



# Sustainability of WASH services Kebridehar

## 2016 Town audit statement

Within the framework of the ONEWASH Plus Programme, sustainability checks are executed to assess WASH service levels and the conditions for sustainable WASH service provision. This town audit statement presents the results of the 2015 and 2016 sustainability checks from Kebridehar, Somali region. It covers the town's water and sanitation services and institutional WASH services.

### Key findings

**Town water supply:** The supply system and the accounting system have improved while information on infrastructure remains critical. Low staff productivity, low cost recovery and ineffective asset management remain sustainability challenges.

**Urban sanitation:** Insufficient public latrines, difficulty in accessing financing mechanisms for sanitation service providers and lack of town capacity to facilitate sanitation and hygiene promotion remain sustainability challenges.

**Institutional WASH:** The key sustainability challenges include lack of sufficient and appropriately equipped sanitation facilities, lack of menstrual hygiene management facilities and insufficient financing and logistics for town and woreda offices.

### Sustainability check overview

The conditions for sustainable WASH have been assessed at two institutional levels:

- Service provider level: The level at which day-to-day management of the WASH services takes place. This is the level of the Town Water Utility, latrine artisans, septic tank emptiers, solid waste collectors, health facilities and schools;
- Service authority level: The level at which planning, coordination, monitoring and support to service providers takes place. This is the level of the municipality.

Service providers and authorities were scored on indicators related institutional, technical, financial, environmental, and social sustainability. Scores were assigned based on micro-scenarios. Where multiple service providers were in place (health facilities, schools), the proportion of service providers meeting the benchmark (BM), which was set as the minimum acceptable level (the 50 score) was determined. In addition to individual indicator scores, the results below present the average score and the % of benchmarks met at each level.

Data collected at the time of the ONEWASH Plus baseline and midline survey informed the 2015 and 2016 sustainability checks respectively. Findings were validated and complemented by town representatives during a sustainability check and planning workshop, which took place in Addis Ababa on 21 and 22 February 2017.

# Urban water

**The piped scheme in Kebridehar provides low level services and the scheme faces many challenges which need to be addressed in order to ensure sustainable water service provision in the town.**

## Service level

The level of service provided by the piped water scheme in Kebridehar is very low. Only 2 of the 6 boreholes are currently supplying the piped water scheme. The remaining 4 have broken down due to lack of replacement of pumps and generators. Two newly drilled boreholes under the ONEWASH Plus project have not yet been connected to the town water scheme. There are some 28 public fountains connected to the pipe system. Many public fountains were hardly used and have therefore been abandoned. Only 5 provide services to the urban dwellers. At the time of the midline survey they were receiving water about every 3-4 days for 6 hours.

Water quality remains an issue as well. Of the 10 water samples taken from the piped water scheme, 6 were found to contain unsafe water (E. coli count > 10 MPM/100 ml).

Water use from the piped scheme is very low. At the time of the baseline survey, the total amount of water sold per person served was only 2 lpcd, which is far below the GTP-2 norm.

## Changes in sustainability indicator scores

### Service provider level

Supply of spare parts for minor maintenance (pipes, fittings etc.) (SP-T-3) was reported to have improved slightly, with spare parts becoming available within 3 days.

Effective financial management (SP-F-2) has improved with the introduction of a double-entry accounting system with annual income statement and balance sheet.

### Service authority level

No changes were observed in the scoring on the service authority indicators.

## Sustainability challenges

The sustainability check revealed a long list of sustainability challenges related to urban water supply in Kebridehar, including the following:

- Inadequate number of staff, with a staff ratio of 42 per 1000 connections;
- Inadequate Town Water Utility staffing (SP-I-4), only 27 of the required 40 staff in place, which is less than 75% of the required staff;
- Non-Revenue Water (NRW) is not measured and therefore unknown (SP-T-2);
- Inadequate water quality management and disinfection (S P-T-5) as disinfection of reservoir(s) is not done on a monthly basis;
- Insufficient cost recovery (SP-F-1) as operational cost recovery has not been met;
- Ineffective asset management (SP-F-3), with no (or incomplete/ outdated) asset registry;
- Lack of mechanisms for urban poor to get affordable water (SP-S-1), as there are insufficient public taps and shared yard connections in the town;
- Insufficient capacity at regional and zonal level to provide support to TWUs (SA-I-1), as the region has insufficient staff to provide this support;
- Presence of Water Board (WB) (SA-I-2), but without trained members;
- Ineffective provision of technical support to the TWU (SA-T-1) as it generally takes more than a week to get the technical support;
- No catchment management system in place (SA-E-1).

