b>									
DLI 3: Number of people with access to an improved sanitation facility	20	6	0	400,000	900,000	900,000	900,000	900,000	
Allocated amount:				2	4.5	4.5	4.5	4.5	0
DLI 4: Number of public primary schools with access to improved sanitation and hygiene facilities	30	9	0	100	350	350	350	350	
Allocated amount:				2	7	7	7	7	0
DLI 5: Number of villages that achieve and sustain community-wide sanitation status	25	7	0	50	350	650	950	1,250	
Allocated amount:				1	5	5	7	7	0
<b>DLIs 6–8: Strengthen the capacity of sector institutions to sustain service delivery in rural areas</b>									
DLI 6: Number of villages with a COWSO with improved O&M capacity for water supply services	110	34	0	550	780	779	779	779	
Allocated amount:				16.4	23.4	23.4	23.4	23.4	0
DLI 7: Number of participating districts submitting accurate and complete sector M&E data	20	6	0	86	86	86	86	86	
Allocated amount:				4	4	4	4	4	0
DLI 8: Agency established and operationalized	20	6	0	Agency established	Agency audit unit and QA&AC mechanism operational	Tech. support implemented in 10 percent of COWSOs	Tech. support implemented in 30 percent of COWSOs	Tech. support implemented in 50 percent of COWSOs	
Allocated amount:				4	4	4	4	4	0

<sup>7</sup> Close out year, no results anticipated for verification.

	<i><b>Total DLI Allocation (US\$, millions)</b></i>	<i><b>As % of Total Financing Amount</b></i>	<i><b>DLI Baseline</b></i>	<i><b>Timeline for DLI Achievement</b></i>					
				<i><b>Year 1</b></i>	<i><b>Year 2</b></i>	<i><b>Year 3</b></i>	<i><b>Year 4</b></i>	<i><b>Year 5</b></i>	<i><b>Year 6</b></i>
<b>Total Financing Allocated:</b>	<b>330</b>	<b>100</b>							

## **Annex4: Verification Protocol**

### **VERIFICATION PROTOCOL**

#### **FOR INDEPENDENT VERIFICATION AGENT**

(To be agreed by IAG and the World Bank)

#### **Sustainable Rural Water Supply and Sanitation Program**

##### **OBJECTIVE**

1. The objective of annual results verification is to verify achievement of targets under the SRWS Operation in order to trigger disbursement of funds in line with the DLI framework.

##### **II. GENERAL ISSUES**

1. The Independent Verification Agent (IVA) designated for the Verification of Results of this PforR is the Internal Auditor General (IAG), which will verify results reported by MoWI in its Comprehensive Results Report (CRR). Any task described in this Protocol should therefore be undertaken in response to the submission of the CRR and a request for results verification by MoWI.
2. IAG plays an important role in conducting audits at the district level and has experience in acting as the IVA for the Tanzania Strengthening Primary Health Care for Results Program (P152736) since 2015. The purpose of this Protocol is to lay out the specific requirements associated with verification of results under the SRWS Operation. Notwithstanding the above, the IVA is free to carry out any additional verification or audit as appropriate in the same geographical locations as those where the SRWS Operation is being implemented.
3. Physical verification of results must be carried out by staff of IAG or by a consulting firm hired for the purpose under the supervision of IAG. Enumerator/ surveyors may be hired on an individual or case-by-case basis or through a firm using a terms of reference that is satisfactory to the Bank.
4. The core team designated for this task will participate in an initial training on the PforR instrument organized by the World Bank team. Any additional staff hired during the assignment must receive appropriate training.
5. Verification will be required against eight indicators. Unless otherwise specified, the terms of each subsequent section of the following Protocol apply to all eight indicators.

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification Entity	Procedure <sup>9</sup>
1	DLI 1: Number of people with access to an improved water supply	<p>Payments will be made in proportion to achievements. The water points must be constructed, extended, or rehabilitated under the Program to be considered for disbursement. People must be served by a functioning water point that is new, extended, or rehabilitated after the beginning of the Program period and which meets the eligibility criteria, that will be defined in the OM. Any water point which is classified as nonfunctional at the baseline is eligible for rehabilitation under the Program.</p> <p>A person will be eligible to count toward the DLI 1 target if the following applies to</p>	MoWI	IVA	Eligibility criteria will be checked through desk-based review of records and meeting minutes. The IVA will make phone calls to all COWSO Chairpersons and Treasurers of the submitted water schemes, for verbal verification of the functioning of all water points in a village as reported by the CDMT. Physical visits to villages will take place on a random basis to verify CDMT and verbal data by sampling in each scheme (90 percent confidence interval). Population served by each water point will be calculated by GIS analysis of GoT census data. If verification finds that less than 80 percent of the population reported with access to water actually have access, the district will not be eligible to receive any

<sup>8</sup> Additional definitions are given below.

