



# Sustainability of WASH services Welenchiti,

## Town audit statement

In June-July 2015, a sustainability check of WASH services was undertaken in Welenchiti town, Oromia Region under the ONEWASH Plus Programme. This factsheet presents a summary of the key findings relating to sustainability challenges in town water supply, rural water supply, urban and rural sanitation and institutional WASH. As this first sustainability check has been undertaken at the start of the programme implementation, the results reflect that WASH services are not improved and capacity building interventions have not been implemented yet. Based on the findings, sustainability plans with details of suggested actions to overcome the sustainability challenges will be prepared.

### Key findings

**Town water supply:** there are challenges related to the institutional, social and environmental sustainability. The main challenge to the financial sustainability is the complete absence of asset management.

**Rural water supply:** WASHCOs are not well organised. Spare part supply is a challenge in the areas around Welenchiti. There are considerable social and environmental sustainability challenges related to rural water supply.

**Urban sanitation:** institutional coordination and integration related to urban sanitation is poor. There is no service provider for liquid waste management. Social sustainability is also weak because of absence of pro-poor interventions for ensuring access to urban sanitation facilities for all.

**Rural sanitation:** the main identified challenges related are the limited logistics and absence of social.

**Institutional WASH:** The main sustainability challenges related to institutional WASH are related to technical and social issues.

## Overview of water supply and sanitation in Welenchiti

The water supply system of Welenchiti town is managed by a utility with an operator overseen by a town board. According to the utility (based on water connection and sales data) the water system serves 33% with public taps and 31% with private yard connections while the remaining use shared facilities. The system functions sub-optimally and services levels are low in terms of continuity, quality and quantity. The per capita consumption is only about 20 litres per day. The main challenge in the town is the limited yield of water sources.

According to the 2014 baseline study, the water supply coverage in the surrounding village is 100%.

The urban sanitation situation in the town is unsatisfactory with only 39% of the population with access to improved sanitation.

Improved sanitation coverage in the rural areas surrounding the town is very low with only 26% of people accessing improved sanitation facilities.

Two of the three health facilities have WASH facilities. All ten schools have water supply and seven have latrine facilities.

# Sustainability check overview

Within the ONEWASH Plus Programme, annual sustainability checks have been programmed to assess and monitor whether the degree to which conditions for sustainable WASH service provision are in place. Based on these sustainability checks, sustainability plans will be developed and implementation promoted to help ensure that the infrastructure and systems developed under the programme – within the programme towns, surrounding satellite villages and including institutional facilities at schools, health centres and other locations - do provide sustainable services to target populations without significant adverse environmental and socio-economic impacts.

The sustainability check considers the following five sustainability factors:

## **Institutional sustainability**

Are policies, strategies and management arrangements in place to ensure sustainable WASH service provision?

## **Technical sustainability**

Are WASH services technically viable and are mechanisms in place to ensure sustainable service provision (including spare part supply, the presence of technical support services etc.)?

## **Financial sustainability**

Are WASH services financially viable and can they be financially sustained over time?

## **Environmental sustainability**

Are measures in place to ensure that WASH services delivery does not have a negative impact on the environment?

## **Social sustainability**

Are measures in place to ensure that everyone can benefit from the provided WASH services?

A scoring system has been developed describing incremental steps related to the performance on the indicator, to which scores are attached from 0 (worst case) to 100 (best case). The benchmark of the minimum acceptable level on each indicator has been determined and is typically set at the 50 score (100 in care of binomial (on-off) indicators).

## Urban water supply

**Table 1 Urban water supply sustainability scores – service provider level**

Indicator		Score	
I	Effective Utility Management	50	37.5
	Staff Efficiency	50	
	Effective Water Board (WB)	25	
	Town Water Utility staffing	25	
T	Quality of infrastructure	75	60
	Non-revenue water	75	
	Adequate supply of spare parts for minor maintenance (pipes, fittings etc.)	50	
	Effective maintenance system in place	100	
	Water quality management and disinfestations	0	
F	Cost Recovery	50	44
	Effective financial management	50	
	Effective asset management	0	
	Effective billing and collection	75	
E	Sanitary inspection of sources	25	25
	Sanitary inspection public fountains	25	
S	Urban poor get affordable water	25	25

**Table 2 Urban water supply sustainability scores – service authority level**

Indicator		Score	
I	Sufficient capacity at regional and zonal level to provide support to TWUs	50	50
T	Effective provision of technical support to the TWU	50	50
	Checks on construction quality	50	
E	Catchment management system in place	0	0

As shown in Table 1 urban water supply in Welenchiti Town fails to meet the benchmark on 7 of the 16 indicators, resulting in low sustainability scores, especially related to environmental, social, institutional and financial sustainability.