## Urban water sustainability check results

Service levels urban water	2015	2016	Score description
Reliability	0	0	0: Rotation is practised for at least part of the year
Accessibility	0	0	0: < 50% of households access the piped scheme within 250m
Quality	NA	25	NA; 25: At least half of samples E. coli count of <10
Quantity	0	NA	0: Water sales is less than half of GTP-2 norm NA
<b>Average service level score</b>	<b>0</b>	<b>8</b>	
<b>Number of service level benchmarks met (Max 4)</b>	<b>0</b>	<b>0</b>	-
Service provider level indicators	2015	2016	Score description
SP-I-1: Utility organisation	50	50	50: Utility in place... with three core departments
SP-I-2: Staff Productivity	0	0	0: >20 staff per 1000 connections
SP-I-4: Town Water Utility staffing	0	0	0: < 75% of required staff
SP-T-2: Non-revenue water	0	0	0: NRW is not known
SP-T-3: Adequate supply of spare parts for minor maintenance (pipes, fittings etc.)	25	50	25: Spare parts available, but takes more than 3 days; 50: Spare parts available within 3 days
SP-T-4: Effective maintenance system in place	25	25	25: Utility has capacity to execute simple repairs, but does not do so within 3 days
SP-T-5: Water quality management and disinfection	25	25	25: Disinfection of reservoir(s) but less often than monthly
SP-F-1: Cost Recovery	0	0	0: Operational cost recovery not met
SP-F-2: Effective financial management	0	75	0: Single entry accounting but incomplete records; 75: Double entry accounting system with annual income statement.... and balance sheet
SP-F-3: Effective asset management	0	0	0: No (or incomplete/ outdated) asset registry
SP-F-4: Effective billing and collection	75	75	75: Computerised billing with no backlog and >80 collection rate
SP-S-1: Urban poor get affordable water	25	25	25: Insufficient public taps and shared yard connections in the town
<b>Average service provider score</b>	<b>19</b>	<b>27</b>	
<b>% of service provider BMs met</b>	<b>17%</b>	<b>33%</b>	
Service authority Indicators	2015	2016	Score description
SA-I-1: Sufficient capacity at regional and zonal level to provide support to TWUs	25	25	25: Region has dedicated department / section for supporting TWU, but not adequate staff
SA-I-2: Presence of Water Board (WB)	25	25	25: WB established by Regional proclamation
SA-T-1: Effective provision of technical support to the TWU	25	25	25: There is some technical support to the TSU, but it generally takes more than a week to get the technical support
SA-T-2: Checks on construction quality	50	50	50: Build quality is checked by zone/region for all scheme
SA-E-1: Catchment management system in place	0	0	0: No catchment management plan
<b>Average service authority score</b>	<b>25</b>	<b>25</b>	
<b>% of service authority BMs met</b>	<b>20%</b>	<b>20%</b>	

# Urban sanitation

**Sanitation coverage in Kebridehar is relatively high and many of the conditions for ensuring sustainable sanitation service provision in the town are in place.**

## Service level

The town has become open defecation free (ODF). The town also has relatively high improved sanitation coverage. However, still a considerable part of the population does not have access to improved sanitation which is clean and provides privacy.

## Changes in sustainability indicator scores

### Service provider level

Scores on many of the service provider indicators have improved.

- Liquid waste services (SP-I-1) are now provided by the municipality and / or private service provider;
- Effective messaging related to sanitation and hygiene (SA-T-1) is taking place on continuous basis in the entire town;
- Access to septic emptying services (SP-T-2) has improved and is available now within 7 days;
- Access to financing mechanisms for sanitation service providers (SP-F-3) has improved, but access is still difficult (e.g. high interest, need for collateral);
- Affordability of liquid (SP-S-1) and solid (SP-S-2) waste management services for households has improved, as these services are considered to be affordable without subsidies. Households pay 30 birr per month, while hotels and cafes are charged more.

