ERITREA

Water, Sanitation and Hygiene Bottleneck Analysis

unicef | for every child

Eritrea Water, Sanitation and Hygiene: Bottleneck Analysis Report

Asmara, Eritrea

Contents

List of tables

List of figures

Acronyms

ASWA	Accelerated Sanitation and Water for All
BAT	bottleneck analysis tool
CLTS	community-led total sanitation
EPHS	Eritrea Population and Health Survey, 2010
MoE	Ministry of Education
MoF	Ministry of Finance
MoH	Ministry of Health
MoLG	Ministry of Local Government
MoLWE	Ministry of Land, Water and Environment
MoND	Ministry of National Development
MoTI	Ministry of Trade and Industry
ODF	open-defecation free
WASH	water, sanitation and hygiene
WASH-BAT	Water, Sanitation and Hygiene Bottleneck Analysis Tool
WRD	Water Resources Department

Acknowledgements

UNICEF Eritrea, in collaboration with Ministry of Land Water and Environment, Ministry of Health and Ministry of Education, organized the WASH bottleneck analysis workshop. We are grateful for the contribution of the following:

1. Mr Mebrahtu Iyassu, Director General – Water Resources Department, Ministry of Land Water and Environment
2. Dr Zumui Alemu, Director, Environmental Health Division, Ministry of Health
3. Mr Abraham Tekle, Director, monitoring and quality assurance, Ministry of Education
4. Dr David Tsetse – WASH Manager, UNICEF Eritrea
5. Yirgalem Solomon – WASH Specialist, UNICEF Eritrea
6. Hanna Berhe – WASH Officer, UNICEF Eritrea
7. Yohannes Debretsion – WASH Consultant, UNICEF Eritrea
8. Sahr Kemoh – WASH Specialist, UNICEF Regional Office

Technical input and guidance were provided by Dr Guy Hutton – Senior WASH Adviser, UNICEF Headquarters.

We extend our gratitude to all participants of the WASH bottleneck analysis workshop.

Executive Summary

Eritrea is an East African country with a population of just under 3.8 million, of which 65 per cent lives in rural areas. The Eritrea Population and Health Survey 2010 (EPHS) reported that between 1995 and 2010 Eritrea substantially reduced its under-five mortality rate from 136 deaths per 1,000 live births to 63, and its maternal mortality ratio from 998 maternal deaths per 100,000 live births to 485 (NSO and Fafo, 2013). In 2010 only 3.5 per cent of the rural population had access to an improved sanitation facility with over 90 per cent practising open defecation (NSO and Fafo, 2013).

However, 668 communities, representing almost 25 per cent of the 2,700 communities in rural Eritrea, have been declared open-defecation free (ODF) since the country's community-led total sanitation (CLTS) programme began in earnest in 2009. Just less than 50 per cent of the rural population in the country has access to an improved water source while, nationally, access is just under 58 per cent (NSO and Fafo, 2013).

The Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH-BAT) is an analysis and monitoring process to assess the enabling environment[1] for the delivery of water, sanitation and hygiene (WASH). It identifies the barriers to sustainable and efficient services at national, regional, service-provider and community levels and activities to remove these barriers, and tracks progress over time. WASH-BAT should preferably be used in a workshop setting of dialogue and participation.

Such a workshop was held (17–19 April 2018) to assess the enabling environment of the WASH sector in Eritrea. It was attended by 60 participants from the WASH sector. They analysed five subsectors at the national level: (1) rural sanitation services; (2) rural water supply; (3) urban water supply; (4) urban sanitation services; and (5) institutions.

Rural sanitation services

The Rural Sanitation Working Group identified a total of 21 criteria and evaluated the status to which each had progressed or had achieved. Seven criteria were awarded a red status, which indicates that no progress in fulfilling those criteria had been made. The main bottlenecks in delivering rural sanitation services were identified as:

1. Absence of a reviewed and updated rural sanitation policy document
2. Lack of clearly stated institutional roles and accountability
3. Poor service delivery model
4. Insufficient and inconsistent resources (sanitary products and services)
5. Insufficient fund allocation
6. A weak monitoring and feedback system
7. A shortage of skilled human resources.

The underlying causes of these major bottlenecks are insufficient budget and weak institutional and human resources capacity; absence of clearly defined and written mandates; ineffectiveness of the rural sanitation service delivery mechanism; absence of sanitation marketing; shortage of budget for a sensitization campaign; absence of well-communicated

1 An enabling environment is a set of interrelated sector functions that impact the capacity of governments and public and private partners to engage in WASH service delivery development processes in a sustained and effective manner. In the context of UNICEF's work, an enabling environment for WASH is one that creates the conditions for a country to have sustainable, at-scale WASH services that will facilitate achievement of Universal Access for All in WASH with progressive reduction of inequality.

monitoring tools; and uneven distribution and allocation of public health professionals.

Seven high priority activities – one from each sector building block – have been identified for further costing and allocation of resources. The recommended bottleneck removal activities are:

1. Update the existing 2007 rural sanitation policy
2. Prepare guidelines that clearly defines the role and responsibility of stakeholders at all levels
3. Issue regulations for private-sector participation
4. Provide access to sanitation materials for rural communities
5. Advocate rural sanitation to secure decision-makers' commitment to timely and more funding
6. Strengthen the monitoring and feedback system at all levels
7. Provide training for professionals in diversified and relevant fields.

The total financing gap to implement the recommended activities to remove rural sanitation service delivery bottlenecks is about USD 8.1 million.

Rural water supply

The Rural Water Working Group identified 44 criteria from four building blocks and five governance functions. Ten criteria were assessed as having shown no progress and were awarded a red status indicating them as priority criteria for further consideration in the bottleneck analysis. The bottlenecks to progress in rural water supply services were identified as:

1. Ineffectiveness of institutions to fully operationalize their roles and responsibilities
2. Absence of a well-functioning coordinating body
3. A poor rural water supply service delivery model that does not include a range of options, particularly private-sector participation and a mechanism for accountability between users and service providers
4. Inability of the supply chain for hardware and services to meet rural community and household needs in terms of availability and cost
5. Low level of private-sector investment in rural water supply infrastructure and service delivery
6. A weak monitoring and feedback system
7. Absence of an overarching government-led capacity-development plan
8. Insufficient capacity and resources of training institutions.

The main underlying causes of the major bottlenecks for rural water supply include a weak policy and regulatory framework enforcement mechanism; limited stakeholder engagement, especially of those in the private sector; limited human and financial resources and institutional capacity; unclear institutional arrangements; and underdeveloped markets to supply the required hardware at a reasonable price.

To address the bottlenecks by removing their causes, ten high-priority activities from five governance functions were identified for further costing and resource allocation.

These recommended activities are:

1. Conduct regular analysis and mapping of stakeholders
2. Develop a decentralized service delivery framework
3. Assess stakeholders' conditions of supply chain and services
4. Undertake advocacy programmes to improve the service delivery mechanism
5. Conduct a situational analysis of the private sector for investment and submit findings and recommendations to decision-makers
6. Assess the capacity needs for a monitoring and evaluation (M&E) system
7. Develop and implement a training programme
8. Develop and implement M&E procedures and guidelines
9. Support the development of a comprehensive capacity-development plan
10. Encourage the private sector by creating a conducive operating environment.

The total financing gap to implement the recommended activities to remove bottlenecks from the delivery of rural water supply services is about USD 451,000.

Urban water supply

The Urban Water Supply Working Group identified 43 criteria from five building blocks and nine governance functions. Of these, 28 criteria were confirmed to have shown no progress and were awarded red status to show their priority for further consideration in the bottleneck analysis.

The bottlenecks for progress in the urban water supply subsector are:

1. Limited capacity to implement the existing urban water supply policy and legal framework
2. The absence of a national coordinating body
3. Inadequate service delivery models
4. Ambiguity in, or the absence of, clearly defined roles and responsibilities for lead urban water management institutions, and also the lack of a performance appraisal system
5. Unsatisfactory budget utilization rate for domestic funds
6. The lack of a prepared pipeline of bankable projects
7. The lack of financial and investment plans to back the urban water supply plan
8. Lack of a well-established monitoring feedback system
9. Lack of an overarching government-led capacity-development plan for urban water supply based on needs assessment.

The main underlying causes of the major bottlenecks for urban water supply are the low levels of policy- and decision-makers' commitment to urban water supply, and limited human, financial, institutional and organizational capacities of this subsector.

To address the bottlenecks by removing these underlying causes, seven activities from various governance functions have been identified for further costing and allocation of resources. These recommended activities are:

1. Reproduce, disseminate and create awareness of urban water supply policy and legal framework at all levels
2. Establish a fully responsible national-level coordinating body for urban water supply
3. Establish fully mandated urban water supply services at all levels
4. Establish a planning and coordination unit within the urban water supply service organizations
5. Restructure the organizations responsible for urban water supply service delivery and advocate for them to assume full mandate for the planning and implementation of the subsector for an efficient, equitable and sustainable service
6. Develop human resources capacity
7. Establish a monitoring and evaluation unit within each organization responsible for urban water supply service delivery.

The total financing gap to implement the recommended activities to remove the bottlenecks currently hindering urban water supply service delivery is about USD 5.81 million.

Urban sanitation services

The Urban Sanitation Working Group identified 19 criteria from five building blocks and eight governance functions. Of these, 13 criteria were assessed as having shown no progress and awarded a red status indicating them as priority criteria for further consideration in the bottleneck analysis.

Broadly, the bottlenecks for progress in the subsector are:

1. Lack of a policy and legal framework
2. Lack of a well-functioning coordinating body, while institutions in the subsector do not have clearly defined roles and responsibilities to lead and coordinate the management of urban sanitation
3. An inefficient and unsustainable urban sanitation service delivery model
4. Limited institutional, organizational, human and financial capacities, and the lack of an overarching government-led capacity-development plan
5. Inadequate internal control mechanisms
6. Development of a plan without consultation with and validation by stakeholders
7. Lack of a well-established monitoring, feedback and complaints system to improve decision-making at different levels.

The main underlying causes of the major bottlenecks in providing urban sanitation services

are low levels of commitment of policy- and decision-makers and service providers; limited human, financial, institutional and organizational capacities of the subsector; and limited knowledge and practice of and attitude towards, participatory planning to involve all relevant stakeholders.

To address the bottlenecks by removing their causes, five broad activities were identified for further costing and allocation of resources:

1. Hold meetings with higher officials, functioning agencies and stakeholders on urban sanitation to advocate the policy and strategy framework, financing, and partnership and coordination
2. Strengthen human resources on the development of policies and regulation, planning, M&E and appropriate technology options and research
3. Strengthen institutional capacity through the procurement of appropriate technologies (including those for vulnerable groups) and office equipment and furniture
4. Establish an urban sanitation information management system including a database, a research and learning centre and a monitoring and evaluation system
5. Strengthen coordination by establishing a public relations office.

The total financing gap to implement these recommended activities to remove the bottlenecks hindering urban sanitation service delivery is about USD 2.37 million.

WASH in institutions

The WASH in Institutions Working Group identified 12 criteria from five sector building blocks and six governance functions to facilitate the identification of bottlenecks hindering WASH in institutions. From these 12 criteria, six were assessed as having shown no progress and were awarded a red status to indicate their priority for further consideration in the bottleneck analysis.

The group decided to identify and assess one critical bottleneck under each sector governance function. Based on this approach, the identified bottlenecks are:

1. Lack of a policy and legal framework that includes provisions for operational sustainability
2. Lack of a well-functioning coordinating body
3. Unsupportive conditions (lack of an enabling environment) for the application of service delivery models
4. Insufficient funding that arises from weak institutional and individual capacities to create a successful mechanism to raise funds and diversify sources of funding
5. Lack of a well-established monitoring feedback system to improve decision-making at different levels
6. Weak institutional, individual and financial capacities to develop a human resources strategy.

The main underlying causes of the major bottlenecks for WASH in institutions are limited human, financial, institutional and organizational capacities of institutions, and low levels of commitment of policy- and decision-makers.

To address the bottlenecks by removing their causes, a total of 13 activities were initially identified. These were then reduced to the following six priority activities from six governance functions for further costing and allocation of resources:

1. Strengthen a sustainable and operational procurement implementation process
2. Establish a well-functioning WASH coordinating body or committee in each institution
3. Plan and implement development of institutional and individual capacities for WASH service delivery
4. Strengthen fundraising capacities of institutions and establish dedicated funding mechanisms
5. Establish a mechanism to ensure accountability at all levels
6. Support the development of a human resource strategy to improve capacity.

The total financing gap to implement these activities recommended to remove the bottlenecks to service delivery in WASH in institutions is about USD 3.73 million.

1 Introduction

1.1 Location and population

Eritrea is located in the Horn of Africa, where arid and semi-arid conditions and persistent drought present challenges in providing appropriate and sustainable water, sanitation and hygiene (WASH) services. This is particularly true of service provision to vulnerable communities and groups, such as female-headed households. The population of Eritrea is estimated to be just below 3.8 million (NSO), of which 65 per cent lives in rural areas (NSO and Fafo, 2013). Eritrea is divided into six administrative regions called 'zobas', namely, Maekel, Anseba, Gash-Barka, Debub, Northern Red Sea and Southern Red Sea, which vary in size, population and socio-economic status. The Government of the State of Eritrea has four tiers of public administration – national, regional (zoba), subregional (sub-zoba, which is equivalent to district) and kebabi (a collection of villages).

1.2 WASH access and gap

Between 1995 and 2010 Eritrea substantially reduced its under-five mortality rate from 136 deaths per 1,000 live births to 63 (NSO and Fafo, 2013). In 2010, only 3.5 per cent of the rural population had access to an improved sanitation facility, with over 90 per cent practising open defecation (NSO and Fafo, 2013). The community-led total sanitation (CLTS) programme adopted in 2007 has, however, had a major impact (MoH, 2007). A total of 668 communities, representing almost 25 per cent of the 2,700 rural communities in Eritrea, have been declared open-defecation free (ODF) since the programme was implemented in earnest in 2009. A tradition of open defecation, poor awareness of hygiene and the high cost and unavailability of sanitation construction materials are the underlying causes of the high risk of diarrhoeal disease in Eritrea. Despite some setbacks, including high rates of 'slippage' back to the practice of open defecation in some regions (UNICEF, 2015), the overall trend is very positive considering the CLTS programme challenges open defecation, which is a social norm in Eritrea.

According to government figures, just under 50 per cent of the rural population in the country have access to an improved water source, while nationally the figure for access is just below 58 per cent (NSO and Fafo, 2013). Structural causes for this coverage include low government investment in water infrastructure and weak capacity to manage and maintain existing infrastructure, due mainly to a lack of spare parts for water pumping devices.