**Institutional sustainability:** The utility has inadequate staff. Further the water board has also weak capacity. Both the capacity of the water board as well as of the utility need to be strengthened.

**Technical sustainability:** Information on the state of the infrastructure is available, but the state of infrastructure is qualified as poor. Non revenue water ration is below 20% and the utility has put in place activities to further reduce it. The town water supply system has satisfactory access to spare parts and practices effective corrective and preventive maintenance. However, it does not disinfect its reservoirs or check water quality.

**Financial sustainability:** The utility has very poor asset management. The utility is able to recover its operational expenditure and managed to save more than 20% of its revenues for future expenditure. However, it is questionable whether this will be sufficient to cover long-term investments.

**Environmental sustainability:** Only few sources and public fountains pass the sanitary inspections.

**Social sustainability:** The utility has not done much to address equity issues. There are insufficient public taps and shared yard connections for providing water services to the poorest.

At **service authority level**, the absence of catchment management and source protection presents a possible environmental sustainability risk. The region has dedicated department / section for supporting TWU with adequate staff. Technical support to the TSU is generally provided within a week and the building quality of urban water supply systems is checked by zone/region for all schemes.

## Rural water supply

**Table 3 Rural water supply sustainability scores – service provider level**

Indicator		Score	
I	Well-composed and trained WASHCo	38	44
	By laws and legal status of the WASHCo	50	
T	Presence of WASH artisans in the woreda	0	8
	Spare part supply	6	
	Routine (preventive) maintenance	19	
F	User payment and tariffs	100	56
	Financial management	44	
	Revenue/standard annual expenditure balance	25	
E	WASHCo Water safety plan	13	31
	Sanitary Inspection (SI)	50	
S	Election of WASHCo by entire community	100	50
	Women representation in WASHCos	0	

**Table 4 Rural water supply sustainability scores – service authority level**

Indicator		Score	
I	Woreda WASH Team	75	50
	Woreda Water Office	0	
	Woreda level plan	75	
	Regional standard WASHCo by laws	50	
T	Checks on construction quality	25	50
	Monitoring of O&M and WASHCo performance	50	
	Scheme inventory and maintenance plan	75	
F	Woreda water office annual recurrent budget	0	12.5
	Woreda water office logistics	25	

As shown in Table 3, the average indicator score is lower than 50 on 8 of the 12 indicators at service provision level.

**Institutional sustainability:** Two of the four WASHCos in the rural areas around Welenchiti are well composed, but the other two do not have all key positions filled. All four do have by-laws in place.

**Technical sustainability:** There were reported to be no WASH artisans in the woreda and spare parts are not readily available. Only one of the four WASHCos executes annual preventive maintenance.

**Financial sustainability:** All four WASHCos have volumetric tariffs in place, but only one has a positive revenue / standard annual expenditure balance. Two WASHCos have up-to-date financial records and a dedicated account in a financial institution.

**Environmental sustainability:** Only one of the four WASHCos has a water safety plan. At least half of the water points pass the sanitary inspection.

**Social sustainability:** None of the four WASHCos are gender balanced with at least 50% women.

At **service authority level**, 4 of the 9 benchmarks have not been met. There is a weak woreda water office, with less than 75% of required staff. The quality of the constructed water supply infrastructure is only checked for some schemes. The main challenges are related to financial sustainability, with low water office annual recurrent budget and only few logistics (in the form of motor cycles) available to the woreda to execute its tasks related to supporting rural water supply.

## Urban sanitation

Table 5 Urban sanitation sustainability scores - Service Provider level			
Service provider indicator		Score	
I	Waste water services	50	67
	Solid waste management services	50	
	Local private sector with capacity to construct and repair latrines	100	
T	Access to septic emptying services	25	25
	Public latrines built and effectively operational	25	
F	Economic viability of liquid waste service provider	75	67
	Economic viability of solid waste service provider	50	
	Access to fund for sanitation service providers	75	
E	Open defecation free environment	89	89
S	Affordability of liquid waste management services for households	NA	50
	Affordability of solid waste management services for households	NA	
	Availability of social inclusive public latrine facilities	50	

Table 6 Urban sanitation sustainability scores - Service authority level			
Service authority indicator		Score	
I	Clear roles and responsibilities related to town sanitation and hygiene	25	37.5
	Town council capacity to do sanitation and hygiene promotion	NA	
	Town sanitation master plan	25	
	Formalization of pit and septic pit emptiers	100	
T	Checks on construction quality	25	100
	Effective messaging related to sanitation and hygiene	100	
F	Town/ municipality annual recurrent budget	75	37.5
	Sufficient logistics for town staff to monitor and follow-up on sanitation and hygiene	0	
E	Safe disposal or reuse of sludge in an environmentally sound manner	0	0
	Safe disposal or recycling of solid waste in an environmentally sound manner	NA	
S	Presence of strategy and service delivery models for reaching the poorest with sanitation facilities	100	100

At service provision level, the town fails to meet the benchmark on only 3 of the 12 urban sanitation sustainability indicators.