### Service authority level

Scores on many of the service authority indicators related to urban sanitation have improved as well:

- Coordination at town level between stakeholder involved in urban sanitation

(SA-I-1) improved with the introduction of a task force, which meets on monthly basis;

- Safe disposal of sludge (Sa-E-1) and solid waste (SA-E-2) is increasingly done in an environmentally sound manner. There is a designated place for dumping liquid waste, which is monitored and regulated. There is also a designated place for dumping solid waste with at least half of the solid waste dumped here. An association has been established to manage urban solid and liquid waste in town. The solid waste collection association reaches all kebeles on a weekly schedule. Households pay 30 birr per month, while hotels and cafes are charged more;
- Town level strategy and interventions for reaching the poorest with sanitation facilities (SA-S-1) have improved, with the introduction of interventions for the vulnerable included in the town's annual plan.

## Sustainability challenges

The sustainability check revealed the following sustainability challenges related to urban sanitation in Kebridehar:

- Insufficient public latrines built and effectively operated (SP-T-3);
- Difficulty in accessing financing mechanisms for sanitation service providers (SP-F-3);
- Lack of town capacity to facilitate sanitation and hygiene promotion (SA-I-2), with insufficient dedicated staff at town level;
- Checks on construction quality (SA-T-1) are limited to public latrines.

## Urban Sanitation sustainability check results

Service levels urban sanitation	2015	2016	Score description
Open defecation free	98%	100%	% of households of which none of the members practise open defecation
Improved sanitation coverage	90%	97%	% of households with their own improved latrine
Clean, private, safe improved sanitation coverage (proportion of population)	47%	27%	% of households with their own improved clean latrine which provides privacy
Service provider level	2015	2016	Score description
SP-I-1: Liquid waste services	0	50	0: No liquid waste services; 50: By municipality.....and / or private service provider engaged in extraction and transportation of liquid waste
SP-I-2: Solid waste management services	50	50	50: By formal service providers
SP-I-3: Local private sector with capacity to construct, repair and improve latrines	50	50	50: Artisans in town, but not organised and trained for latrines
SA-T-1: Effective messaging related to sanitation and hygiene	50	100	50: On continuous basis in at least half the town; 100: On continuous basis in the entire town
SP-T-2: Access to septic emptying services	0	50	0: Not available; 50: Available within 7 days
SP-T-3: Public latrines built and effectively operational	25	25	25: Inadequate number (<half of required) available
SP-F-3: Access to financing mechanisms for sanitation service providers	0	25	0: No Access to finance; 25: Access to finance but difficult to access (e.g. high interest, need for collateral)
SP-S-1: Affordability of liquid waste management services for households	0	50	0: Not affordable to households; 50: Affordable without subsidy to some households
SP-S-2: Affordability of solid waste management services for households	25	50	25: Only affordable with subsidy; 50: Affordable without subsidy to some households
SP-S-3: Availability of social inclusive public latrine facilities	50	50	50: Separate facilities for men and women
<b>Average service provider score</b>	<b>25</b>	<b>50</b>	
<b>Number of service provider BMs met</b>	<b>40%</b>	<b>80%</b>	
Service authority level	2015	2016	Score description
SA-I-1: Coordination at town level between stakeholder involved in urban sanitation	0	50	0: No coordination structures; 50: Coordination structure....meeting on monthly basis
SA-I-2: Town capacity to facilitate sanitation and hygiene promotion	25	25	25: Dedicated staff at town level but insufficient in terms of quantity (number of staff) and/or quality (training of staff)
SA-I-3: Town sanitation master plan	50	50	50: Sanitation strategic plan and a sanitation annual plan
SA-T-1: Checks on construction quality	25	25	25: Construction quality is checked only for public latrines
SA-F-2: Sufficient logistics for town staff to monitor and follow-up on sanitation and hygiene	0	0	0: No access to logics (transport etc.)
Sa-E-1: Safe disposal of sludge in an environmentally sound manner	0	50	0: No sludge disposal and treatment site in place, and no study of plan for safe disposal; 50: Sludge disposal and treatment site in place
Sa-E-2: Safe disposal of solid waste in an environmentally sound manner	25	50	25: Designated place for dumping solid waste, but less than half of solid waste is dumped here; 50: Designated place for dumping solid waste, and at least half of solid waste dumped here
SA-S-1: Town level strategy and interventions for reaching the poorest with sanitation facilities	25	75	25: Policy and strategy for social equity; 75: Policy and strategy for social equity... and awareness on policies and strategies is there...and interventions for vulnerable included in town annual plan
<b>Average service authority score</b>	<b>19</b>	<b>41</b>	
<b>% of service authority BMs met</b>	<b>13%</b>	<b>63%</b>	