Data on WASH in institutions indicate that 50 per cent of health facilities have access to an improved water source and 90 per cent have toilets available for patients (MoH, 2012). There is a lack of reliable data on the status of WASH facilities at schools; however, the Ministry of Education (MoE) states that 50 per cent of schools have access to drinking water, which includes both improved and unimproved sources, and that 67 per cent of schools have latrine facilities (MoE, 2012). However, in both school and health facilities the condition, functionality and accessibility of latrines is questionable; for example, latrines are locked or used for other purposes and are not gender segregated. A lack of water, combined with the poor management of latrines, means that many facilities are too unhygienic and filthy to use. In cases where water is piped, water might not be available all the time.

1.3 Environment enabling water supply and sanitation services

There are ministries and specialist organizations whose mandates include WASH, but the overall coordination of all development work in Eritrea is the responsibility of the Ministry of National

Development (MoND). The Ministry of Land, Water and Environment (MoLWE) is responsible for rural water supply, while the Ministry of Health (MoH) is responsible for sanitation and hygiene.

Rural water supply is regulated under Eritrean Water Proclamation No. 162 of 2010, which sets out water rights and regulation and management responsibilities; the Action Plan for Integrated Water Resource Management in Eritrea (2009) also plays a role. The Rural Sanitation Policy 2007 guides the provision of sanitation services in rural Eritrea and promotes community-led approaches as a general strategy. The National Development Plan (2014–2018) mentions several results covering WASH. These include enhanced equitable access to basic services; improved health status, general well-being, longevity and economic productivity of all Eritreans; and the development of sustainable water sources and institutional capacity to match needs.

To address the challenges and harness the above-mentioned opportunities, there is a need for the government to strengthen the enabling environment at all levels, from national to community. Accordingly, UNICEF Eritrea has received financial assistance through UNICEF Headquarters from the current Accelerating Sanitation and Water for All (ASWA II) initiative, funded by the United Kingdom Department for International Development, to work closely with WASH sector institutions of the government and other partners to develop a strong enabling environment.

2 WASH-BAT Workshop

2.1 Summary of WASH-BAT

WASH-BAT – the Water, Sanitation and Hygiene Bottleneck Analysis Tool – is a sector analysis and monitoring tool developed in 2011 by UNICEF and the World Bank. It evolved from the health sector's Marginal Budgeting for Bottlenecks approach. WASH-BAT aims to assess the enabling environment of WASH delivery by tracking the removal of barriers to sustainable and efficient services at national, regional, service-provider and community levels. It applies a root cause analysis of the major constraints on sector progress to determine the requirements and consequences of removing them. The tool caters to the need of the user, and each enquiry can vary in scope (water or sanitation and hygiene, urban or rural), level of detail and the time covered. The tool is preferably used through dialogue and in a participatory way in a workshop setting.

It is in this context that the three WASH sector partners – MoH, MoE and the Water Resources Department (WRD) of MoLWE – with the support of UNICEF Eritrea organized a workshop (17–19 April 2018 at the National Confederation of Eritrean Workers Hall) aimed at strengthening the capacity of national WASH sector institutions to undertake inclusive diagnoses to identify key bottlenecks, their causes and activities to remove them.

2.2 Objective

The objective of the workshop was to use WASH-BAT to assess the enabling environment of the WASH sector in Eritrea, specifically to:

- Strengthen the capacity of WASH sector stakeholders for evidence-based sector analysis, planning and budgeting
- Conduct a 'light' national analysis to identify priority sanitation-and-water-for-all building blocks that will strengthen national systems and capacity for rural WASH in Eritrea (ASWA II)
- Provide a rational and evidence-based approach to developing a national and subnational WASH investment strategy for Eritrea.

2.3 Planning and organization

The WASH-BAT workshop was jointly planned and organized by UNICEF WASH Eritrea and the three WASH sector institutions (WRD of the MoLWE, MoH and MoE). Key planning matters – such as subsectors and administrative levels to be analysed; timing and length of meeting(s); participants; location of workshop; workshop moderation; and linkage to policy and planning processes – were discussed and decided on.

The scope of analysis was agreed to be at national level for five subsectors: 1) rural sanitation services; 2) rural water supply; 3) urban water supply; 4) urban sanitation services; and 5) institutions. A total of 50 participants (10 participants per subgroup on average) were to be drawn from national, zoba and sub-zoba levels. The workshop would be three days, between 17 and 19 April 2018.

The National Confederation of Eritrean Workers Hall was identified as the location for the workshop based on its convenience for participants; the availability of the required space for group work and technical facilities such as projectors to aid presentations and group work; and its proximity to most of the participants' workplaces and the preferred hotel for lunch and tea breaks.

Dr David Tsetse, UNICEF WASH Manager, and Mr Kemoh from UNICEF Regional Office facilitated the workshop with the support of two co-facilitators from the UNICEF WASH team. Five breakaway groups, each representing a subsector, each had a session facilitator and a rapporteur to document the results and

report back to the group. The availability of all the necessary equipment such as overhead projectors, microphones, flip charts, flip-chart markers, pin boards, scotch tape, paper and a printer were organized ahead of the workshop.

2.4 Participation

The three-day WASH-BAT workshop was attended by seven government institutions (stakeholders) with significant power to influence WASH sector service delivery at national, zoba and municipal levels, and one private consultant.

Prior to dispatching the official invitation, it had been decided by the workshop organizers that participants should be individuals currently engaged in WASH service delivery who would be committed to the process and who would give high-quality input throughout the WASH bottleneck analysis. In line with this, invitation letters were sent from the WASH sector institutions to relevant stakeholders at national, zoba and sub-zoba levels with a clear indication of the objectives of the workshop and the type of participants it hoped to attract.

Of the 60 non-UNICEF participants, 75 per cent (45 participants) were from the three ASWA-partner ministries and 15 per cent (9 participants) were from municipalities in Asmara (3 participants) and other urban and semi-urban Eritrean towns (6); the municipal and town participants were responsible for urban water supply and sanitation services of their respective urban areas. Each WASH sector partner institution was led by a director-general or director; their involvement and participation throughout the three days was committed and consistent. It is also worth noting that the participation of MoND and the Ministry of Finance (MoF) was important to mainstream the major outcomes of the workshop into the national planning and budgetary system. Table 1 presents a breakdown of the participant institutions at the workshop

Table 1. WASH Bottleneck Analysis workshop participants disaggregated by institutions and level of administration

INSTITUTION	NUMBER OF REPRESENTATIVES				PROPORTION (%)
	NATIONAL LEVEL	ZOBA LEVEL	MAJOR CITIES, TOWNS AND PERI-URBAN CENTRES	TOTAL	
PARTICIPANTS					
Ministry of Health	14	9		23	38
Ministry of Education	8	2		10	17
Ministry of Land, Water and Environment	8	4		12	20
Ministry of National Development	2			2	3
Ministry of Finance	1			1	2
Ministry of Local Government	1	1		2	3
Municipal water and sanitation sections			9	9	15
Private	1			1	2
Subtotal	**35**	**16**	**9**	**60**	**100**
FACILITATORS					
UNICEF Eritrea Country Office	3			3	75
UNICEF regional WASH specialist	1			1	25
Subtotal	**4**			**4**	**100**
TOTAL	**39**	**16**	**9**	**64**	

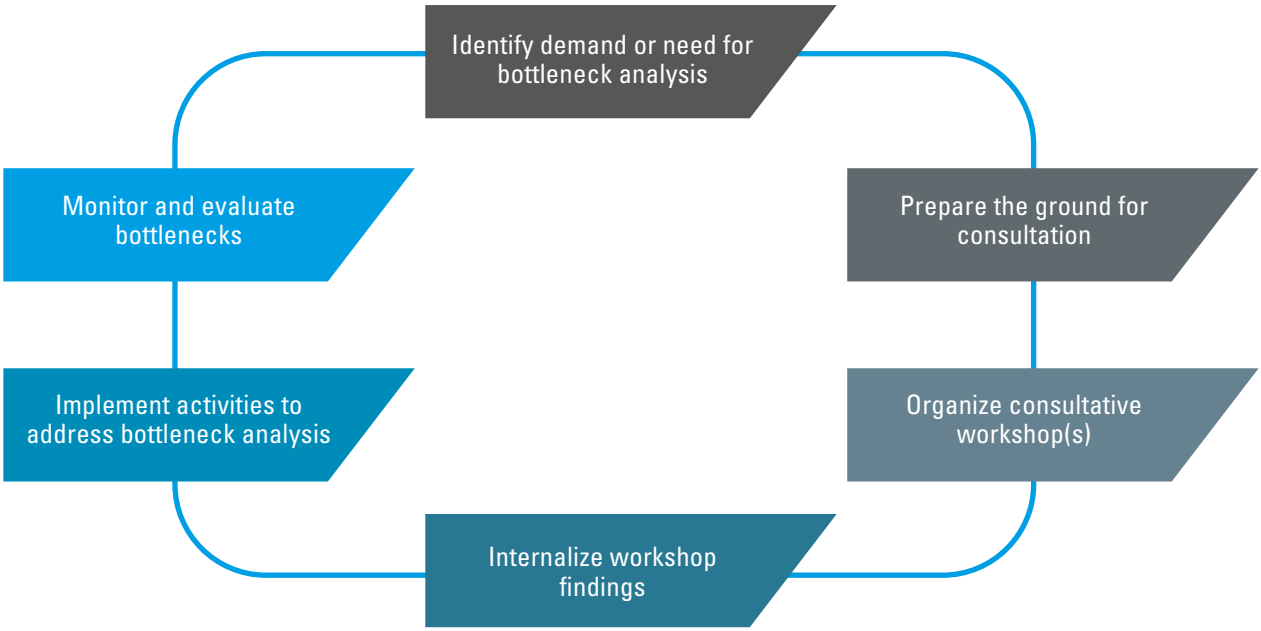

Figure 1. Implementation steps of WASH bottleneck analysis; WASH-BAT is both a tool and a process

by level of administration and proportion of total participants. A complete list of individual participants is provided in Annex 2.

2.5 Presentation

Dr David Tsetse, UNICEF WASH Manager, after introducing himself, welcomed all participants and gave a short introductory speech on the objectives of the workshop. He invited all participants to introduce themselves. He then invited Mr Mebrhatu Iyassu, Director General of the Water Resources Department, to make a speech to officially open the workshop.

In his opening remark, Mr Iyassu explained that ASWA II is a programme aimed at strengthening the capacity of WASH sector institutions to plan, implement, monitor and sustain WASH services and that it is aligned with Eritrea's national development plan. He also stressed the importance of the bottleneck analysis tool and its relevance to the WASH sector in identifying and analysing challenges. He also stated that outcomes from the workshop will assist institutions involved in WASH service delivery to plan and implement their activities and asked all participants to engage attentively in the workshop. Finally, he declared the workshop officially open.

In addition to his welcoming speech, Dr Tsetse provided a short description of WASH bottleneck analysis and the tool, and explained that it has been developed to raise awareness and understanding of WASH sector stakeholders of what bottleneck analysis is and its value. He elaborated on the status of Eritrea's WASH services for rural and urban communities using the most recent available data (2015); Eritrea's ODF status for the year 2017; the objectives of the workshop; what workshop analysis is and its step-by-step methodology; the main outcomes of the tool; its expected contribution in creating partnerships and improving coordination; and its potential impact in improving the WASH enabling environment, in general, so that Eritrea can realize Sustainable Development Goal (SDG) 6 by 2030. Dr Tsetse also described UNICEF's enabling environment framework and emphasized that WASH-BAT is both a tool and process. Figure 1 presents a schematic illustration of the steps of WASH bottleneck analysis.

Finally, he presented various WASH-BAT online and offline resources and encouraged participants to search for more information so that they can adopt the tool for their day-to-day WASH-related bottleneck analyses.

The next speaker, Mr Kemoh (the UNICEF Regional WASH Specialist), presented steps to

follow in exploring WASH-BAT. He explained the offline version of WASH-BAT to participants.

Following the presentation, participants formed five breakaway groups based on the WASH sector institutions and jurisdictions they represented and/or their relation and orientation to the subsectors. They continued working in these groups for the three days of the workshop with frequent report-back sessions so that discussions and reflections were shared with all the participants. The subsector session facilitators and rapporteurs had undertaken detailed and practical online exercises on WASH-BAT on 20 March 2018 at the UNICEF Country Office due to ease of Internet connectivity.

Figure 2 presents a schematic diagram of the WASH-BAT process during the three-day workshop.

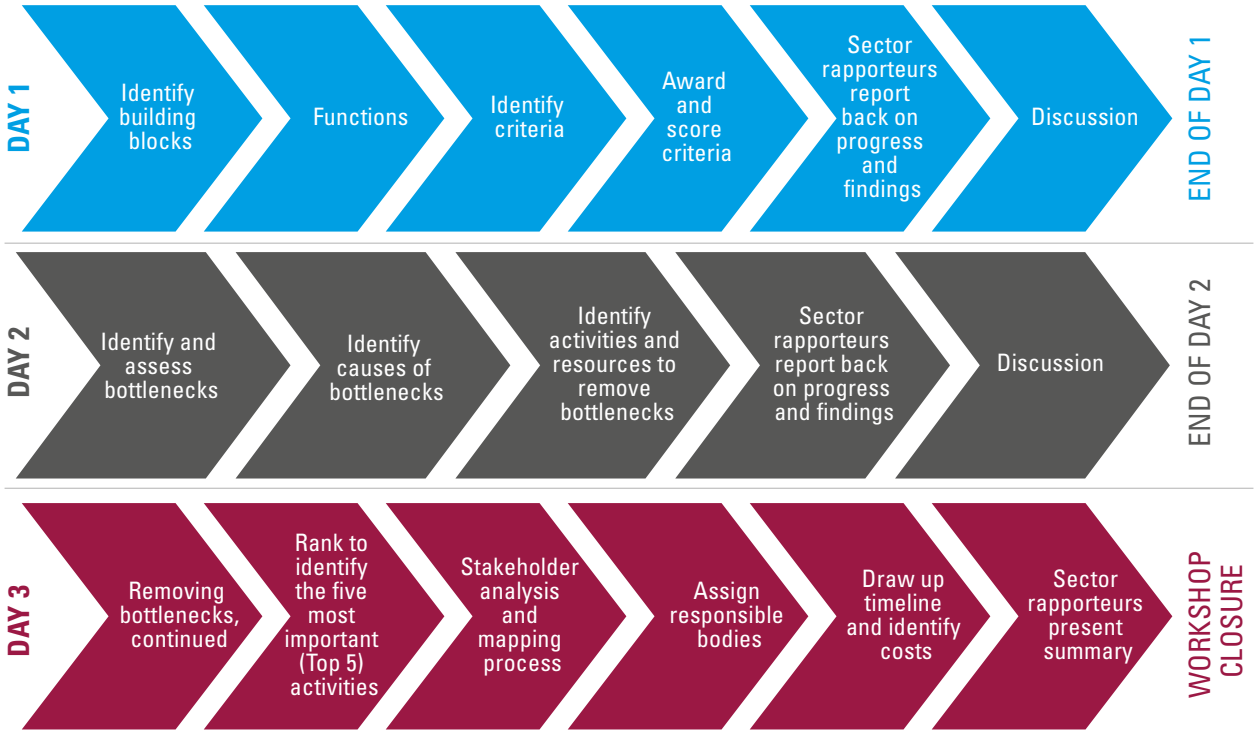

Figure 2. Process of WASH bottleneck analysis during the three-day workshop

3 Subsector Analysis

The subsector analysis was done using WASH-BAT in a workshop setting with the active participation of representatives of the three principal WASH sector line ministries, municipalities responsible for urban and semi-urban water and sanitation service delivery, and the Ministries of Finance, National Development, and Local Government.