<sup>9</sup> Actual sampling methodology and size may be subject to modification.



#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
		<p>the associated improved water point: (a) a registered COWSO is managing the water scheme and community has been consulted during the design phase; (b) a cost-reflective tariff is charged for water supplied by the scheme; (c) quality assurance and quality control procedures have been followed and the designated offices have approved the scheme design and quality of construction (this includes social and environmental safeguards); (d) At least one of the three key COWSO positions should be female; (e) the water supply scheme includes a simple operational chlorination system (hand pumps are excepted); and (f) social and environmental safeguards guidelines must have been followed.</p> <p>A functioning water point that is verified as new, extended, or rehabilitated in one</p>			<p>disbursement for those results under DLI 1 in the current Program period. However, the district may then resubmit the same results for verification in the following year.</p>

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
		<p>Program period which subsequently falls into disrepair will not be eligible for resubmission in a subsequent Program period for additional disbursement under DLI 1.</p> <p><b>Eligible water supply typologies:</b> A household connection, public tap or standpipe connection to a piped water supply system, borehole or protected dug well with a hand pump, protected spring or rainwater tank. A water point must be within 30 minutes roundtrip collection time (a 1,000 m radius) of the population served and a user is able to fill a 20 liter bucket in less than 1 minute. Upon development of the water source, the water quality must have been certified as fit for human consumption.</p>			

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
		The total allocation to this DLI, targets, and unit payments are subject to adjustment at MTR.			
	DLI 2: Number of sustainably functioning water points	<p>Payments will be made in proportion to achievements. A water point must be a functioning water point, serve a population, and meet the eligibility criteria. The water point has not been submitted under DLI 1 in the same Program period.</p> <p>A sustainably functioning water point is eligible for disbursement in each Program period. The total allocation to this DLI target is subject to adjustment at MTR.</p> <p><b>Eligible water supply typologies:</b> A household connection; public tap or standpipe connection to a piped water supply system; borehole or protected dug well with a handpump; protected spring or rainwater tank; a water point must be within 30 minutes roundtrip collection time (1,000 m radius) of the population served</p>	MoWI	IVA	Eligibility criteria will be assessed through desk-based review and physical sampling. The IVA will make phone calls to all COWSO chairpersons and treasurers, for verbal verification of functioning of all water points in a village as reported by the CDMT. Physical visits to villages will take place on a random basis to verify CDMT and verbal data. The sample size for verbal verification would be approximately 20 villages per district, covering an average of 7 water points in each village equivalent to 140 water points per district. GIS analysis of census data will be used to verify that water points serve a population.

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification Entity	Procedure <sup>9</sup>
		and a user is able to fill a 20 liter bucket in less than 2 minutes. Upon development of the water source, the water quality must have been certified as fit for human consumption.			
2	DLI 3: Number of people with access to an improved sanitation facility	Payments will be made in proportion to achievements. An improved sanitation facility at household level is defined as a toilet with a washable floor, a lockable door, and a superstructure that provide privacy to the user (should not be seen while inside the facility) with no holes other than the drop hole.	MoHCDGEC	IVA	Verification to be representative at the district level—baseline average coverage will be 12 percent. Sampling through physical inspection of no less than 2 percent of households per sampled village. DLIs 3 and 5 will be independently sampled, but samples may overlap. If verification finds that less than 80 percent of the households reported with access to an improved sanitation facility actually have access, the district will not be eligible to receive any disbursement for those results under DLI 3 in the current Program period; however, the district may then resubmit the same results for verification in a

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
					subsequent Program period.
	DLI 4: Number of public primary schools with access to improved sanitation and hygiene facilities	<p>Payments will be made in proportion to the achievements. There is no payment for partial achievement. A public primary school must have improved sanitation and handwashing facilities.</p> <p>Improved sanitation facilities in schools includes the following features: pupil/drop hole ratio: maximum 1:40 for girls and 1:50 for boys (a special ratio for schools with a student enrolment above 1,500 is provided in the OM); all schools have at least one handwashing facility for every 100 pupils; each school has separate latrine blocks for girls and boys; segregated block of latrines for teachers; latrines are kept clean and in good condition; the task of cleaning or maintaining sanitary facilities should be shared equally among girls and boys; there</p>	MoEST	IVA	The IVA shall carry out a desk review of reports and data maintained by the district and the EMIS; physical inspection of all facilities in 100 percent of schools in sampled villages.