# Institutional WASH

## Service level

WASH in schools has improved considerably, with an increase in % of schools with functioning water supply within the compound and with clean and private latrines. Sanitation coverage in health facilities increased as well, but cleanliness and privacy of these facilities remain issues. Water supply for health facilities remains a challenge as well.

## Changes in sustainability indicator scores

### Service provider level

The % of health facilities with clear roles for cleaning and minor maintenance of institutional latrines (SP-I-1) has increased, as has the proportion of schools with an active school health club or administrative body that manages latrines.

The % of health facilities and schools with a latrine cleaning programme and at least weekly cleaning (SP-T-1) has increased as well, although many schools and health facilities still do not have regular cleaning programmes in place.

The % of institutions which are open defecation free (SP-E-2) has increased considerably.

The % of schools and health facilities with separate latrines for males and females has increased.

### Service authority level

Coordination at town level between stakeholders involved in school WASH (SA-I-1) improved with the introduction of a task force, which meets on monthly basis.

Local government capacity to provide support to institutional sanitation (SA-I-2) has improved as there is now sufficient dedicated staff, which have received training.

The availability of septic tank emptiers has improved (SA-T-3) with the introduction of vacuum trucks in the town.

This has also led to improvement on the indicator related to formalisation of pit and septic pit emptiers (SA-I-3). There are now formal pit or septic tank emptiers (vacuum truck) which are registered and regulated by the town.

Safe disposal and / or reuse of sludge in an environmentally sound manner (SA-E-1) is still an issue, as no sludge disposal and treatment site in place yet. However, studies and plans for ensuring safe disposal have been put in place.

## Sustainability challenges

The sustainability check revealed the following sustainability challenges related to institutional WASH in Kebridehar:

- Lack of latrine cleaning programmes in many of the schools and health facilities, as mentioned above;
- Lack of sufficient and appropriately equipped sanitation facilities with handwashing stations (SP-T-2), as none of the health facilities and schools were found to have a handwashing facility with water and soap (or ash);
- Septic tank emptying practices (SP-T-4) remain a challenge, especially in schools;
- Effective support for WASH in health facilities (SA-T-2) is lacking, as it takes more than a week to get support after a request has been submitted;
- Insufficient financing (SA-F-1) and logistics (SA-F-2) at woreda and town level to monitor and follow-up support to school WASH.