To reflect the current situation and facilitate the identification of bottlenecks, four of the five subsector groups reached a consensus to identify and assess bottlenecks using the five sector building blocks,[2] namely: 1) sector policy and strategy; 2) institutional arrangement; 3) budgeting and financing; 4) planning, monitoring and review; and 5) capacity development. Scoring of the individual criteria within the building blocks and governance functions was carried out using a simplified coloured scoring scheme.

3.1 Rural sanitation services

3.1.1 Current situation

The Rural Sanitation Working Group concluded that the enabling factors for rural sanitation service delivery are far from the required level of efficiency and effectiveness.

As indicated in Table 2, seven criteria concerning service delivery arrangements (coordination) and monitoring, evaluation and learning were identified as having shown no progress and as a result were awarded red status as per the colour scoring scheme. Annex 1A on page 42 lists all 27 criteria identified for the five ASWA building blocks and governance functions and the colour status awarded to each criterion.

Sector policy and strategy: The working group concluded that some relevant rural sanitation policies and legal frameworks do exist, but acknowledged that few are accompanied with a set of supporting documents and implementing decrees that provide clarity on roles and responsibilities and service norms and standards that facilitate their implementation and enforcement. It was also recognized that the policy and legal frameworks are limited because they do not include accountability mechanisms between users, service providers and government.

Coordination: It was recognized that the MoH – specifically, its Environmental Health Department – is the national coordination body for rural sanitation with satisfactory mechanisms in place at national, zoba and sub-zoba levels. However, the working group emphasized that the institutional roles and accountabilities are not clearly defined or operationalized for the effective coordination of a sustainable, equitable and effective rural sanitation service for all.

Service delivery arrangements: As shown in Table 2, service delivery arrangements are the most critical stumbling blocks to ensuring an enabling environment for response to rural communities' sanitation needs and for addressing capacity gaps; and there has been no progress in removing these obstacles. It was confirmed that the mechanisms (models) set to provide reliable, good quality rural sanitation services on a continuous basis lack: i) accountability between users, government and service providers; ii) a range of options, including private-sector participation; and iii) adequate conditions for applying service delivery models, including policy and a regulatory framework, capacity support, finance arrangements and incentives. These three criteria were scored

2 The Rural Water Working Group decided to completely remove the entire sector policy and strategy building block from their analysis to reflect the current situation and facilitate the identification of bottlenecks.

Table 2. Rural sanitation criteria (identified within building blocks and governance functions) and the extent to which they have been achieved

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Institutional arrangements	Service delivery arrangements	1. Models include mechanism for accountability between users, government and service providers	
	Service delivery arrangements	2. Sector delivery model includes a range of options, including private sector participation	
	Service delivery arrangements	3. Adequate conditions are in place for the application of service delivery models, including a policy and regulatory framework, available capacity support, finance arrangements and incentives	
Planning, monitoring and review	Monitoring, evaluation and learning	4. Established monitoring feedback system(s) to improve decision-making at different levels	
	Monitoring, evaluation and learning	5. Commonly adhered-to set of indicators monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness), the type of service providers (e.g., formal, informal) and the parts of the service chain (on-site provision, emptying, transport, treatment, discharge and reuse)	
	Monitoring, evaluation and learning	6. Service providers report the results of their internal monitoring against required service standards to the regulatory authority, which triggers timely corrective action	
	Monitoring, evaluation and learning	7. Established sector learning processes are used by stakeholders, based on a mix of evaluation, research and knowledge management approaches	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	To a large extent	To a lesser extent	No progress

red and qualified for further screening and prioritization to identify the most critical bottlenecks, analyse the underlying causes for them and identify activities to remove the bottlenecks. It was clearly indicated that the existing mechanisms (models) do not adequately provide for targeting the most vulnerable communities or attempt to put standards or benchmarks for rural sanitation service delivery in place.

Accountability and regulation: The working group confirmed that to a large extent government monitoring and verification systems for rural sanitation are in place at multiple levels. However, partial progress is observed in having: i) clear roles and responsibilities and performance appraisal systems for lead institutions; ii) an incentive mechanism for investment in environmentally sustainable and efficient technologies, and iii) clear and effective mechanisms for consumer feedback and complaints.

Budgeting and expenditure: Currently, rural sanitation is short of funding for sensitization campaigns as it has not been explicitly itemized in the budget and if it has been allocated, it has been insufficient. The budget utilization rate (i.e. expenditure as a percentage of the budget) over the past three years has been inadequate for official development assistance.

Monitoring, evaluation and learning: One of the most critical areas that needs strengthening

to improve the environment for rural sanitation is monitoring, evaluation and learning. As shown in Table 2, of seven criteria that have shown no progress and been flagged red, four are related to monitoring, evaluation and learning. This indicates a low baseline from which no progress has been made to improve evidence-based decision-making on rural sanitation service delivery. The criteria identified are: i) weak monitoring feedback system(s) to improve decision-making at different levels; ii) low level of adherence to long-term monitoring of a set of indicators that reflect relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness), the type of service providers (e.g. formal, informal) and the parts of the service chain (on-site provision, emptying, transport, treatment, discharge and reuse); iii) very weak reporting of results by service providers of their internal monitoring against required service standards to the regulatory authority so that reports could not act as triggers for timely or corrective action; and iv) weak or absent sector learning processes based on a mix of evaluation, research and knowledge management approaches for stakeholders.

On the positive side, the working group recognized that the national rural sanitation plan has to a large extent been managed by clearly stated targets, activities, indicators, timelines and budgets; contains advocacy activities to influence politicians and key influencers; and is backed with financial and investment plans.

Capacity development: The working group assessed capacity development as one of the relevant building blocks and functions, and reached a consensus that there is an institutional capacity gap that prevents fulfilment of the roles and responsibilities to scale up sustainable rural sanitation service delivery. This gap includes the availability of necessary structures, tools, training, and incentive and capacity-development actions, which are not progressing against the capacity-development plan. Despite the importance of these criteria, the group awarded them yellow status to acknowledge that there are some ongoing baseline activities to address the issue.

3.1.2 Bottlenecks

From the total of 21 criteria awarded yellow (moderate progress) and red (no progress), participants decided to focus on one most-critical criterion related to each governance function (except finance); they identified the bottleneck for each of these and the underlying causes of the bottleneck. The group then defined one activity for each bottleneck that would address it by removing its causes.

The working group identified the following seven critical bottlenecks hindering progress in rural sanitation service delivery in Eritrea:

- **Absence of a reviewed and updated rural sanitation policy document** that addresses the current challenges by being informed from recent research and development findings, even though a policy on rural sanitation has been in existence since 2007
- **Lack of clearly stated institutional roles and accountabilities** is hindering effective coordination for sustainable, equitable and effective rural sanitation service delivery for all
- **Inadequate service delivery model**, which does not consider different options
- **Insufficiency and inconsistency of resources** (sanitary products and services)
- **Insufficient fund allocation** to support sensitization campaigns and inadequate budget allocation from official development assistance to promote rural sanitation delivery services resulting in a low budget utilization rate compared to actual budget in recent years
- **Weak monitoring and feedback system** (although there is a government-led monitoring system for rural sanitation in place), which hinders effective planning and decision-making at all levels
- **Shortage of skilled human resources at sub-zonal and village levels** hinders institutions from carrying out their responsibilities.

3.1.3 Underlying causes

The underlying causes of the major bottlenecks for rural sanitation were identified as:

- **Insufficient budget and weak institutional and human resources capacities** have caused the lack of updating of the rural sanitation policy and associated regulatory and strategic documents.

- **Absence of clearly defined and documented mandates**: Rules and accountabilities of stakeholders functioning as the rural sanitation coordination body at all levels of the government are not defined.
- **Ineffectiveness of the rural sanitation service delivery mechanism:** The current mechanism does not consider different options, including private-sector participation. In addition, the following factors were identified as causes for the current poor service delivery of rural sanitation: i) inadequate policy and regulatory framework, capacity-development support, financing arrangements and incentives; ii) inappropriateness of the model of rural sanitation services with respect to the lifestyles and inaccessibility of some vulnerable groups; and iii) duplication of roles and responsibilities of different line ministries.
- **The absence of sanitation marketing** means a demand for improved sanitation products and services has not been generated and neither, in turn, has an enabling environment for access to them been developed.
- **Insufficient budgeted funds for a sensitization campaign** focused on budgetary decision-makers at the national level and delayed disbursement of the budget are underlying causes of insufficient fund allocation to support rural sanitation service delivery.
- **Absence of well-communicated monitoring tools** at all levels (national, zoba, sub-zoba and community levels) is an important factor in hampering the creation of an enabling environment by improving decision-making at different levels.
- **Uneven distribution and allocation of public health professionals** at the sub-zonal level, combined with lack of a clearly defined job description for public health officers affect service delivery.

3.1.4 Identification and prioritization of activities to remove bottlenecks

The Rural Sanitation Working Group defined seven high-priority activities to address the bottlenecks by removing their causes. In short, the group decided to update the existing policy; prepare guidelines that clearly define the roles and responsibilities of stakeholders functioning as coordinating bodies at all levels; issue regulations for private-sector participation; provide communities with access to sanitation materials; allocate sufficient funds; strengthen the monitoring system; and train professionals at degree, diploma and certificate levels.

3.1.5 Costing and allocation of resources

The working group determined the cost of implementing the identified activities and the financing currently available, and thus were able to calculate the financing gap for each (Table 3). These costs were determined for a five-year period. Given that activities need to be sequenced, they were prioritized according to whether financing is likely to be available and their level of importance. The group decided that all the seven activities are high-priority. The total financing gap to implement the recommended activities to remove the bottlenecks currently hindering rural sanitation service delivery is about USD 8,100,000 (see Table 3).

3.1.6 Accountability and responsibilities

The working group also identified who should be accountable and responsible for implementing the activities and delivering the expected results to improve the enabling environment for the rural sanitation subsector. These accountable and responsible institutions and the expected start and end dates for the activities are presented in Table 3.

3.2 Rural water supply

3.2.1 Current situation

The Rural Water Supply Working Group removed the sector policy and strategy building block from their analysis completely because a rural water supply policy and a legal framework with set priorities do exist and are reflected in laws and regulations supporting rural water supply with the recognition that water is a human right. However, the group was also aware that there could be gaps in the subsector policy and strategy, about which they were not informed enough to do a bottleneck analysis. The working

Table 3. Summary of identified and prioritized activities to remove bottlenecks in rural sanitation, and the associated costs, allocation of resources and responsible institutions

BUILDING BLOCK AND/OR GOVERNANCE FUNCTION	ACTIVITY	PRIORITY	ESTIMATED COST			ACCOUNTABILITY AND TIMELINE		
			TOTAL COST (USD)	FINANCING AVAILABLE (USD)	FUNDING GAP (USD)	ACCOUNTABLE AND RESPONSIBLE INSTITUTION(S)	EXPECTED START DATE	EXPECTED END DATE
Sector policy and strategy	Update the existing 2007 rural sanitation policy document by allocating the required financial resources.	High	50,000	0	50,000	MoH	01-Jan-2019	14-Dec-2018
Coordination	Prepare guidelines that clearly define the role and responsibility of stakeholders that are functioning as rural sanitation coordinating bodies at national, regional, subregional and community levels, and for service users and private rural sanitation service providers.	High	50,000	0	50,000	MoH	01-Jan-2019	19-Dec-2018
Service delivery arrangement	Issue regulations for private-sector participation that enhance engagement, as well as the development of relevant skills, the market and a credible supply chain for the improvement of rural sanitation service-delivery models.	High	4,300,000	0	4,300,000	MoH, MoLG, MoTI	01-Jan-2019	12-Feb-2019
Accountability and regulation	Provide the community with access to sanitation materials through various marketing strategies.	High	500,000	0	500,000	MoLG, MoH, MoF, MoTI	22-Jan-2019	24-Dec-2019
Budget and expenditure	Advocate rural sanitation to secure decision-makers' commitment to increased budgetary allocations from the government's treasury, timely arrival of the budget and building the subsector's capacity to raise funds externally to support rural sanitation delivery services.	High	1,500,000	0	1,500,000	MoH, MoF, development partners	01-Jan-2019	21-Apr-2021
Monitoring, evaluation and learning	Strengthen monitoring and feedback systems at all levels to improve decision-making at all levels.	High	400,000	0	400,000	MoH, development partners	13-Jun-2019	13-Dec-2018
Capacity development	Provide training for professionals in diversified and relevant fields at degree, diploma and certificate levels, and introduce an incentive mechanism for professionals to work in remote communities.	High	1,300,000	0	1,300,000	MoH, higher education	03-Sep-2019	03-Jul-2021
Total			**8,100,000**		**8,100,000**			

Table 4. Rural water supply criteria (identified within building blocks and governance functions) and the extent to which they have been achieved

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Institutional arrangement	Coordination	1. Institutional roles and accountabilities are clearly defined and operationalized	
	Coordination	2. Well-functioning body coordinates stakeholders and meets as needed	
	Service delivery arrangements	3. Models include mechanisms for accountability between users, governments and service providers	
	Service delivery arrangements	4. Supply chains for hardware and services for drinking-water systems meet the needs of rural communities and households in terms of availability and price	
Budgeting and financing	Financing	5. The private sector is incentivized to invest in rural water infrastructure and service delivery	
Planning, monitoring and review	Monitoring, evaluation and learning	6. Established monitoring feedback system(s) to improve decision-making at different levels	
Capacity development	Capacity development	7. Government-led overarching capacity-development plan developed for rural water based on needs assessment	
	Capacity development	8. Training institutions have the capacity and resources to deliver the personnel needed for scaling up rural water supply	
	Capacity development	9. Implementation of capacity-development plans is progressing	
	Capacity development	10. Private-sector capacity exists to deliver safely managed rural water services in an efficient matter	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	To a large extent	To a lesser extent	No progress

group therefore focused on the remaining four sector blocks.