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification Entity	Procedure <sup>9</sup>
		is at least one drop hole available and suitable for pupils with disabilities; the schools have a designated and active menstrual counselor (teacher). In schools without a female teacher an appropriate female parent or community health worker should be appointed to carry out this role.			
	DLI 5: Number of villages that achieve and sustain community-wide sanitation status	<p>Payments will be made in proportion to the achievements. Each village targeted will pass or fail in a given year. There is no payment for partial achievement; however, villages can be resubmitted each year until all indicators are reached and CWS status is achieved. Communities which already meet the CWS criteria at the start of the Program will only be eligible for sustaining CWS.</p> <p>A village that has been verified as having achieved CWS status in a previous year/period will be considered to have sustained CWS status in the current period</p>	MoHCDGEC	IVA	<p>The IVA shall carry out (a) a desk review of reports and data maintained by the district and the CDMT and (b) physical verification of a random sample of no less than 5 percent of villages to confirm CWS status. Physical inspection of all facilities in 100 percent of schools in sampled villages. Random inspection of no less than 5 percent of households in sampled villages to check coverage of domestic sanitation and handwashing facilities.</p> <p>DLIs 3, 4, and 5 will be independently sampled, but samples may overlap.</p>

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
		<p>if all schools in the village have improved sanitation and handwashing facilities.</p> <p>A village is considered to have achieved CWS status if the village is free of open defecation, at least 50 percent of households in the village have access to an improved sanitation facility, at least 25 percent of households in the village have access to a handwashing facility, and all public primary and secondary schools in the village have improved sanitation and handwashing facilities.</p>			
3	DLI 6: Number of villages with a COWSO with improved O&M capacity for water supply services	<p>The COWSO Level I and II criteria for improved O&amp;M capacity for water supply services are as follows:-</p> <p>Level I(all four criteria must be achieved):</p> <p>1. Be registered, have an active management team</p>	MoWI (CDMT)	IVA	Level I: Review of COWSO/best modal registration records at the district level and CDMT data. Phone calls to COWSO/best modal chairperson and treasurer. The biannual community of practice meeting will be verified through review of meeting minutes and outputs. Review of cash book, tariff, and

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
		<p>2. At least one of the three key COWSO/best modal positions might be female</p> <p>3. Participate in at least one of the biannual district-level community of practice meetings</p> <p>4. Have a well-maintained cash book and an Operating Cost Ratio of <math>\leq 1</math> (cost-reflective tariff)</p> <p>Level II (highest level):</p> <p>5. Achieved Level I</p> <p>6. Participate in at least two of the biannual district-level community of practice meetings</p> <p>7. The water scheme has a functioning chlorination system</p> <p>8. Has backstopping mechanism for maintenance and repair and passed an annual assessment</p>			<p>COWSO/best modal bank statements. The records will be collected during the biannual community of practice meeting at the district level.</p> <p>Level II: Review of COWSO/best modal registration records at the district level and CDMT data. Phone calls to COWSO/best modal chairperson and treasurer. The biannual community of practice meeting will be verified through review of meeting minutes and outputs. Review of cash book, tariff, and COWSO/best modal bank statements. The records will be collected during the biannual community of practice meeting at the district level. Review of backstopping mechanism assessment visit checklist and meeting minutes. Background check of all third-party service providers.</p>



#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
	DLI: 7: Number of participating Districts submitting accurate and complete sector M&E data	<p>Payments will be made in proportion to the achievements. In each district, villages must report accurate and complete water and sanitation M&amp;E data as per the following:</p> <ol style="list-style-type: none"> <li>1. Timely: The Districts need to submit reports on time.</li> <li>2. Accurate: The reports need to adhere to the accuracy criterion.</li> <li>3. Complete: The reports need to adhere to the completeness criterion.</li> </ol>	MoWI, MoHCDGEC	IVA	Assessment against performance criteria for water supply and sanitation M&E data accuracy and completeness.
	DLI 8: Agency established and operationalized	<p>Payments will be made in proportion to the achievements. Agency established and operational against the following sequential milestones:</p> <ol style="list-style-type: none"> <li>1. Agency established</li> <li>2. Agency audit unit and quality assurance and quality control mechanism operational</li> </ol>	MoWI, MoHCDGEC	IVA	<p>Review of documentation relating to the establishment of the Agency including the resource plan, budget, expenditure program, and tech. support agreement</p> <p>Physical inspection of a sample of local Agency offices and focus group discussions with staff to assess outputs</p>