## Institutional WASH sustainability check results

Service levels Institutional WASH	Health facilities		Schools		Score description
	2015	2016	2015	2016	
Institutional water supply coverage	0%	0%	100%	100%	% of institutions with access to improved water supply
Improved functioning water supply of acceptable quality in compound of institution	0%	0%	75%	100%	% of institutions with functional improved water supply within the compound
Institutional sanitation coverage	0%	50%	0%	100%	% of institutions with improved sanitation
Institutions with clean and private sanitation	0%	0%	0%	75%	% of institutions with clean, safe and private sanitation facilities
<b>Service provider indicators</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>Score description</b>
SP-I-1: Roles for cleaning and minor maintenance of institutional latrines	0%	50%	0%	100%	% of institutions meeting the benchmark: Clear roles School: active school health club or administrative body that manages latrines
SP-T-1: Latrine cleaning programme	0%	0%	0%	25%	% of institutions meeting the benchmark: Regular cleaning programme, cleaning at least once a week
SP-T-2: Availability of sufficient and appropriately equipped sanitation facilities including hand washing	0%	0%	0%	0%	% of institutions meeting the benchmark: Availability of handwashing facility .... with water and soap (or ash)
SP-T-4: Septic tank emptying practices	0%	0%	0%	0%	% of institutions meeting the benchmark: Septic tank emptying
SP-F-2: Financing of capital maintenance of sanitation facilities	0%	50%	0%	100%	% of institutions meeting the benchmark: By the institution and / or the users
SP-E-1: Distance between latrines and water source (hand dug well / borehole / spring)	0%	50%	0%	100%	% of institutions meeting the benchmark: between 10 and 30 m
SP-E-2: Open defecation free environment	0%	50%	0%	100%	% of institutions meeting the benchmark: ODF
SP-S-1: Social inclusion of latrine facilities	0%	50%	0%	75%	% of institutions meeting the benchmark: Separate latrines for males and females
<b>Average % of institutions meeting BM</b>	<b>0%</b>	<b>31%</b>	<b>0%</b>	<b>63%</b>	
<b>Service authority indicators</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>Score description</b>
SA-I-1: Coordination at woreda level between stakeholders involved in institutional WASH					0: No coordination structures
SA-I-2: Local government capacity to provide support to institutional sanitation	0	50	25	50	0: No dedicated staff at woreda and/ or regional; 25: Dedicated staff at woreda and/ or regional level, but insufficient in terms of quantity (number of staff) and/or quality (training of staff); 50: Sufficient dedicated staff that have received training
SA-T-1: Monitoring of latrine use and maintenance and follow-up support provided by woreda or other support institution from zonal/regional level	75	75	100	100	75: Monitoring at least every 6 months and support is provided accordingly; 100: Monitoring at least every 6 months and support is provided accordingly...and monitoring results inform future planning
SA-T-2: Effective support to institutional WASH	50	50	50	50	50: Support on request of institutions. It takes a week or less to respond to a request
SA-T-3: Availability of septic tank emptiers	0	100	0	100	0: None; 100: In all urban and rural areas
SA-F-1: Sufficient financing at woreda and town level to monitor and follow-up support to institutional WASH	0	0	25	25	0: No financial resources; 25: Some financial resources
SA-F-2: Sufficient logistics at woreda and town level to monitor and follow-up on institutional WASH service provision	0	0	0	0	0: No access to logistics
SA-E-1: Safe disposal and / or reuse of sludge in an environmentally sound manner	0	50	0	50	0: No sludge disposal and treatment site in place, and no study of plan for safe disposal; 50: Sludge disposal and treatment site in place
SA-E-2: Safe disposal and / or recycling of solid waste in an environmentally sound manner	25	50	25	50	25: Designated place for dumping solid waste, but less than half of solid waste is dumped here; 50: Designated place for dumping solid waste, and at least half of solid waste dumped here
<b>Average service authority score</b>	<b>19</b>	<b>47</b>	<b>28</b>	<b>53</b>	
<b>% of service authority BMs met</b>	<b>25%</b>	<b>75%</b>	<b>25%</b>	<b>75%</b>	

## Conclusions and recommendations

Improvements to the water supply scheme have been underway, but have not yet resulted in improved water service provision. Scores on the sustainability indicators are low and require urgent attention.

Sanitation coverage, which was already high at the time of the baseline, remains relatively high. Conditions for sustainable urban sanitation service provision seem to have improved. A major point of concern is the lack of logistics for town staff to monitor and follow-up on sanitation and hygiene. Also issues related to lack of human resources at town

level to support sanitation and hygiene promotion, the limited number of public latrines, and lack of access to financing mechanisms for sanitation service providers need to be addressed in order to ensure sustainable sanitation in the town.

Although progress has been made with improving the conditions for sustainable institutional WASH, challenges remain, especially related to technical sustainability at service provision level and financial sustainability at service authority level.

## Highlights of proposed actions

For the town water supply, the utility should be strengthened with skilled and trained staff. The utility should develop and implement new tariff to improve cost recovery. It should identify and record all infrastructures and introduce asset management. The board members should be trained and provided with guidelines. The region should strengthen the TWU support unit and system, and enhance the support provided to utilities. The source area should be demarcated and a catchment management system implemented.

In urban sanitation, the number of public latrines should be increased and public latrine management should be improved through a

performance agreement with operators. The municipality should facilitate access to funding for service providers.

The institutional WASH woreda offices should enhance capacity to provide support to schools and health facilities, and WASH coordination should be improved by establishing effective structures. The municipality should build adequate and appropriately equipped sanitation facilities with menstrual hygiene management facilities.

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