Table 4 presents 10 criteria that were identified as having shown no progress and were awarded red status, indicating their priority for further consideration in the bottleneck analysis. These criteria focused on rural water subsector coordination (2), service delivery arrangements (2), financing (1), monitoring, evaluation and learning (1), and capacity development (4). Annex 1B on page 44 presents a list of the 44 criteria identified for the four building blocks and five governance functions, and the colour awarded each.

Coordination: The subsector working group recognized the WRD of MoLWE as the national rural water supply coordinating body with a mechanism to coordinate and provide policy and technical support for zoba and sub-zoba administration. However, the group concluded that:

- The institutional roles and accountabilities of the WRD and its regional departments responsible for rural water supply service delivery are not clearly defined and operationalized;
- The users and service providers of rural water supply are not well coordinated and only meet as needed; and
- Coordinating bodies at the national level (WRD) and water departments at the zoba level do not include or have a mechanism to include major stakeholders in rural water services, including private-sector

organizations, community-based organizations, government agencies, advocacy groups, civil society organizations and non-governmental organizations for sustainable, equitable and effective rural water supply service delivery.

Service delivery arrangements: While affirming the existence of some level of standards and/or benchmarks for rural water supply service delivery, the group recognized that the current rural water service delivery models do not include mechanisms for accountability between users, government and service providers, and the supply chain for hardware and services for drinking water systems does not meet rural community and household needs in terms of availability and price. Progress made to solve these challenges has been very limited. These two criteria were scored red and qualified for further screening and prioritization to identify the most critical bottlenecks, analyse their causes and identify activities to remove them.

The group also concluded that the range of options to make the service delivery mechanism (model) effective and efficient, including private sector participation, is very limited.

Budgeting and expenditure: The group affirmed that the sector budget is disaggregated into rural water supply and expenditure is tracked, but there are still gaps in the documentation and organization of budget to allow for budget and expenditure analyses. The working group identified four criteria for further scoring to identify the most critical bottleneck to rural water supply. All four were scored yellow, which indicates there is some achievement, but not sufficient. These criteria are:

- Tariffs are not sufficient to provide adequate delivery of rural water supply services according to national standards, including operations and management
- There is not enough capital expenditure to meet rural water sector investment targets
- The budget utilization rate (i.e. expenditure as a percentage of budget) of domestic funds over the past three years (2015–2017) has been inadequate
- The budget utilization rate of official development assistance funds over the past three years has been inadequate.

Financing: The group identified a weak enabling environment to incentivize the private sector to invest in rural water supply infrastructure and service delivery as a critical barrier (red status) to diversify funding sources, which is necessary to increase access to water and improve the efficiency and sustainability of service delivery. The low percentage of external aid (out of total aid for rural water) that supports water plans and budgets, and the non-existence of financing institutions and mechanisms to raise additional funds for rural water (e.g. domestic bond market) were identified as key areas where government has made little progress. These areas need development if an enabling environment is to be created.

Monitoring, evaluation and learning: The working group recognized that the existing monitoring feedback system(s) to improve decision-making at different levels is weak; it is a critical bottleneck that needs to be addressed.

The group also reaffirmed that efforts made by service providers need to improve in two areas:

1. Reporting the results of their internal monitoring against the required service standards of the regulating authority is limited, the standards of those reports (if any) are poor and the reports are not timely, making it difficult to implement the required quality-correction actions.
2. Their performance, including information regarding customer satisfaction, is inadequately made public, and does not contribute to improving service delivery standards.

Capacity development: One of the most critical factors in creating an enabling environment that was emphasized by the Rural Water Supply Working Group to improve the subsector was capacity development. As shown in Table 4, from a total of 10 criteria that have been identified to have shown no progress, four are related to capacity development and flagged red. This indicates that service providers and regulatory

bodies do not have the required human, technical and resource capacity to execute their responsibilities under the guiding sectoral plan.

The group identified that no progress had been made on:

- Developing an overarching government-led capacity-development plan for rural water supply based on needs assessment
- Providing the required capacity and resources for training institutions to deliver the personnel required for scaling up rural water supply
- Implementing capacity-development actions as identified in capacity-development plans
- Developing private-sector capacity to deliver efficiently managed, safe rural water services.

It was also recognized that institutional stakeholders have various limitations in providing their own capacity-development plan (flagged yellow).

3.2.2 Bottlenecks

Participants decided to focus on and identify bottlenecks for all no-progress (red) criteria (10) and a couple of criteria (2) with moderate progress (yellow).

The working group identified the following bottlenecks for progress in rural water supply service delivery:

1. Ineffectiveness of institutions in fully operationalizing their roles and responsibilities with accountability, although these are clearly defined
2. Absence of a well-functioning body that coordinates stakeholders at all levels in rural water supply service delivery
3. Low-level involvement (exclusion) of major stakeholders in the rural water service coordination body, particularly in (Eritrean context) the private sector, community-based organizations and government agencies
4. Weak rural water supply service delivery model, which does not include a range of options, particularly for private-sector participation
5. The absence of rural water supply service delivery models that include mechanisms for accountability between users and service providers
6. Inability of the supply chain for hardware and services for drinking water systems to meet rural community and household needs in terms of both availability and price
7. Low level of private sector investment in rural water supply infrastructure and service delivery due to a lack of incentives
8. The group recognized that although a government-led monitoring and feedback system for rural water service is in place, it is weak, and identified it as the critical bottleneck hampering decision-making at different levels
9. Absence of an overarching government-led capacity-development plan for rural water supply based on needs assessment
10. Insufficient capacity and resources of training institutions to produce personnel needed for scaling up rural water supply
11. Apart from low levels of participation and investment of the private sector, the group also recognized that the private sector organizations who are involved in rural water supply service delivery (supply of parts, infrastructure development, etc.) have very low capacity to deliver safely managed rural water services in an efficient manner.

3.2.3 Underlying causes

The underlying causes of the major bottlenecks for rural water supply are: i) weak enforcement of the policy and regulatory framework, including a lack of procedures, guidelines, rules and mechanisms that encourage and incentivize private sector organizations to invest in rural water supply infrastructure; ii) limited stakeholder engagement (including that of the private sector) arising from low levels of commitment of policy- and decision-makers, and service-delivering institutions; iii) limited human and financial resources and institutional capacity to develop a comprehensive capacity-development plan, put effective institutional incentives and accountability mechanisms in place, incorporate an M&E system, develop monitoring and feedback protocols and formats, and strengthen training institutions; iv) unclear institutional setup; and v) underdeveloped markets to supply the required hardware at reasonable prices.

Table 5. Summary of identified and prioritized activities to remove bottlenecks in rural water supply, and the associated costs, allocation of resources and responsible institutions

BUILDING BLOCK AND/OR GOVERNANCE FUNCTION	ACTIVITY	PRIORITY	ESTIMATED COST			ACCOUNTABILITY AND TIMELINE		
			TOTAL COST (USD)	FINANCING AVAILABLE (USD)	FUNDING GAP (USD)	ACCOUNTABLE AND RESPONSIBLE INSTITUTION(S)	EXPECTED START DATE	EXPECTED END DATE
Coordination	Conduct regular analysis and mapping of stakeholders	High	8,000	0	8,000	MoLWE (WRD)	01-Jan-2019	13-Jun-2019
Service delivery arrangement	Develop a decentralized service delivery framework	High	10,000	0	10,000	MoLWE	13-Apr-2019	13-Apr-2020
	Assess stakeholders' conditions of supply chain and services	High	20,000	0	20,000	MoLWE	13-Apr-2019	13-Apr-2020
	Undertake advocacy programmes	High	30,000	0	30,000	MoLG	13-Apr-2019	13-Apr-2020
Finance	Conduct a situational analysis of the private sector for investment and submit findings and recommendations to decision-makers	High	70,000	0	70,000	MoLWE, MoLG, MoF, MoTI, MoND	13-Apr-2019	13-Apr-2020
Monitoring, evaluation and learning	Assess capacity needs for the M&E system	High	30,000	7,000	23,000	MoLWE (WRD)	13-Apr-2019	13-Apr-2020
	Develop and implement training programme	High	75,000	0	75,000	MoLWE (WRD)	13-Apr-2019	13-Apr-2020
	Develop and implement M&E procedures and guidelines	High	100,000	0	100,000	MoLWE (WRD)	13-Apr-2019	13-Apr-2020
Capacity development	Support the development of a comprehensive capacity-development plan	High	65,000	0	65,000	MoLWE	13-Apr-2019	13-Apr-2020
	Encourage the private sector by creating a conducive working environment	High	50,000	0	50,000	MoLWE, MoLG, MoF, MoTI, MoND	13-Apr-2019	13-Apr-2020
Total			**458,000**	**7,000**	**451,000**			

3.2.4 Identification and prioritization of activities to remove bottlenecks

The group defined 12 activities to address the bottlenecks hindering rural water supply service delivery; these focus on removing the underlying cause. Ten activities have been rated 'high priority' for further consideration and funding. A detailed description of these 10 activities is presented in Table 5.

3.2.5 Costing and allocation of resources

The working group identified the costs and financing available for each of the activities required to remove bottlenecks. These costs have been calculated for up to a five-year period. Given that activities need to be sequential, they were prioritized according to whether financing is likely to made available and their level of importance. The total financing gap to implement the recommended activities is about USD 451,000. The costs, available financing and funding gaps of each of these priority activities are presented in Table 5.

3.2.6 Accountability and responsibilities

The working group also identified who should be accountable and responsible for implementing each activity, and the start and end date of each (see Table 5). The WRD of MoLWE is identified as the lead institution to implement almost all of these activities with major support from MoLG, MoF, MoND and the Ministry of Trade and Industry (MoTI).

3.3 Urban water supply

3.3.1 Current situation

The Urban Water Supply Working Group selected nine sector governance functions of the five sector building blocks for assessing the current situation of the enabling environment.

Table 6 presents 28 criteria identified, which focused on urban water sector policy and strategy (1); coordination (3); service delivery arrangements (2); accountability and regulation (4); budget and expenditure (4); financing (1); planning (2); monitoring, evaluation and learning (6); and capacity development (5). They were assessed to have shown no progress and were awarded red status to indicate their priority for further consideration in the bottleneck analysis.

Annex 1C on page 46 presents the list of all 43 criteria identified for each building block and governance function, and the colour awarded for each.

Table 6. Urban water supply criteria (identified within building blocks and governance functions) and the extent to which they have been achieved

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Sector policy and strategy	Sector policy and strategy	1. Urban water policy and legal framework are implemented	●
Institutional arrangement	Coordination	2. A coordination body or mechanism for urban water exists	●
	Coordination	3. Institutional roles and accountabilities are clearly defined and operationalized	●
	Coordination	4. A well-functioning body coordinates stakeholders and meets as needed	●
	Service delivery arrangements	5. Adequate conditions are in place for the application of service delivery models, including a policy and regulatory framework, available capacity support, financing arrangements and incentives	●
	Service delivery arrangements	6. A supply chain for hardware and services for drinking water systems meets urban community and household needs in terms of availability and price	●

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Institutional arrangement	Accountability and regulation	7. Lead institutions have clear roles and responsibilities, and use a performance appraisal system	
	Accountability and regulation	8. There are clear and effective mechanisms for addressing consumer feedback and complaints	
	Accountability and regulation	9. An institution with clear regulatory functions exists	
	Accountability and regulation	10. Sufficient resources and capacity are in place to implement the regulations	
Budgeting and financing	Budget and expenditure	11. Budget utilization rate (i.e. expenditure as a percentage of budget) over the three years is adequate for domestic funds	
	Budget and expenditure	12. Budget utilization rate over the last three years is adequate for official development assistance	
Budgeting and financing	Budget and expenditure	13. Multi-year budget allocations are provided and long-term commitments are known	
	Budget and expenditure	14. There is a clearly articulated procurement process	
	Financing	15. There is a ready pipeline of bankable projects in urban water	
Planning, monitoring and review	Planning	16. Plans are backed with financial and investment plans	
	Planning	17. Clearly defined procedures exist for participation of water service users (e.g. households) and communities in planning programmes	
	Monitoring, evaluation and learning	18. Government-led monitoring system on urban water is in place	
	Monitoring, evaluation and learning	19. Established monitoring feedback system(s) to improve decision-making at different levels	
	Monitoring, evaluation and learning	20. Commonly adhered-to set of indicators is monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness) and the type of service providers (e.g. formal, informal)	
	Monitoring, evaluation and learning	21. Service providers report the results of their internal monitoring against required service standards to the regulatory authority, which triggers timely corrective action	
	Monitoring, evaluation and learning	22. The performance of formal service providers is made public, including information on customer satisfaction	
	Monitoring, evaluation and learning	23. Established sector-learning processes are used by stakeholders, based on a mix of evaluation, research and knowledge management approaches	
Capacity development	Capacity development	24. Institutions have the capacity to fulfil sector roles and responsibilities for sustainable service delivery at scale, including the availability of necessary structures, tools, training and incentives	
	Capacity development	25. Overarching government-led capacity-development plan for urban water has been developed, based on needs assessment	
	Capacity development	26. A human resources strategy exists that identifies problems and capacity gaps, and actions required to develop and manage human resources for urban water supply	

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Capacity development	Capacity development	27. Implementation is progressing against capacity-development plans	
	Capacity development	28. Capacity exists to monitor services against indicators defined by national standards	

Key: Extent to which criterion or indicator has been fulfilled

			
Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Sector policy and strategy: The working group agreed that urban water supply policy and a legal framework do exist, but they are not fully implemented or updated regularly.

Coordination: Of the coordination function of governance, the working group identified five criteria that described the current situation, mainly challenges for effective coordination of the urban water subsector, and which required further analysis. These were:

- The absence of a coordinating body or mechanism for urban water at the national level
- The institutional roles and accountabilities of regional, subregional, urban (municipalities) or semi-urban water supply service delivery coordinating bodies are not clearly defined or operationalized
- Some stakeholders (users and service providers) are not well coordinated and meet only as needed
- Absence of one government-led plan to which all stakeholders contribute
- Coordinating bodies do have mechanisms to include major stakeholders in urban water services, including private-sector and community-based organizations, government agencies, advocacy groups, civil society organizations and non-governmental organizations for the sustainable, equitable and effective delivery of urban water supply services.

Service delivery arrangements: While they acknowledged the existence of some standards and benchmarking arrangements for urban water supply services, the group recognized that:

- The current urban water service delivery models do not adequately include a range of options, including for private-sector participation
- Government regulations, laws, institutions, and financing and incentive systems do not incentivize the private sector to the extent that the urban water supply service is efficient and sustainable
- The process for selection and implementing service delivery models is not clear, transparent and adapted to the context
- Adequate conditions are not in place for the application of service delivery models, including the policy and regulatory framework, capacity support, financing arrangements and incentives
- The supply chain for hardware and services for drinking water systems does not meet the needs of urban communities and households in terms of availability and cost
- The service models are not widely known and implemented in practice, and progress made to solve these challenges is very limited.