#	DLI	Definition <sup>8</sup> / Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data Source/ Agency	Verification on Entity	Procedure <sup>9</sup>
		3. Tech. support agreement signed and implemented with 10 percent of COWSOs/any best modal  4. Tech. support agreement signed and implemented with 30 percent of COWSOs/any best modal  5. Tech. support agreement signed and implemented with 50 percent of COWSOs/any best modal			of the resource and expenditure plans

### **III. METHODOLOGY**

1. Verification of DLIs 6, 7 and 9 requires review of 100% of the results reported and therefore does not use a sampling approach. DLI 8 requires 100% review of documentation.
2. A sampling approach will be taken for DLIs 1, 2, 3, 4 and 5. DLI 8 will require a sampling approach for physical inspections. Verification will use a statistical sampling approach with stratification at the water scheme level for DLI 1, village level for DLI 2, district level for DLI 3, village level for DLI 4 and 5. Physical inspections for DLI 8 will be stratified at the National level. This approach will ensure that resultant findings are representative at the level at which each DLI is stratified. As such, the average non-compliance found in the sample population can be projected to the population of non-sampled units. Disbursements will be subject to pro-rata reductions if the verification exercise detects non-compliance.
3. The sampling method for DLIs will include LQAS, attribute / acceptance sampling whereby sampled units (households, water connections) either do or do not deviate from reported compliance. The result of each test will be a binary indication of 'yes, matches reported list' or 'no, does not match reported list'.
4. The sampling frame for verification of the DLIs will be the universe of outputs reported by the Districts.
5. Additional sampling units will be selected at the time of initial selection in order to accommodate the possible need for replacement of units in the event the original unit is unable to participate in the verification for whatever reason.
6. GIS analysis will be carried out against the latest census data set to determine population served for DLI 1 and to confirm that a population is served for DLI 2.
7. Any further details on verification methodology and the related definitions for the results to be verified (section VIII) will be provided during training.

### **IV. DATA SOURCES AND DATA COLLECTION METHODS**

1. Verification will be carried out using several sources of data and data collection methods:
  - a. Secondary documentation and data review, including but not limited to the following:
    - i. Technical designs, contracts, commissioning certificates, work completion acceptance minutes, quality assurance checks, results of water quality tests undertaken
    - ii. Meeting minutes and decision letters;
    - iii. COWSO/best modal Cash books, bank statements and registration records
    - iv. COWSO/best modal Backstopping mechanism assessment
    - v. Documentation relating to the establishment of the Agency including the resource plan, budget, expenditure program, and technical support agreement
    - vi. gazetted regulations and training records and certificates of environmental inspectors
  - b. Village survey of water points
  - c. Household sanitation facility physical inspection and village transect walk

- d. School sanitation physical inspection
  - e. Supervision and routine monitoring reports
2. The tools for data collection will be developed by the IAG with the support of the SPSC and submitted to the Bank for approval.

## **V. FIELD PROTOCOLS**

1. Physical verification must be carried out by consultant enumerator/ surveyors hired for the purpose and overseen by IAG staff. Enumerator/ surveyors will be hired through contracting of a firm using ToRs acceptable under World Bank procurement guidelines.
2. As needed, the firm will obtain all necessary permissions for implementing the data collection activities and will adhere to local formalities and obtain any required permits related to logistics of survey implementation, as well as health and accident insurance, salary and taxes for all enumerators and supervisors.
3. All data collection forms and instruments will be provided by the World Bank in English and will be translated into Kiswahili. Paper forms will be translated into digital format and downloaded onto a handheld data entry application for digital data collection in the field.
4. Enumerators will carry information sheets in the local language that can be provided to household participants invited to participate in the verification. Personal invitations to each household will entail a visit by a field team member, namely a local enumerator who will hold a valid identification card, and will explain both verbally and using a written information sheet the background to the activity and invite the household to participate.
5. Willing participants will be asked to provide verbal consent to confirm they understand the purpose of the activity, that the activity will involve the collection of data for analysis, that their personal data will remain confidential, and that they are able to freely withdraw from the activity at any time in which case their personal data will be removed from future analysis but data that has been analyzed in aggregate will remain in the data set.
6. Consent will be indicated through verbal agreement. Both oral consent from children under 16 years with or without physical disability, and oral consent from an accompanying adult relative or guardian living within the household, would be required prior to inclusion of children under 16 years as respondents.
7. Enumerators/ surveyors will participate in a 4-day training and 2-day field pilot session to cover all required field protocols. After training and before the field pilot the survey firm is expected to conduct comprehensive tests of enumerator skills, including knowledge of field protocols. Only those top performing enumerators should make the final selection (maximum top 80%). No more than 20% of new applicants (i.e. those who were never previously employed by the firm) should be selected for the enumeration.
8. Sampling units will be randomly selected using complete, updated listing of outputs provided by the Districts based upon the defined sampling strategy provided by IAG and the World Bank. This will include:
  - a. random selection of designated units to sample;