Accountability and regulation: The working group agreed that government monitoring and verification systems for urban water service delivery are weak and insufficient at multiple levels. Despite the effort made by the government, the group confirmed that there had been no progress towards:

- Lead institutions having clear roles and responsibilities and performance appraisal systems
- Having clear and effective mechanisms for consumer feedback and complaints
- Establishing an institution with clear regulatory functions

- Allocating sufficient resources and capacity to implement the regulations.

On the other hand, the group recognized that partial progress had been made:

- Towards making the regulatory body sufficiently independent of service providers and government to act as a valid referee and provide performance-based incentives and/or sanctions; and
- Towards putting in place incentives for investment in environmentally sustainable and efficient technologies.

Budgeting and expenditure: The working group affirmed that the sector budget is disaggregated into urban water, and that expenditure is tracked. Furthermore, there is a body that represents the needs of water service customers in the budgeting processes, and to a large extent the funding for sensitization campaigns has been explicitly addressed in the budgeting process and is to some extent adequate. However, there is still no progress on:

- The budget utilization rate (i.e. expenditure as a percentage of budget) over the last three years has been inadequate for domestic funding
- The budget utilization rate over the last three years has been inadequate for official development assistance
- Multi-year budget allocations have not been provided, and long-term commitments have not been realized
- There is no clearly articulated procurement process.

Partial progress was recognized on the issue of making the budget and expenditure reports for urban water subsector publicly available.

Financing: The group identified the absence of a ready pipeline of bankable projects in urban water supply (and scored red) and a weak enabling environment to incentivize the private sector to invest in urban water supply infrastructure and service delivery (scored yellow) as critical barriers to diversifying funding sources, increasing access to water and improving the efficiency and sustainability of service delivery.

Planning: In general, the group affirmed that there are urban water plans at regional, subregional and municipal levels, but they are without clearly defined targets, activities, indicators, timelines and budgets. Of the governance function of planning, the working group identified four criteria that describe the current situation. These are:

- Plans are not backed with financial and investment plans
- Clearly defined procedures for participation by water service users (e.g. households) and communities in planning programmes do not exist
- Plans do not contain clear responsibilities and accountabilities
- Plans are not developed in consultation with, or validated by, stakeholders.

Of the four above-mentioned criteria, the first two were assessed to have shown no progress (scored red) in addressing urban water sector planning problems, while it was believed that partial or some progress had been made in addressing the last two issues (scored yellow).

Monitoring, evaluation and learning: There was consensus among the members of the working group that there are very weak monitoring systems in institutions (municipalities) responsible for the management of urban water supply services regarding quality control and influencing management actions. During the working session a total of five monitoring, evaluation and learning criteria reflecting the current status of urban water subsector governance were identified. All were flagged red, indicating that no progress had been made to improve evidence-based decision-making for the benefit of urban water service delivery. These critical limitations are related to:

- The existing organization of monitoring feedback system(s) to improve decision-making at various urban water management levels
- Adherence to a common set of monitoring indicators reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity and cost effectiveness) and the type of service providers (e.g. formal, informal)

- The quality of reports from service providers on their internal monitoring against required service standards to the regulating authority and on their timeliness to trigger corrective actions
- Making the performance of formal service providers public, including information on customer satisfaction
- Establishing and using sector learning processes based on a mix of evaluation, research and knowledge management approaches.

Capacity development: The working group agreed that the existing institutions involved in providing urban water supply services have limited capacity to fulfil subsector roles and responsibilities for sustainable service delivery at scale, including the availability of necessary structures, tools, training and incentives. The group identified six criteria to assess the current status of the subsector; four of these showed no progress (flagged red) while two showed partial progress (flagged yellow). Those criteria identified with no progress are:

- Developing an overarching government-led capacity-development plan for urban water supply based on needs assessment
- Developing a human resources strategy that identifies the challenges and capacity gaps, and actions to develop and manage human resources for urban water supply
- Implementing capacity-development actions and their progress against capacity-development plans
- Developing capacity to monitor services against indicators defined by national standards.

Criteria with partial progress (flagged yellow) are:

- Developing internal institutional stakeholder and/or provider capacity-development plans
- Developing private-sector capacity to deliver safely managed urban water services in an efficient manner.

3.3.2 Bottlenecks

Participants in the working group decided to focus on and identify one critical type of bottleneck among the criteria identified for each governance function. They all agreed to focus on criteria with the least progress (i.e. flagged red) and where the removal of bottlenecks could significantly contribute to the improvement of outcomes. Based on this approach, the bottlenecks were identified as:

- Low capacity to implement the existing urban water supply policy and legal framework
- The absence of a national coordinating body
- Inadequate service delivery models because not all the necessary conditions such as a policy and regulatory framework, capacity support, financial arrangements and incentives are in place
- Ambiguity or the absence of clearly defined roles and responsibilities of the lead urban water supply institutions, and the absence of an effective performance appraisal system
- Inadequate budget utilization rate for the last three years for domestic funds
- Absence of a ready pipeline of bankable projects for urban water supply
- Absence of financial and investment plans that support the urban water plan
- Absence of a well-established monitoring feedback system to improve decision-making at different levels
- The absence of an overarching government-led capacity-development plan for urban water supply based on needs assessment.

3.3.3 Underlying causes

The main underlying causes of the major bottlenecks for urban water supply are the low level of policy- and decision-makers' commitment and the limited human, financial, institutional and organizational capacities of the urban water subsector.

The low level of policy- and decision-makers' commitment relates to: i) establishing a national coordinating body and supporting evidence-based advocacy for its establishment; ii) enforcing the implementation of the existing organizational structure, monitoring and evaluating its performance and conducting regular joint reviews to clarify roles and responsibilities among the stakeholders involved to enhance partner contributions, and the means to address such changes; iii) assigning full authority to organizations responsible

Table 7. Summary of identified and prioritized activities to remove bottlenecks in urban water supply, and the associated costs, allocation of resources and responsible institutions

BUILDING BLOCK AND/OR GOVERNANCE FUNCTION	ACTIVITY	PRIORITY	ESTIMATED COST			ACCOUNTABILITY AND TIMELINE		
			TOTAL COST (USD)	FINANCING AVAILABLE (USD)	FUNDING GAP (USD)	ACCOUNTABLE AND RESPONSIBLE INSTITUTION(S)	EXPECTED START DATE	EXPECTED END DATE
Coordination	Establish fully responsible urban water supply coordinating body at national level	High	250,000	0	250,000	MoLWE	01-Jan-2019	30-Jul-2020
Service delivery arrangement	Establish fully mandated urban water supply services	High	160,000	0	160,000	MoLWE	01-Jan-2019	31-Jul-2020
Accountability and regulation	Establish planning and coordination unit within each urban water supply service organization	High	100,000	0	100,000	MoLG	01-Jan-2019	31-Jul-2019
Budgeting and expenditure	Restructure organizations responsible for urban water supply service delivery and advocate for them to assume full mandate for the planning and implementation of the subsector for an efficient, equitable and sustainable service	High	50,000	0	50,000	MoLG	01-Jan-2019	31-Jul-2020
Finance	Develop fundraising capacity (human resources) of urban water supply institutions	High	100,000	0	100,000	MoLWE	02-Sep-2018	30-Sep-2022
Monitoring, evaluation and learning	Establish monitoring and evaluation unit within each organization responsible for urban water supply service delivery	High	150,000	0	150,000	MoLG	02-Jul-2018	31-Jul-2019
Capacity development	Develop institutional and human resource capacity to provide urban water supply services	High	5,000,000	0	5,000,000	MoLWE	01-Jan-2019	31-Jul-2022
Total			**5,810,000**	**0**	**5,810,000**			

for urban water supply services to manage their budgets; iv) putting in place an effective incentive mechanism to encourage and increase professionals' commitment to contribute in preparing bankable projects, and v) developing an overarching government-led capacity-development plan for urban water supply based on needs assessment.

Limited human, financial, institutional and organizational capacity of the urban water subsector relates to: i) putting in place all necessary conditions, such as policy and regulatory framework, capacity support, financial arrangements and incentives; ii) advancing the establishment of a national coordination body; iii) preparing financial and investment plans and leading their implementation; iv) establishing a monitoring feedback system to improve decision-making at different levels; and v) developing an overarching government-led capacity-development plan for urban water supply based on needs assessment.

Limited levels of awareness of stakeholders and service providers about the existing policy and legal framework produced for urban water governance is also an underlying cause of the bottlenecks.

3.3.4 Identification and prioritization of activities to remove bottlenecks

The Urban Water Working Group defined seven activities to address the bottlenecks hindering urban water supply services, which focus on removing their causes. Six activities have been rated as high priority for further consideration and funding. A detailed description of the identified and prioritized activities to remove the bottlenecks is presented in Table 7.

3.3.5 Costing and allocation of resources

The working group identified the costs and financing available for each of the seven activities identified to remove the subsector's bottlenecks. These costs were calculated for up to a five-year period. Given that the activities need to be sequential, they were prioritized according to whether financing is likely to be made available and their level of importance. The total financing gap to implement the recommended activities is about USD 5,810,000. The cost, available financing and funding gap of these priority activities are presented in Table 7.

3.3.6 Accountability and responsibilities

The work group also identified who should be accountable and responsible for implementing the activities, and the projected start and end dates for carrying them out (see Table 7). The MoLWE and MoLG were identified as lead institutions responsible for urban water supply in the country.

3.4 Urban sanitation services

3.4.1 Current situation

The Urban Sanitation Working Group selected eight sector governance functions of the five sector building blocks for assessing the current situation of the enabling environment.

Table 8 lists 13 criteria related to urban sanitation services. These focus on the governance functions of sector policy and strategy (1); coordination (2); service delivery arrangements (1); accountability and regulation (1); financing (1); planning (2); monitoring, evaluation and learning (2); and capacity development (3). The criteria identified were assessed as having shown no progress and were awarded red as per the colour scoring scheme to show their priority for further consideration in the bottleneck analysis. Annex 1D on page 48 presents the list of all 19 criteria identified for each building block and governance function, and the awarded colour of each.

Sector policy and strategy: The working group affirmed that an urban sanitation policy and legal framework do not exist, and those in draft form are lacking a set of supporting documents and implementing decrees that provide clarity on roles and responsibilities, and service norms and standards.

Coordination: The subsector working group agreed that a coordinating body or mechanism for urban sanitation services exists, but the group also identified two criteria that describe the current situation (mainly challenges) on the

Table 8. Urban sanitation criteria (identified within building blocks and governance functions) and the extent to which they have been achieved

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Sector policy and strategy	Sector policy and strategy	1. The policy and legal framework have a set of supporting documents and implementing decrees that provide clarity on roles and responsibilities, and service norms and standards	
Institutional arrangement	Coordination	2. Institutional roles and accountabilities are clearly defined and operationalized	
	Coordination	3. Well-functioning body coordinates stakeholders and meets as needed	
	Service delivery arrangements	4. Adequate conditions are in place for the application of service delivery models, including the policy and regulatory framework, capacity support, financing arrangements and incentives	
	Accountability and regulation	5. Clear and effective mechanisms for consumer feedback and complaints are in place	
Budgeting and financing	Financing	6. A proportion of external aid (out of total aid for urban sanitation) supports plans and budgets	
Planning, monitoring and review	Planning	7. Plan developed contains clear responsibilities and accountabilities	
	Planning	8. Plan developed is informed through a consultative platform, coordination and learning	
	Monitoring, evaluation and learning	9. Established monitoring feedback system(s) to improve decision-making at different levels	
	Monitoring, evaluation and learning	10. Commonly adhered-to set of indicators is monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness), the type of service providers (e.g. formal, informal) and the parts making up the service chain (e.g. on-site provision, emptying, transport, treatment, discharge and reuse)	
Capacity development	Capacity development	11. An overarching government-led capacity-development plan for urban sanitation has been developed, based on needs assessment	
	Capacity development	12. Each institutional stakeholder (service provider) has their own capacity-development plan	
	Capacity development	13. Capacity exists to monitor urban sanitation services against the indicators defined in the national standards	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

coordination of the subsector which required further analysis. These were:

- The institutional roles and accountabilities of urban sanitation coordinating bodies are not clearly defined and operationalized
- Poorly functioning body coordinating the stakeholders, which does not meet as needed.

Service delivery arrangements: Although they affirmed the existence of some standards and/or benchmarking arrangements for urban sanitation service delivery, the group recognized that adequate conditions are not in place for the application of service delivery models, including the policy and regulatory framework, available capacity support, financing arrangements and incentives. There had been no progress towards solving these problems.

On the other hand, very limited progress is known to have been achieved:

- On the current urban sanitation models to include provisions for targeting the most vulnerable populations;
- Towards making urban sanitation service models widely known and implemented in practice; and
- By including private-sector participation and a range of options in the current urban sanitation service delivery models.

Accountability and regulation: The working group agreed that there are government monitoring and verification systems for urban sanitation service delivery at multiple levels, but there are no clear and effective mechanisms for consumer feedback and complaints, or progress towards establishing such a mechanism.

The working group also identified enabling environments where limited progress has been achieved. These are:

- In allocating sufficient resources and developing capacity to implement the regulations
- Putting in place functional internal control mechanisms, such as state audits, transparency commissions, and/or others that check for institutional compliance.

Financing: The working group noted that the current public allocation to urban sanitation is inadequate and that no progress had been made to address this challenge. Similarly, the proportion of external aid (out of total aid for urban sanitation) that supports plans and budgets is insufficient, although some progress was reported to have been made.

Planning: In general, the group affirmed the presence of national urban sanitation plans that state clear targets, activities, indicators, timelines and budgets, but those plans do not contain clear responsibilities and accountabilities, and the planning was not informed through consultative platform(s), coordination and learning.

Monitoring, evaluation and learning: There was consensus among the group that there is a government-led monitoring system on urban sanitation, but with considerable limitations to monitor, evaluate and document reliable and timely information that could be used for managerial decisions and improve policies and programmes. Those limitations are applicable to:

- The existing organization on monitoring feedback system(s) to improve decision-making at different urban sanitation management levels
- Adhering to a common set of indicators that reflect relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness), the type of service providers (e.g. formal, informal) and the various parts of the service chain (on-site provision, emptying, transport, treatment, discharge and reuse).

Capacity development: The working group agreed that the existing institutions that provide urban sanitation services have limited capacity to fulfil their roles and responsibilities for sustainable service delivery at scale, including the availability of necessary structures, tools, training and incentives. The group identified two relevant criteria to assess the current status of capacity development in the subsector, which they concluded have shown no progress (flagged red) at all. These are:

- Developing an overarching government-led capacity-development plan for urban sanitation based on needs assessment

- The various institutional service providers and other stakeholders developing their own capacity-development plans
- Developing capacity to monitor services against indicators defined by national standards.

3.4.2 Bottlenecks

Participants decided to focus on and identify one critical bottleneck for each criterion identified under each sector governance function. Based on this approach the identified bottlenecks are:

- Lack of a policy and legal framework
- The absence of clearly defined roles and responsibilities for lead urban sanitation management institutions
- Lack of a well-functioning coordinating body
- Lack of supportive conditions for the application of service delivery models. These include a weak policy and regulatory framework, insufficient capacity support, and lack of financing arrangements and incentives
- No mechanism to include provision for targeting and providing specific services to vulnerable groups
- Low level of knowledge about the existing urban sanitation service models for implementation
- Poor urban sanitation service delivery model that does not include a range of options, particularly private-sector participation
- Insufficient resources and capacities to implement the regulations
- Lack of clear and effective mechanisms for consumer feedback and complaints
- Inadequate internal control mechanisms
- Insufficient public allocation to urban sanitation as a proportion of gross domestic product
- Lack of external aid for urban sanitation
- Absence of a plan that contains clear responsibilities and accountabilities
- Plan not being developed in consultation with and/or validated by stakeholders
- The absence of a well-established monitoring feedback system to improve decision-making at different levels
- Monitoring is not based on a set of indicators
- The absence of an overarching government-led capacity-development plan for urban sanitation
- Inability of institutions to incorporate their own capacity-development plans
- Inadequate capacity to monitor services against indicators defined by national standards.

3.4.3 Underlying causes

The underlying causes of the major bottlenecks for urban sanitation services are: i) low levels of policy- and decision-makers' commitment; ii) limited human, financial, institutional and organizational capacity of the urban sanitation subsector; and iii) limited knowledge, practice and attitudes on participatory planning that involves all relevant urban sanitation stakeholders.

The low levels of policy- and decision-makers' and service providers' commitment refer to: i) formulating and enacting policy and legal frameworks; ii) introducing appropriate technologies and putting mechanisms in place to include provisions for targeting and providing specific services for vulnerable populations; iii) raising external aid for urban sanitation; iv) putting effective mechanisms for consumer feedback and complaints in place; v) taking the initiative to include a range of options, particularly private-sector participation; and vi) prioritizing urban sanitation in the allocation of resources and developing capacity to facilitate the effective implementation of regulations.

Limited human, financial, institutional and organizational capacities of the urban sanitation services refer to: i) developing policy and legal frameworks; ii) establishing a well-functioning coordinating body; iii) preparing an urban sanitation subsector plan developed in consultation with and validated by stakeholders; iv) developing an overarching government-led capacity-development plan with institutions, incorporating their own capacity-development plans; v) having a well-established monitoring feedback system to improve decision-making at different levels; and vi) creating linkages and partnerships between urban sanitation subsector institutions and donors.

Table 9. Summary of identified and prioritized activities to remove bottlenecks in urban sanitation, and the associated costs, allocation of resources and responsible institutions

BUILDING BLOCK AND/OR GOVERNANCE FUNCTION	ACTIVITY	PRIORITY	ESTIMATED COST			ACCOUNTABILITY AND TIMELINE		
			TOTAL COST (USD)	FINANCING AVAILABLE (USD)	FUNDING GAP (USD)	ACCOUNTABLE AND RESPONSIBLE INSTITUTION(S)	EXPECTED START DATE	EXPECTED END DATE
Sector policy and strategy, and capacity development	Hold meetings with higher officials, functioning agencies and stakeholders on urban sanitation, to advocate the policy and strategy framework, financing, and partnership and coordination	High	180,000	0	180,000	MoH, MoLG, MoF	01-Jun-2019	01-Jun-2020
Coordination, capacity development and planning	Strengthen human resources on development of policies and regulation; planning; monitoring and evaluation; and appropriate technology options and research	High	63,000	0	63,000	MoH, MoLG, development partners	01-Jan-2019	01-Dec-2022
Service delivery arrangements and capacity development	Strengthen institutional capacity through the procurement of appropriate technologies (including for vulnerable groups) and office equipment and furniture	High	2,060,000	0	2,060,000	MoH, MoLWE, MoLG, development partners	01-Jun-2019	01-Dec-2022
Accountability and regulation, and monitoring, evaluation and learning	Establish an urban sanitation information management system, including a database, a research and learning centre, and a monitoring and evaluation system	High	41,000	0	41,000	MoH, MoLG, development partners	01-Jun-2019	01-Jun-2020
Planning	Strengthen coordination by establishing a public relations office	High	25,000	0	25,000	MoH, MoLG, development partners	01-Jan-2019	01-Jun-2020
Total		**2,369,000**	**0**	**2,369,000**				

Limited knowledge, practice and attitudes on participatory planning that involves all relevant urban sanitation stakeholders is the third underlying cause of bottlenecks in delivering urban sanitation services.

3.4.4 Identification and prioritization of activities to remove bottlenecks

The group defined 29 activities to address the bottlenecks by removing their causes. From the 29 activities, the group formulated five broad activities that could address the bottlenecks in the five sector building blocks and sector governance functions; all have been rated high priority for further consideration and funding. A detailed description of these identified and prioritized activities is presented in Table 9.

3.4.5 Costing and allocation of resources

Table 9 also shows the costs (for up to a five-year period), available financing and funding gap of each high-priority activity. Given that activities are sequential, they were prioritized according to whether financing is likely to become available and their level of importance. The total financing gap to implement the recommended activities is about USD 2,369,000.

3.4.6 Accountability and responsibilities

The working group also identified who should be accountable and responsible for implementing the activities, and the projected start and end dates for carrying them out (see Table 9). The MoH and MoLG are the two lead institutions identified to take responsibility in implementing the activities.

3.5 WASH in institutions

3.5.1 Current situation

The WASH in Institutions Working Group was mainly composed of personnel from MoE and MoH. The group selected six sector governance functions of the five sector building blocks for assessing the current environment of WASH in institutions. Annex 1E on page 49 presents the list of all 12 criteria identified and their colour score.

Table 10. Criteria for WASH in institutions (identified within building blocks and governance functions) and the extent to which they have been achieved

BUILDING BLOCK	FUNCTION	CRITERION	SCORE
Sector policy and strategy	Sector policy and strategy	1. The policy includes provisions for operational and financial sustainability of services	
Coordination	Coordination	2. Well-functioning body coordinates stakeholders and meetings as needed	
	Service delivery arrangements	3. Adequate conditions are in place for the application of service delivery models, including the policy and regulatory framework, capacity support and financial arrangements	
Budgeting and financing	Financing	4. Sufficient allocation of funds for WASH in institutions	
Planning, monitoring and review	Monitoring, evaluation and learning	5. Established monitoring feedback systems to improve decision-making at different levels	
Capacity development	Capacity development	6. A human resources strategy exists that identifies problems and capacity gaps, and actions required to develop and manage human resources for WASH in institutions	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Table 10 presents the six criteria that were identified as having shown no progress and scored red for further consideration in the bottleneck analysis.

Sector policy and strategy: The working group concluded that the existing policy does not include provisions for the operational and financial sustainability of WASH services in institutions (school and health facilities), and there had been no progress in addressing this problem (scored red). On the other hand, progress had been achieved to a limited extent in the inclusion of provisions for accountability mechanisms between users, service providers and government in the existing WASH policy and legal framework to deal with WASH service delivery in institutions (scored yellow).

Coordination: The working group was convinced that, to a large extent, institutional roles and accountabilities are clearly defined and operationalized for WASH in institutions (scored green). However, there is no well-functioning body that coordinates stakeholders and meets as needed for effective, efficient and sustainable WASH services in institutions (school and health facilities) and no progress towards establishing such a body (scored red).

Service delivery arrangements: While affirming the government's efforts in the provision of WASH infrastructure and education on WASH in institutions according to national standards, the group recognized that adequate conditions are not in place for the application of service delivery models, including the policy and regulatory framework, available capacity support and financial arrangements and no progress towards solving this problem had been made (scored red). On the other hand, very limited progress was recognized regarding the process for selecting and implementing service delivery models, which is clear, transparent and adapted to the context (scored yellow).

Financing: The group concluded that the allocation of funds for WASH in institutions from all sources of funding is insufficient to support the delivery of the services required (scored red).

Monitoring, evaluation and learning: The working group recognized that the existing monitoring feedback systems to improve decision-making at different levels of WASH in institutions are weak and that no progress had been observed (scored red). Furthermore, monitoring, evaluation and learning do not have a common set of indicators that reflects relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness) and there had been very limited progress towards addressing these issues (scored yellow).

Capacity development: The group observed that a human resources strategy that identifies problems and capacity gaps, and actions required to develop and manage human resources for WASH in institutions was lacking (scored red). In addition they found that institutional and individual capacity to monitor services against indicators defined by national standards were weak (scored yellow).

3.5.2 Bottlenecks

The working group agreed to assess and identify one critical bottleneck for each criterion identified under each sector governance function. Based on this approach the following bottlenecks were identified:

- Lack of a policy and a legal framework that include provisions for operational sustainability
- Lack of a well-functioning coordinating body
- Unsupportive conditions for the application of service delivery models, including a weak policy and regulatory framework, insufficient capacity support, and no financing arrangements or incentives
- Insufficient funding due to weak institutional and individual capacities to create mechanisms to raise funds and diversify sources of funding
- Absence of a well-established monitoring feedback system to improve decision-making at different levels
- Weak institutional, individual and financial capacities to develop a human resources strategy that identifies problems and capacity gaps, and actions required to develop and

manage human resources for WASH in institutions.

3.5.3 Underlying causes

Two underlying causes of bottlenecks for WASH in institutions were identified. These are:

- **Limited human, financial, institutional and organizational capacities** of institutions to: i) put in place a policy and legal framework that includes provisions for operational sustainability; ii) establish a well-functioning coordinating body; iii) create conditions necessary for the application of service delivery models; iv) create a mechanism to raise funds and diversify sources of funding; v) establish a monitoring feedback system; and vi) develop a human resources strategy that identifies problems and capacity gaps, and actions required to develop and manage human resources for WASH in institutions.
- **Low level of policy- and decision-makers' commitment** to: i) prioritizing WASH in institutions and allocating resources; ii) establishing a monitoring and feedback system within institutions; and iii) developing a human resources strategy.

3.5.4 Identification and prioritization of activities to remove bottlenecks

The group defined 13 activities to address the bottlenecks by removing their causes. From the 13 activities, six were rated high priority for further consideration and funding. These are listed and briefly described in Table 11.

3.5.5 Costing and allocation of resources

Table 11 presents the cost (for up to five years), available financing and funding gap of each high-priority activity presented. Given that the activities need to be implemented sequentially, they were prioritized according to whether financing is likely to be available, and their level of importance. The total financing gap to implement the recommended activities is about USD 3,730,000.

3.5.6 Accountability and responsibilities

The working group also identified who should be accountable and responsible for implementing the activities, and the projected start and end dates for each (see Table 11). The MoE and MoH are the two leading institutions responsible for implementing the proposed activities.

Table 11. Summary of identified and prioritized activities to remove bottlenecks in WASH in institutions, and the associated costs, allocation of resources and responsible institutions

BUILDING BLOCK AND/OR GOVERNANCE FUNCTION	ACTIVITY	PRIORITY	ESTIMATED COST			ACCOUNTABILITY AND TIMELINE		
			TOTAL COST (USD)	FINANCING AVAILABLE (USD)	FUNDING GAP (USD)	ACCOUNTABLE AND RESPONSIBLE INSTITUTION(S)	EXPECTED START DATE	EXPECTED END DATE
Sector policy and strategy	Strengthen sustainable and operational procurement implementation process	High	90,000	0	90,000	MoF	01-Jan-2019	30-Dec-2019
Coordination	Establish well-functioning WASH coordinating body or committee in each institution	High	10,000	0	10,000	MoND	01-Jan-2019	30-Dec-2019
Service delivery arrangement	Plan and implement institutional and individual capacities for WASH service delivery in institutions	High	1,000,000	0	1,000,000	MoE, MoH	01-Jan-2019	30-Dec-2019
Financing	Strengthen fundraising capacities of institutions and establish dedicated funding mechanisms to finance institutions to secure adequate and sustainable funding for WASH	High	2,500,000	0	2,500,000	MoF	01-Jan-2019	30-Dec-2019
Monitoring, evaluation and learning	Establish a mechanism to ensure accountability at all levels	High	10,000	0	10,000	Institutional structure and WASH committee	01-Jan-2019	30-Dec-2019
Capacity development	Support the development of a human resource strategy to improve capacity	High	120,000		120,000	MoE, MoH	01-Jan-2019	30-Dec-2019
Total		**3,730,000**	**0**	**3,730,000**				

4 Conclusions, recommendations and next steps

Based on an assessment, overlaps and similarities across the five subsectors were found with respect to the bottlenecks for WASH service delivery, the underlying causes of these bottlenecks and priority activities to remove them. These common aspects are summarized below.

1. Bottlenecks for sustainable, equitable and effective WASH service delivery for all include:
   - Absence of reviewed and updated WASH policy and legal frameworks that would address current challenges by being informed from recent research and development findings.
   - Inadequate conditions to apply service delivery models include a weak policy and regulatory framework, insufficient capacity support, and a lack of financing arrangements and incentives.
   - Service delivery models are inadequate because not all the necessary conditions such as policy and regulatory framework, capacity support, financial arrangements and incentives are in place.
   - There is no well-functioning national WASH coordinating body.
   - There is a lack of clearly defined roles and accountabilities of institutions, or where they do exist, the institutions are ineffective in fully operationalizing them with accountability.
   - The WASH service delivery models are inadequate in that they do not include a range of options, regarding, in particular, private-sector participation for high-level investment in WASH infrastructure, mechanisms for accountability between users and service providers, performance appraisal systems and provisions for targeting and providing specific services to vulnerable groups.
   - The supply chain for WASH hardware and services does not meet rural community and household needs in terms of availability and price, particularly for drinking-water systems.
   - Weak monitoring and feedback and inadequate functional internal control mechanisms are identified as critical bottlenecks hindering the improvement of WASH service delivery decision-making at different levels.
   - Insufficient public budget allocations and low levels of budget utilization are hindering the WASH sector.
   - Insufficient funding (external and private) for WASH service delivery mainly arises from the absence of a ready pipeline of bankable projects in each subsector.
   - WASH sector financial and investment plans, developed in consultation with stakeholders, that define clear responsibilities and accountabilities are absent.
   - Weak monitoring and feedback systems hinder effective WASH service planning and decision-making at different levels.
   - Inadequate institutional capacity (institutional, individual and financial) in the WASH sector (including that of private institutions), the absence of an overarching government-led capacity-development plan for WASH service delivery based on needs assessment and inadequate capacity to monitor services against indicators were recognized bottlenecks in the subsectors.