- b. incorporation of a replacement group of units in the event the original unit cannot be sampled for whatever reason;
  - c. unique coding strategy to ensure each unit has a unique code for data entry and identification which is linked where appropriate to the unique coding used in the Consolidated Results Report; and
  - d. Replicable and fully documented method of random selection.
9. Prior to the start of data collection a pilot will be carried out in two rural enumeration areas (villages), the locations of which will be selected by the World Bank, including evidence that:
    - a. Field teams correctly identify water points and households in the selected pilot clusters using mobile hand-held devices for data enumeration
    - b. Data captured on hand-held devices is automatically uploaded to a server
    - c. Field team members understand their roles
    - d. Field team members understand, and correctly follow interviewing protocols in all sampled units (water points, households, schools)
    - e. Data from all sampled units (water points, households, schools) are successfully transferred to tab-delimited format readable in STATA
  10. Indicators of successful implementation of data collection in all planned/substitute sample locations, include the following:
    - a. Complete dataset containing all of data coded from the cluster
    - b. Electronic supervisor's log that documents: Dates of arrival and completion of the cluster/PSU, any notable difficulties or deviations from the standard field plan, record of each substitution of households that may have been required, including the reasons for substitution.
  11. The enumerators/surveyors must make a minimum of 2 attempts to find the survey units and will organize return visits to all units. All call-back visits should be fully recorded along with reasons for being unable to visit units, in the format provided.
  12. If replacement units are sampled, then the replacement units should be visited only after every reasonable effort has been made to locate the original sample units.
  13. The start date and time and end date and time of all household interviews must be recorded accurately.
  14. The firm must conduct return visits to all units where physical inspections/surveys were determined to be sub-standard.
  15. All field data collected must be checked for completeness, quality and consistency in the field on the same day/evening as the enumeration.
  16. Survey supervisors/team leaders will back-check one unit per EA to verify data collected. This is to ensure the enumerators are not curbstoning – i.e., sitting around making up answers.
  17. The World Bank team may visit field teams and conduct checks on data entry quality at any time during the field work or data entry. If requested, the survey firm must provide full details of field plan and facilitate the World Bank team members if they wish to undertake back checks, review data quality or assess any other aspect of the quality control processes.

18. The survey firm must complete a weekly online progress report for the duration of the field work and data entry. The progress report will consist of weekly supervision files.
19. All enumerators should be given a unique code. All new staff should be given a new code. Specifically, numbers will be assigned on a team basis.

## **VI. RESPONSIBILITY OF THE SURVEY FIRM**

### ***Staff Qualifications***

1. In all cases enumerators will be:
  - f) Fluent in Kiswahili;
  - g) Have good numeracy and literacy skills sufficient for data collection requirements;
  - h) Be fit enough to walk around community and access households with ease;
  - i) Have excellent social skills (in particular able to demonstrate a professional and respectful attitude to people of all socio-economic backgrounds and an ability to put people of all ages at ease); and
  - j) Have sensitivity to cultural norms and appropriate behaviors (as appropriate to the area of verification).
2. Enumerator knowledge of the following would also be a distinct advantage:
  - a) Sanitation conditions in the community (communal sanitation facilities, open defecation, gross contamination of water bodies / fields with wastewater); and
  - b) Water points (access, quality and reliability).