2. The underlying causes of the major bottlenecks identified for WASH service delivery are:
   - Limited human, financial, institutional and organizational capacities;
   - Low levels of commitment of policy- and decision-makers and WASH service providers;

- Low levels of awareness of stakeholders and WASH service providers; and
- Underdeveloped markets to supply the required WASH hardware and sanitary products at reasonable prices.

3. Priority activities identified to remove bottlenecks in WASH service delivery are:
   - Support the sector's policy and strategy by: i) updating WASH sector policy documents with particular emphasis on the existing 2007 rural sanitation policy document; ii) conducting evidence-based advocacy on improving WASH service delivery by focusing on the policy and strategy framework, financing, partnerships and coordination; and iii) strengthening sustainable and operational procurement implementation processes.
   - Coordinate the mechanisms of WASH sector institutions by: i) establishing fully responsible well-functioning coordinating bodies at the national level prioritizing urban water supply and WASH in institutions (schools and health facilities); ii) conducting regular analyses and mapping of stakeholders; and iii) preparing guidelines that clearly define the roles and responsibilities of stakeholders functioning as coordinating bodies at the national, regional, subregional and community levels, and of service users and private-sector sanitation service providers with a priority for rural sanitation.
   - Develop a reliable, high quality and sustainable WASH service by: i) developing a decentralized service delivery framework; and ii) issuing regulations for private sector participation that enhance engagement and the development of relevant skills and markets, and improves a credible supply chain for service delivery models.
   - Enhance accountability and regulation by establishing planning and coordination units within WASH service organizations that improve the existing inadequate functional internal control mechanisms and weak monitoring and feedback systems.
   - Enhance financing of the WASH sector by: i) conducting evidence-based advocacy for more financial support; ii) strengthening the fundraising capacities of institutions; and iii) promoting and supporting the private sector for investment based on a comprehensive study.
   - Improve monitoring, evaluation and learning in the sector by strengthening the monitoring and feedback systems that improve decision-making at all levels; this should be based on a capacity needs assessment, through the implementation of training and by introducing a mechanism to ensure accountability at all levels.
   - Support capacity development by: i) developing institutional and human resources capacity based on a comprehensive capacity-development plan; ii) introducing an incentive mechanism for professionals to work in remote areas of the country and at the community level so that WASH service delivery can be improved at all levels; and iii) providing access to sanitation materials by communities by using various marketing strategies.

During the three-day workshop and in finalizing the report, it became apparent that some participants had a low level of understanding of the concept of an enabling environment (building blocks and functions), and bottlenecks, the underlying causes of these and potential activities to remove them. This was more clearly manifested in the WASH bottleneck analysis reports generated by the subsector groups using the online tool when an effort was made to establish logical relationships between the bottlenecks, the underlying causes and bottleneck removal activities. Therefore, it is highly recommended that these and other relevant conceptual issues be addressed prior to starting similar WASH bottleneck analysis at other levels.

The working group of each subsector identified 5–10 high-priority activities for further consideration for funding without putting them in order of importance for resource allocation. Therefore, participants should be encouraged: i) in further analysis and prioritization of bottlenecks to choose the most critical and

strategic activity to create the necessary enabling environment for service delivery; ii) to identify which activities should be sequenced first because they are underlining bottlenecks, because they are 'easy-to-win' or because a partner of government is already planning to do it, and iii) to further define the activities so that the financier and implementing agent can start discussing ownership and responsibility.

From the WASH bottleneck analysis conducted at the national level there was a consensus among participants that the tool had helped to systematically assess the enabling environment of WASH delivery by tracking the removal of barriers to WASH service delivery at the national level for the five subsectors (rural and urban sanitation services, rural and urban water supply and institutions). It is thus important that this national-level analysis be followed up with regional- and subregional-level assessments of the enabling environment of WASH delivery by tracking the removal of barriers to services.

During the workshop, participants requested the offline version of WASH-BAT for analysis and planning. Therefore, the WASH offline version needs to be distributed to WASH sector partners for their regular use in the analysis of their enabling environment. Similarly, it is important to distribute the offline version to WASH sector partners at regional and subregional levels in advance of their similar workshops.

References

Ministry of Education (MoE), 'School Water, Sanitation and Hygiene Profile Assessment Report', MoE, Anseba Region, 2012.

Ministry of Health (MoH), 'Nationwide Assessment on Availability of Water, Sanitation and Hygiene Facilities in Health Care Facilities', MoH, Asmara, 2012.

Ministry of Health (MoH), 'Rural Sanitation Policy and Strategy Directions for Eritrea', MoH, Asmara, 2007.

National Statistics and Evaluation Office (NSO), 'Eritrea Population Size 2000–2022, NSO, Asmara.

National Statistics and Evaluation Office and Fafo Institute for Applied National Studies (NSO and Fafo AIS), 'Eritrean Population Health Survey 2010', NSO and Fafo AIS, Asmara, 2013.

United Nations Children's Fund (UNICEF), 'Open Defecation Sustainability Assessment', UNICEF Eritrea, Asmara, 2015.

Annexes

Annex 1: All criteria (identified within building blocks and governance functions) and the extent to which they have been achieved

Annex 1A: Rural sanitation

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Sector policy and strategy	1. Rural sanitation policy and legal framework exists	
	2. The policy and legal framework have a set of supporting documents and implementing decrees that provide clarity of roles and responsibilities, service norms and standards	
	3. The policy and legal framework include provisions for accountability mechanisms between users, service providers and government	
Coordination	4. A coordination body or mechanism for rural sanitation exists	
	5. Institutional roles and accountabilities are clearly defined and operationalized	
Service delivery arrangements	6. Standards and benchmarking arrangements for rural sanitation service delivery in place	
	7. The models include a mechanism for accountability between users, government and service providers	
	8. The sector delivery model includes a range of options, including private-sector participation	
	9. Adequate conditions are in place for the application of service delivery models, including the policy and regulatory framework, available capacity support, finance arrangements and incentives	
	10. The models include provisions for targeting the most vulnerable populations	
Accountability and regulation	11. Government monitoring and verification systems for rural sanitation are in place at multiple levels	
	12. Lead institutions have clear roles and responsibilities and have performance appraisal system	
	13. Sufficient resources and capacity exist to implement the regulations	
	14. Incentives exist for investment in environmentally sustainable and efficient technologies	
	15. There are clear and effective mechanisms for consumer feedback and complaints	
Budget and expenditure	16. The budget is disaggregated by rural sanitation and expenditure is tracked	
	17. The funding for sensitization campaigns has been explicitly addressed in the budgeting process and is adequate	
	18. Budget utilization rate (i.e. expenditure as a percentage of budget) over the past three years is adequate for official development assistance	

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Planning	19. National rural sanitation plans state clear targets, activities, indicators, timelines and budgets	
	20. Plan contains advocacy activities to influence politicians and key influencers	
	21. The rural sanitation plan is backed with financial and investment plans	
Monitoring, evaluation and learning	22. Established monitoring feedback system(s) to improve decision-making at different levels	
	23. Commonly adhered-to set of indicators is monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness), the type of service providers (e.g. formal, informal) and the parts of the service chain (on-site provision, emptying, transport, treatment, discharge and reuse)	
	24. Service providers report the results of their internal monitoring against required service standards to the regulatory authority, which triggers timely corrective action	
	25. Established sector learning processes are used by stakeholders, based on a mix of evaluation, research and knowledge management approaches	
Capacity development	26. Institutions have capacity to fulfil sector roles and responsibilities for sustainable rural sanitation service delivery at scale, including the availability of necessary structures, tools, training and incentives	
	27. Implementation is progressing against capacity-development plans	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Annex 1B: Rural water supply

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Coordination	1. Institutional roles and accountabilities are clearly defined and operationalized	
	2. Well-functioning body coordinates stakeholders and meets as needed	
	3. Coordinating body includes major stakeholders in rural water services, including the private sector, community-based organizations, government agencies, advocacy groups, civil society organizations and non-governmental organizations	
Service delivery arrangements	4. The sector delivery models comprise a range of options, including private-sector participation	
	5. The models include mechanisms for accountability between users, governments and service providers	
	6. A supply chain for hardware and services for drinking-water systems meets rural community and household needs in terms of both availability and price	
Accountability and regulation	7. There are clear and effective mechanisms for consumer feedback and complaints	
	8. There are functional internal control mechanisms, such as state audits, transparency commissions and others that check for compliance of institutions	
	9. An institution with clear regulatory functions exists	
	10. Sufficient resources and capacity exist to implement the regulations	
	11. The regulatory body is sufficiently independent from service providers and government to act as a valid referee and provide performance-based incentives and/or sanctions	
Budget and expenditure	12. The budgets and expenditure reports are publicly available	
	13. Tariffs are sufficient to provide adequate delivery of rural water services according to national standards, including operations and maintenance	
	14. There is enough capital expenditure to meet rural water sector investment targets	
	15. Allocations to sub-national level incorporate equity criteria (to be defined in each context) and include specific measures to target resources to reduce service inequalities	
	16. The funding for sensitization campaigns has been explicitly addressed in the budgeting process and is adequate	
	17. Budget utilization rate (i.e. expenditure as a percentage of budget) over the past three years is adequate for domestic funds	
	18. Budget utilization rate (i.e. expenditure as a percentage of budget) over the last three years is adequate for official development assistance	
	19. Donor funds are channelled on budget and align with government systems	
	20. There is a clearly articulated procurement process	
Financing	21. The private sector is incentivized to invest in rural water infrastructure and service delivery	
	22. Public allocations to water as a proportion of GDP are sufficient	
	23. A proportion of external aid (out of the total aid for rural water) supports water plans and budgets	

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Financing	24. Tariffs can be adjusted to cover the costs of services (operating expenditure if capital expenditure is covered by public funds) and cost inflation	
	25. Existence of financing institutions and mechanisms to raise additional finances for rural water (e.g. domestic bond market)	
	26. There is a ready pipeline of bankable projects in rural water	
Planning	27. Plan contains clear responsibilities and accountabilities	
	28. Plan is developed in consultation with and validated by stakeholders	
	29. Plan is backed with financial and investment plans	
	30. Plan states a target for reduction of inequalities	
	31. Plan contains advocacy activities to influence politicians and key influencers	
	32. Clearly defined procedures exist for participation by water supply service users (e.g. households) and communities in planning programmes	
Monitoring, evaluation and learning	33. Established monitoring feedback system(s) to improve decision-making at different levels exist	
	34. Annual joint sector review (JSR), or similar mechanism, regularly assesses progress against targets and sets priority activities for following year(s)	
	35. Coverage of specific population subgroups is monitored to track progress of vulnerable populations, and feeds into decision-making	
	36. Service providers report the results of their internal monitoring against required service standards to the regulatory authority, which triggers timely corrective action	
	37. The performance of formal service providers is made public, including information on customer satisfaction	
Capacity development	38. An overarching government-led capacity-development plan for rural water supply has been developed, based on needs assessment	
	39. Each institutional stakeholder and service provider has its own capacity-development plan	
	40. A human resources strategy exists that identifies problems and capacity gaps, and actions required to develop and manage human resources for rural water supply	
	41. Training institutions have the capacity and resources to deliver the personnel needed for scaling up rural water supply	
	42. Implementation is progressing against capacity-development plans	
	43. Private sector capacity exists to deliver safely managed rural water supply services in an efficient matter	
	44. Capacity exists to monitor services against indicators defined by national standards	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Annex 1C: Urban water supply

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Sector policy and strategy	1. Urban water supply policy and legal framework are implemented	●
	2. Sector policy and legal framework are updated regularly	●
Coordination	3. A coordination body or mechanism for urban water supply exists	●
	4. Institutional roles and accountabilities are clearly defined and operationalized	●
	5. Well-functioning body coordinates stakeholders and meets as needed	●
	6. Existence of one government-led plan	●
Service delivery arrangements	7. The sector delivery models include a range of options, including private-sector participation	●
	8. The process for selection and implementing service delivery models is clear, transparent and adapted to the context	●
	9. Adequate conditions are in place for the application of service delivery models, including the policy and regulatory framework, available capacity support, financing arrangements and incentives	●
	10. A supply chain for hardware and services for drinking water systems meets urban community and household needs in terms of availability and price	●
Accountability and regulation	11. Government monitoring and verification systems for urban water supply are in place at multiple levels	●
	12. Lead institutions have clear roles and responsibilities, and have performance appraisal systems	●
	13. There are clear and effective mechanisms for consumer feedback and complaints	●
	14. An institution with clear regulatory functions exists	●
	15. Sufficient resources and capacity exist to implement the regulations	●
	16. The regulatory body is sufficiently independent from service providers and government to act as a valid referee and provide performance-based incentives and/or sanctions	●
	17. Incentives exist for investment in environmentally sustainable and efficient technologies	●
Budget and expenditure	18. The budgets and expenditure reports are publicly available	●
	19. Budget utilization rate (i.e. expenditure as percentage of budget) over the past three years is adequate for domestic funds	●
	20. Budget utilization rate (i.e. expenditure as a percentage of budget) over the past three years is adequate for official development assistance	●
	21. Multi-year budget allocations are provided and long-term commitments are known	●
	22. There is a clearly articulated procurement process	●

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Financing	23. The financial needs for urban water supply are known and the legal and institutional frameworks for resource mobilization are in place	
	24. The private sector is incentivized to invest in urban water supply infrastructure and service delivery	
	25. There is a ready pipeline of bankable projects in urban water supply	
Planning	26. National urban water supply plans state clear targets, activities, indicators, timelines and budgets	
	27. Plan contains clear responsibilities and accountabilities	
	28. Plan is developed in consultation with and validated by stakeholders	
	29. Plan is backed with financial and investment plans	
	30. Clearly defined procedures exist for participation of water service users (e.g. households) and communities in planning programmes	
Monitoring, evaluation and learning	31. Government-led monitoring system on urban water supply is in place	
	32. Monitoring feedback system(s) to improve decision-making at different levels is established	
	33. Commonly adhered-to set of indicators is monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness) and the type of service providers (e.g. formal, informal)	
	34. Service providers report the results of their internal monitoring against required service standards to the regulatory authority, which triggers timely corrective action	
	35. The performance of formal service providers is made public, including information on customer satisfaction	
	36. Established sector learning processes are used by stakeholders, based on a mix of evaluation, research and knowledge management approaches	
Capacity development	37. Institutions have capacity to fulfil sector roles and responsibilities for sustainable service delivery at scale, including the availability of necessary structures, tools, training and incentives	
	38. An overarching government-led capacity-development plan for urban water supply has been developed, based on needs assessment	
	39. Each institutional stakeholder and service provider has its own capacity-development plan	
	40. A human resources strategy exists that identifies problems and capacity gaps, and actions required to develop and manage human resources for urban water supply	
	41. Implementation is progressing against capacity-development plans	
	42. Private-sector capacity exists to deliver safely managed urban water services in an efficient matter	
	43. Capacity exists to monitor services against indicators defined by national standards	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Annex 1D: Urban sanitation

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Sector policy and strategy	1. The policy and legal framework have a set of supporting documents and implementing decrees that provide clarity of roles and responsibilities, service norms and standards	
Coordination	2. Institutional roles and accountabilities are clearly defined and operationalized	
	3. Well-functioning body coordinates stakeholders and meets as needed	
Service delivery arrangements	4. Adequate conditions are in place for the application of service delivery models, including the policy and regulatory framework, available capacity support, financing arrangements and incentives	
	5. The models include provisions for targeting the most vulnerable populations	
	6. The service models are widely known and implemented in practice	
	7. The sector delivery models include a range of options, including private-sector participation	
Accountability and regulation	8. Sufficient resources and capacity exist to implement the regulations	
	9. Clear and effective mechanisms for consumer feedback and complaints exist	
	10. Functional internal control mechanisms are utilized, such as state audits, transparency commissions, and others that check for compliance of institutions	
Financing	11. Public allocations to sanitation as a proportion of GDP are adequate	
	12. A proportion of external aid (out of total aid for urban sanitation) supports plans and budgets	
Planning	13. Plans contain clear responsibilities and accountabilities	
	14. Planning is informed by consultative platforms, coordination and learning	
Monitoring, evaluation and learning	15. An established monitoring feedback system(s) is (are) used to improve decision-making at different levels	
	16. Commonly adhered-to set of indicators is monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness), the type of service providers (e.g. formal, informal) and the various parts of the service chain (on-site provision, emptying, transport, treatment, discharge and reuse)	
Capacity development	17. An overarching government-led capacity-development plan for urban sanitation has been developed, based on needs assessments	
	18. Each institutional stakeholder and service provider has its own capacity-development plan	
	19. Capacity exists to monitor services against indicators defined by national standards	

Key: Extent to which criterion or indicator has been fulfilled

Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Annex 1E: WASH in institutions

BUILDING BLOCK AND GOVERNANCE FUNCTION	CRITERION	SCORE
Sector policy and strategy	1. Policy is informed by evidence (e.g. coverage data, service quality, available financing, population impacts of poor services and equity issues)	
	2. The policy includes provisions for operational and financial sustainability of services	
	3. The policy and legal framework include provisions for accountability mechanisms between users, service providers and government	
Coordination	4. Institutional roles and accountabilities are clearly defined and operationalized for WASH in institutions	
	5. A well-functioning body coordinates stakeholders and meets as needed	
Service delivery arrangements	6. The process for selection and implementing service delivery models is clear, transparent and adapted to the context	
	7. Adequate conditions are in place for the application of service delivery models, including the policy and regulatory framework, available capacity support and financial arrangements	
Financing	8. Allocation of funds for WASH in institutions is sufficient	
Monitoring, evaluation and learning	9. Commonly adhered-to set of indicators is monitored over time, reflecting relevant aspects of service delivery (functionality, hours of service, affordability, quality, quantity, cost effectiveness)	
	10. Established monitoring feedback systems are used to improve decision-making at different levels	
Capacity development	11. A human resources strategy exists that identifies problems and capacity gaps, and actions required to develop and manage human resources for WASH in institutions	
	12. Capacity exists to monitor services against indicators defined by national standards	

Key: Extent to which criterion or indicator has been fulfilled

			
Yes, achieved	**To a large extent**	**To a lesser extent**	**No progress**

Annex 2: List of participants

	NAME	ORGANIZATION	E-MAIL ADDRESS
1.	Jaefer Zerai Abadi	Keren Water Supply Department	
2.	Tekie Abraha	Ministry of Health	wediabraha06@gmail.com
3.	Osman Hassn Adem	Tsenei Water Supply Department	
4.	Erbana Adhan	Ministry of National Development	erbanasdhan@yhoo.com
5.	Tesfagabir Akalu	Ministry of Health	Tesfa06@gmail.com
6.	Dr Zemuie Alem	Ministry of Health	
7.	Betiel Ambesajer	Ministry of Health	bietu18@yahoo.com
8.	Feven Andebrhan	Ministry of Health	MikiasAdmas@gmail.com
9.	Yonas Asgedom	Ministry of Education (Project Management Unit)	engyonas@gmail.com
10.	Abrham Belay	Ministry of Health (Maekel Zoba)	kibretab07@gmail.com
11.	Habtetsion Berhane	Water Resources Department (Northern Red Sea Zoba)	
12.	Tadesi Beraki	Water Supply Department (Dubarba)	
13.	Hanna Berhe	UNICEF Country Office	hberhe@unicef.org
14.	Yohannes Debretsion	UNICEF Country Office	ydebretsion@unicef.org
15.	Micheal Gebregziabher	Ministry of Education (Project Management Unit)	michealshege@gmail.com
16.	Mussie Gebrehiwet	Ministry of Health	
17.	Mussie Gebrelul	Ministry of Education	
18.	Medhanie Gebremichael	Ministry of Health	
19.	Gebru Gebremicheal	Dekemhare Water Supply Department	
20.	Misghina Gebresillasie	Water Resources Department of MoLWE	misghan@gmail.com
21.	Mekonnen Gebru	Ministry of Education (MQA)	
22.	Afewerki Ghebregziabher	Ministry of Health (Southern Red Sea Zoba)	afewerki@gmail.com
23.	Shewit Ghirmay	Ministry of Health (Debub Zoba)	shungsweet@yahoo.com
24.	Mebrahtu Gilagaber	Ministry of Education (Project Management Unit)	
25.	Tsighe Habtezghi	Ministry of Education (Debub Zoba)	
26.	Dawit Haile	Ministry of Education	smna0295@gmail.com
27.	Amanuel Hailemicheal	Ministry of Health	
28.	Mebrahtu Iyassu	Water Resources Department of MoLWE	meblyassu@yahoo.com
29.	Bipin Jha	UNICEF Country Office	bjha@unicef.org
30.	Robel Kibrom	Department of Environment of MoLWE	roki0404@gmail.com
31.	Eng. Abiel Kiflay	Asmara Water Supply Department	abikiflay15@gmail.com
32.	Daniel Kiflmariam	Water Resources (Ghinda, Gash Barka Zoba)	
33.	Tedros Kubrom	Ministry of Land, Water and Environment	Ktedros70@gmail.com
34.	Mario Lugi	Municipality Barenty (Gash Barka Zoba)	
35.	Asefaw Mesfun	Ministry of Public Works	asefawmb@yahoo.com
36.	Hagos Milkias	Ministry of Health (Massawa)	
37.	Kibrom Misghan	Water Resources Department (Debub Zoba)	
38.	Abduselam Nassir	Ministry of Health (Southern Red Sea Zoba)	a_sebri99@yahoo.com
39.	Abdu Haseb Rebi	Keren Sanitation	
40.	Mohammed M. Saleh	Ministry of Health (Debub Zoba)	MMS65@gmail.com

	NAME	ORGANIZATION	E-MAIL ADDRESS
41.	Efrem Seyoum	Ministry of Education (Maekel Zoba)	
42.	Ademicheal Solomon	Ministry of Local Government	
43.	Abraham Tecle	Ministry of Education	
44.	Yodit Tekeste	Ministry of Health (Headquarters)	Judith.kesit@gmail.com
45.	Zerabruk Tekle	Water Department (Gash Barka Zoba)	Zbk_tekle@yahoo.com
46.	Samuel Teklehaymanot	Ministry of Finance	teklehaymanotsamuel@gmail.com
47.	Finan Teklemariam	Ministry of Health (Massawa)	
48.	Bethlehem Teklemariam	Ministry of Health	
49.	Yemane Tekleyohannes	Consultant	ymanety@hotmail.com
50.	Amanuel Teklezghi	Ministry of Health	Amanuelte@hotmail.com
51.	Yonas Temesgen	Ministry of Public Works	yonayona@gmail.com
52.	Devid Tsetse	UNICEF Country Office	dtsetse@unicef.org
53.	Tedros Tesfagabir	Water Resources Department of MoLWE	tedtes33@gmail.com
54.	Marta Tesfai	Ministry of Health (Environmental Health Department)	marta-tesfay@yahoo.com
55.	Miriam Tesfay	Ministry of National Development	miriamtesfay@yahoo.com
56.	Asmeret Tesfayohannes	Ministry of Health (Headquarters)	asmerethaile16@gmail.com
57.	Almaz Tewelde	Ministry of Health	
58.	Zere Weldtinsae	Water Resources Department (Ansaba)	zerewelde75@gmail.com
59.	Yonas Woldu	Southern Red Sea Zoba	ywoldu67@gmail.com
60.	Abdu Yacob	Ministry of Health (Gash Barka Zoba)	
61.	Tecle Yemane	Water Resources Department of MoLWE	tecley@yahoo.com
62.	Biniam Yergalem	Ministry of Education (Project Management Unit	biniamyergalem@gmail.com
63.	Adiam Yoahannes	Asmara Water Supply Department	moonafrica@gmail.com
64.	Micheal Yoseph	Water Resources Department of MoLWE	michealyoseph525@gmail.com

Annex 3: Workshop agenda and schedule

Agenda Day 1: Building blocks

Date: Tuesday, 17 April 2018

Venue: National Confederation of Eritrean Workers Hall, Asmara

TIME	SESSION AND/OR THEME	METHOD AND/OR RESOURCE PERSON
08.00–08.30	**Registration of participants**	
08.30–09.30	*(Forming Workshop Group)* **Introduction** **SDGs and beyond:** Status, challenges and opportunities of WASH in Eritrea, and linking WASH-BAT to sector policy planning **Opening remarks**	 Geoffrey (UNICEF Chief of ASCD) or David (WASH manager), UNICEF Mr Mebrahtu Iyassu, Director General, Water Resources Department, MoLWE
09.30–10.30	**Why WASH-BAT?** Overview of WASH Bottleneck Analysis Tool and Methodology **Questions and answers**	Sahr or David, UNICEF Presentation Plenary
10.30–11.00	**WASH-BAT Workshop practicalities, housekeeping, expectations:** Group rules	Sahr or David, UNICEF Facilitated open-space session Plenary
11.00-11.30	**Tea break**	
11.30–13.00	**Building blocks:** Award and score (adjusting and scoring of criteria)	Group work. Five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
13.00–14.00	**Lunch break**	
14.00–15.30	*(Group energizer)* **Building blocks, continued:** Award and score (adjusting and scoring of criteria)	Group work. Five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
15.30–17.00	**Stakeholder analysis and mapping**	Group work. Five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
17.30–18.00	**Report back:** Findings, difficulties, progress (sector feedback) **Discussion**	Brief report back on progress by group facilitators Plenary
18.00	**Finishing off:** Finalizing, reviewing software documentation Planning Day 2	Group facilitators and note-takers only

Agenda Day 2: Bottlenecks

Date: Wednesday, 18 April 2018

Venue: National Confederation of Eritrean Workers Hall, Asmara

TIME	SESSION AND/OR THEME	METHOD AND/OR RESOURCE PERSON
08.00–08.30	**Registration of participants**	
08.30–09.00	**Understanding WASH bottlenecks:** Introduction to identifying bottlenecks and their causes **Questions and answers**	Sahr or David, UNICEF Presentation Plenary
09.00–11.00	**WASH bottlenecks in detail: Assessment and causes** Identifying subsector-specific bottlenecks and their causes	Group work. Five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
11.00–11.30	**Tea break**	
11.30–13.00	**WASH bottlenecks in detail: Assessment and causes, continued** Identifying subsector-specific bottlenecks and their causes	Group work. Five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
13.00–14.00	**Lunch break**	
14.00–15.00	*(Group energizer)* **WASH bottlenecks: Feedback and identification of overlaps**	Group preparation of bottleneck feedback per function Presentation by each group facilitator on major bottlenecks and identification of overlaps Plenary, Meta Plan moderation
15.00–15.30	**How to remove WASH bottlenecks:** An introduction Introduction into group work on activities to remove bottlenecks	Sahr or David, UNICEF Presentation, plenary
15.30–17.30	**Removing Bottlenecks 1:** Activities: What does it take to remove bottlenecks? Identification of activities to remove bottlenecks, responsibility and timeline per subsector	Group work in two sector groups with differentiation in five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
17.30–18.00	**Report back:** Findings, difficulties, progress (sector feedback) **Discussion**	Brief report back on progress by group facilitators Plenary
18.00	**Finishing off:** Finalizing, reviewing software documentation Planning Day 3	Group facilitators and note-takers only

Agenda Day 3: Planning and way forward

Date: Thursday, 19 April 2018

Venue: National Confederation of Eritrean Workers Hall, Asmara

TIME	SESSION AND/OR THEME	METHOD AND/OR RESOURCE PERSON
08.00–08.30	**Registration of participants**	
08.30–10.30	**Removing Bottlenecks 1, continued**: **Top 5** **Ranking activities:** What are the most important activities to remove bottlenecks? Ranking to identify the Top5 activities, responsibilities and timelines for each subsector	Group work in two sector groups with differentiation in five thematic groups: • Rural sanitation • Rural water • Urban water • Urban sanitation • WASH in institutions
10.30–11.00	**Tea break**	
11.00–13.00	**Removing Bottlenecks 2**: **Glimpse at costing interventions and fund allocation** Identification of costs, financing and priorities for additional funding	Group preparation for feedback on removal of bottlenecks Presentation by each working group on activities to remove bottlenecks and identification of overlaps, especially for costs and financing Plenary
13.00–14.00	**Lunch break**	
14.00–15.30	*(Group energizer)* **Development of overview:** WASH-BAT findings Identification and summary of main subsector-related findings and recommendations	Preparation of Powerpoint presentations by each group giving a summary of their findings
15.30–16.30	**WASH-BAT findings, continued:** Final presentation and feedback **Discussion**	Presentation of main findings by each group Plenary
16.30–17.00	**Where do we take it from here?** A summary of conclusions and policy recommendations on priority activities **Discussion**	Sahr or David, UNICEF Summary presentation of priorities and policy recommendations on priority activities
17.00–18.00	**WASH-BAT outlook and workshop closure:** Following up, and obtaining government endorsement	Presentation on next steps David Tsetse, WASH Manager, UNICEF Shaya Asindua, Deputy Representative, UNICEF Mr Mebrahtu Iyassu, Director General, Water Resources Department, MoLWE
18.00	**Finishing off:** Finalizing, reviewing software documentation Planning final report, communication of findings, etc.	Group facilitators and UNICEF WASH only