### ***Training of Enumerators***

3. Members of the core team should address the following during training of enumerators in addition to the technical content and details of the inspection/survey format:
  - a) Description of the IVA role and purpose of verification;
  - b) Overview of each tool to be used;
  - c) Expectations of hired personnel in accordance with their terms of reference with specific emphasis on their ethical behavioral expectations, particularly with regard to obtaining consent, inclusion of vulnerable people (e.g. children and people with disability), means of evaluating that participants are happy to continue with the surveys once recruited and participating;
  - d) Content to be captured and estimated time to collect the data using each method through:
    - Review of sample unit selection methods; explaining the random selection process and importance of adhering to it;
    - Step by step review of the inspection/survey format to confirm that the questions are appropriate and understood by the enumerators and understandable to the local population;
    - Review of informed consent;
    - Mock role-playing of participant and enumerator interactions; and
    - Testing of technical understanding through use of photographs and examples
  - e) Etiquette during participant engagement with regards to the management of participant expectations;
  - f) Training on use of mobile data collection equipment; and

- g) Role-play of sample unit selection, informed consent, survey administration, and log of visit outcome.

### ***Enumerator Training Manual***

- 4. The roles of the enumerators will be outlined in a set of instructions explained and given to each enumerator by the IVA. The will include instructions on:
  - a) communities which have been selected for verification;
  - b) identifying water points and households;
  - c) list of additional procedures for data collection, including all survey tools and process for delivering all tools;
  - d) suggested ways to introduce him/ herself to the household members and ask permission to carry out the survey; and
  - e) Suggested prompts to support participant interaction with the survey tools.

## **VII. DATA MANAGEMENT**

- 1. *Document version control, naming, coding approaches*** – The IVA will establish a naming convention for data files. These will be reviewed and agreed with the Bank.
- 2. *Data entry*** – Data entry will be through mobile hand-held data collection devices.
- 3. *Data quality control*** – The data quality control and reliability procedures include the following:
  - a) The name of the enumerator or field investigator who collected the information and their supervisor are stated on each inspection/survey format
  - b) During data collection in the field enumerators check each answer for logic and if unclear verify the answer
  - c) During data collection in the field both the enumerator and the supervisor check all the collected research formats for inconsistencies and gaps on a regular basis (daily or weekly as appropriate). If consistencies or gaps are found the field investigator/enumerator tries to fill the gaps (by returning to the field) or verifies the information
  - d) Both the field enumerator and the supervisor sign the research format after checking the format for inconsistencies and gaps, stating that the information is correct
- 4. *Data storage and sharing*** – The IVA will propose the approach to data storage to ensure appropriate National standards of data protection are applied and are acceptable to the Bank.

## **Annex 5: Definitions**

<b>DLI</b>	<b>Term</b>	<b>Definition</b>
<b>DLI 1.</b>	Improved water supply	<p>Eligible water supply typologies:</p> <ul style="list-style-type: none"> <li>• A household connection</li> <li>• Public tap or standpipe connection to a piped water supply system</li> <li>• Borehole or protected dug well with a handpump</li> <li>• Protected spring or rainwater tank</li> </ul> <p>Water points must be within a 1,000 m radius of the population served. A user is able to fill a 20 litre bucket in less than 2 minutes. Upon development of the water source, the water quality must have been certified as fit for human consumption according to the National water quality standards (TZS 789:2008).</p>
	COWSO registration	A water point must be managed by a registered COWSO and at least one of the three key COWSO positions (Chairperson, Treasurer, Secretary) must be held by a woman
	Community participation	The community must have been consulted during the design phase
	Cost-reflective tariff	A 'cost reflective tariff' is a tariff which gives an Operating Cost Ratio of $\leq 1$ . The Operating Cost Ratio is calculated by dividing the operating costs by the revenue from tariffs. The operating costs include the costs for minor (but not major) repairs, as defined in the Engineering Design Manual. Operating Cost Ratio is applied at the water supply scheme level.
	Quality assurance	Quality assurance will follow the procedures developed jointly by the SPSC and MoWI.
	Simple operational chlorination system	A system that is in working order, which is designed to chlorinate water through in line dosing (hand pumps do not require a chlorination system)
	Water supply scheme	<p>A 'water supply scheme' is one of the following:</p> <ul style="list-style-type: none"> <li>• All water points that are connected to the same water source through a piped distribution network</li> </ul> <p>All non-networked water points in a village (e.g. hand pumps)</p>
	Social and environmental Safeguards	<p>Comply with social and environmental safeguards. This involves:</p> <ul style="list-style-type: none"> <li>- Project screened and Environmental and Social Impact Assessment (ESIA) undertaken before commencement or financing of a moderate Risk project as per the Environmental Impact Assessment and Audit Regulations (2005).</li> </ul>



		Guidelines on land acquisition/allocation and voluntary land donations followed.
<b>DLI 2.</b>	Functioning water point	<p>Eligible water supply typologies:</p> <ul style="list-style-type: none"> <li>• Household connection to a piped water supply system</li> <li>• Public tap or standpipe connection to a piped water supply system</li> <li>• Borehole or protected dug well with a handpump</li> <li>• Protected spring or a rainwater tank</li> </ul> <p>The water point must serve a population and must be located within a 1,000 meters radius of the population served as determined by GIS measurement. A user must be able to fill a 20 litre bucket in less than 2 minutes. There is no requirement for the water point to be in a good state of repair.</p>
<b>DLI 3.</b>	Improved sanitation facility	<p>An improved sanitation facility at household level is defined as one of the following toilet types:</p> <ul style="list-style-type: none"> <li>• Flush and pour flush toilets or latrines connected to septic tanks or pits</li> <li>• Ventilated improved pit latrines</li> <li>• Pit latrines with slabs</li> <li>• Composting toilets including twin pit latrines</li> </ul> <p>The facility must have:</p> <ul style="list-style-type: none"> <li>• A washable floor without cracks that openly exposes human faeces from the pit.</li> <li>• Mud/earth is not acceptable in a radius of 30cm around the drophole itself.</li> <li>• A lockable door and a superstructure that provide privacy to the user.</li> </ul> <p>No leaks or faeces/sludge overflowing the containment structure</p>
<b>DLI 4.</b>	Improved sanitation and hygiene facilities in schools	<p>Improved sanitation facilities in schools must include the following features:</p> <ul style="list-style-type: none"> <li>• All latrines have washable floors (mud/earth is not acceptable) and lockable doors to ensure privacy</li> <li>• No leaks or faeces/sludge overflowing the/ containment structure</li> <li>• Pupil/Drop hole Ratios: Maximum 1:40 for girls and 1:50 for boys (if a urinal is provided). In schools with an enrolment above 1,500 students, a student to drop hole ratio of one drop hole per 50 girls and one drop hole per 65 for boys can be accepted if it is considered impractical to meet the 40 girls/50 boys guideline. If there is more than one session per day at a school then the ratio will be applied to the maximum pupil numbers per session</li> <li>• Each school must have separate latrine blocks for girls and boys. These blocks have a privacy wall in front of the doors</li> <li>• A separate, segregated block of latrines exists for teachers</li> <li>• Latrines/ urinals are kept clean (free from excreta, stagnant urine and flies)</li> <li>• The task of cleaning or maintaining sanitary facilities should be shared equally among girls and boys (if there is no hired cleaner/care taker)</li> <li>• There is at least one drop hole available and suitable for pupils with disabilities, preferably one for boys and one for girls and these latrines should meet minimum requirements for accessibility</li> <li>• The school has a designated and active menstrual counselor (a female teacher). In schools without a female teacher an appropriate female</li> </ul>

		<p>parent or community health worker should be appointed to carry out this role.</p> <p>All schools must have at least one hand washing facility for every 100 pupils</p>
	Separate facilities	<p>Separate facilities are defined as individual, or blocks of, latrines which are fully private; having as a minimum separate entrances into each facility and full height partitions between adjacent facilities. A single building divided into male and female sections is acceptable as long as these privacy requirements are met.</p>
	Hand washing facility	<p>A hand washing facility is defined as a container for washing hands in, with soap or a soap substitute (detergent or ash) and water available in close proximity to the container.</p> <p>There is no water quality requirement for hand washing</p>
<b>DLI 5.</b>	Community Wide Sanitation	<p>A village is considered to have achieved CWS status if:</p> <ul style="list-style-type: none"> <li>• The village is free of open defecation (no human faeces visible on the ground within the village)</li> <li>• At least 50 percent of households in the village have access to an improved sanitation facility</li> <li>• At least 25 percent of households in the village have access to a hand washing facility</li> </ul> <p>All public primary and secondary schools on the village have improved sanitation and hand washing facilities</p>
<b>DLI 6.</b>	Improved O&M capacity for water supply services	<p>The COWSO Level I and II criteria for improved O&amp;M capacity for water supply services are as follows:</p> <p>Level I(all four criteria must be achieved):</p> <ol style="list-style-type: none"> <li>1. Be registered, have an active management team</li> <li>2. One of the three key COWSO/best modal positions must be female</li> <li>3. Participate at least one of the bi-annual district-level community of practice meetings</li> <li>4. Have a well-maintained cash book and an Operating Cost Ratio of <math>\leq 1</math> (cost reflective tariff)</li> </ol> <p>Level II (highest level):</p> <ol style="list-style-type: none"> <li>5. Achieved Level I</li> <li>6. The water scheme has a functioning chlorination system</li> <li>7. Participates in two bi-annual district-level community of practice meetings</li> </ol> <p>Has Backstopping Mechanism for maintenance and repair, and passed an annual assessment</p>
	Backstopping mechanism	<p>A backstopping mechanism is a contract for O&amp;M services established by COWSOs individually or in clusters with either:</p> <ul style="list-style-type: none"> <li>• Private sector service providers</li> <li>• Urban utilities</li> </ul> <p>Water trusts that can provide technical and managerial support to each COWSO</p>
<b>DLI 7.</b>	Timely, accurate and complete sector M&E data	<p>Timely, accurate and complete sector M&amp;E data is data that meets the following criteria:</p> <ul style="list-style-type: none"> <li>• Timely: In each district 75% of COWSOs/any best modal or villages have submitted information on time, rising to 80% in year 2, 90% in year 3, 95% in year 4 and 98% in year 5.</li> <li>• Accurate: 70% of the data reported is accurate (missing data is not</li> </ul>

		<p>considered when assigning a score), rising to 75% in year 2, 80% in year 3, 85% in year 4 and 88% in year 5.</p> <p>Complete: All of the data that the Districts are required to report on, has been included in the report.</p>
<b>DLI 8.</b>	Technical support agreement	<p>The technical support agreement between the Agency and COWSO is a technical backstopping agreement that can take the following forms:</p> <ul style="list-style-type: none"> <li>• An agreement that supports at least the maintenance (repairs/replacements) of a rural water scheme, and (optionally) operation of the scheme</li> <li>• The agreement can be with one COWSO/any best modal or a cluster of COWSOs/any best modal, in the same district or cutting across district boundaries</li> </ul> <p>The works can be executed by a public entity, an urban water utility, a COWSO trust, the Agency or a private service provider and the agreement can run from 1-20 years.</p>

## Annex 6: Geographical Scope

The 17 participating regions and 86 districts are listed below.

No.	REGION	DISTRICTS COUNCIL	No.	REGION	DISTRICTS COUNCIL	No.	REGION	DISTRICTS COUNCIL
1	Geita	Chato	31	Manyara	Babati	62	Singida	Singida
2		Mbogwe	32		Hanang	63		Mkalama
3		Geita	33		Simanjiro	64		Manyoni
4		Bukombe	34		Mbulu	65		Itigi
5		Nyang'hwale	35		Kiteto	66		Iramba
6	Iringa	Iringa	36	Mwanza	Buchosa	67		Ikungi
7		Kilolo	37		Kwimba	68		Shinyanga
8		Mufindi	38		Magu	69	Kishapu	
9	Kagera	Bukoba	39		Misungwi	70	Shinyanga	
10		Karagwe	40		Sengerema	71	Msalala	
11		Biharamulo	41	Ukerewe	72	Simiyu	Maswa	
12		Ngara	42	Mara	Rorya		73	Bariadi
13		Muleba	43		Musoma		74	Busega
14		Kyerwa	44		Bunda		75	Meatu
15		Missenyi	45		Serengeti		76	Itilima
16	Katavi	Mlele	46		Tarime	77	Songwe	Ileje
17		Mpanda	47	Butiama	78	Mbozi		
18		Nsimbo	48	Mtwara	Masasi	79		Momba
19		Mpimbwe	49		Mtwara	80		Songwe
20	Kigoma	Buhigwe	50		Nanyumbu	81	Tabora	Tabora (Uyui)
21		Kakonko	51	Newala	82	Nzega		
22		Kasulu	52	Tandahimba	83	Urambo		
23		Kibondo	53	Ruvuma	Mbinga	84		Igunga
24		Kigoma	54		Namtumbo	85		Kaliua
25		Uvinza	55		Songea	86		Sikonge
26	Lindi	Kilwa	56		Nyasa			
27		Lindi	57		Tunduru			
28		Liwale	58		Madaba			
29		Nachingwea	59	Rukwa	Kalambo			
30		Ruangwa	60		Sumbawanga			
		61	Nkasi					