**Institutional sustainability:** Latrine artisans are available within town and private service providers are engaged in extraction and transportation of liquid waste and solid waste in the town.

**Technical sustainability:** It generally takes longer than seven days for septic tank emptiers to respond to a request for septic tank emptying services. Also, there are insufficient public latrines in the town.

**Financial sustainability:** The liquid and solid waste service providers were reported to be economically viable. Furthermore, solid waste collectors were reported to have access to (micro) finance.

**Environmental sustainability:** 89% of households reported not practice open defecation. This implies only a small potential environmental sustainability risk.

**Social sustainability:** No data was available on the affordable of sanitation services to households. As only 1% of households reported to make use of liquid waste management services and 6% of solid waste management services, the affordability of these services could be questioned. The public latrine facility has separate latrines for males and females, but no special facilities for disabled people.

At **service authority level**, the town scores especially low on the financial and environmental sustainability indicators. The town does not have access to sufficient with recurrent budget and logistical resources available for supporting urban sanitation services. There are no environmentally acceptable disposal facilities and systems in place for liquid and solid waste disposal. Furthermore, the town does not have a strategic sanitation master plan, but inly has an annual sanitation plan in place. It also only conducts construction quality checks for public latrines, not for private ones.

## Rural sanitation

Table 7 Rural sanitation sustainability scores – service provider level			
Indicators		Score	
I	Hygiene and Sanitation community Groups	NA	NA
T	Local private sector with capacity to construct and repair latrines	NA	NA
F	Economic viability of sanitation service provider	NA	NA
	Access to fund for sanitation service providers	NA	
E	Open defecation free environment	63	63
S	Affordability of latrines for households	NA	NA

Table 8 Rural sanitation sustainability scores – service authority level			
Woreda level indicator		Score	
I	Clear roles and responsibilities related to rural sanitation and hygiene	100	75
	Capacity to do sanitation and hygiene promotion	50	
	Sanitation & Hygiene in woreda WASH plan	75	
T	Effective messaging related to sanitation and hygiene	25	25
F	Sufficient logistics for woreda staff to monitor and follow-up on rural sanitation and hygiene	25	25
S	Presence of strategy and service delivery models for reaching the poorest with sanitation facilities	0	0

Expect for the data on open defecation, data to effect the scoring on the rural sanitation sustainability indicators at service provision level, was not available.

**Environmental sustainability:** Overall 63% of households in the rural areas around Welenchiti reported not to practice open defecation. This could pose an environmental sustainability risk.

At **service authority level**, there are good sanitation plans, clear roles and responsibilities and adequate public capacities at woreda and kebele level. However, effective messaging related to sanitation and hygiene does not cover the entire woreda. Logistic issues are the most critical elements that could hamper the financial sustainability of rural sanitation at this level. Furthermore, the lack of clear strategy for reaching the poorest with sanitation facilities, hamper social sustainability.

## Institutional WASH

**Table 9 Institutional WASH sustainability score – service provider level**

Indicators		Health facility		School	
I	Roles for cleaning and minor maintenance of institutional latrines	100	100	100	100
	Clear roles and responsibilities with regard to pit emptying/desludging /decommissioning	100		100	
T	Cleaning programme for sanitation facilities	25	10	45	21
	Availability of sufficient and appropriately equipped sanitation facilities including hand washing	0		13	
	Menstrual hygiene	17		10	
	Septic tank emptying practices	0		15	
F	Payment for water services	50	42	50	50
	Financing of capital maintenance of sanitation facilities	33		50	
E	Distance between latrines and water source (hand dug well / borehole / spring)	100	83	100	80
E	Open defecation free environment	67		60	
S	Social inclusion of latrine facilities	17	17	40	40

**Table 10 Institutional WASH sustainability score – service authority level**

Indicators		Health facility		School	
I	Clarity on roles and responsibilities related to supporting institutional WASH	na	100	na	100
	Local government capacity to provide support to institutional sanitation	na		NA	
	Formalization of pit and septic pit empties	100		100	
T	Monitoring of sanitation facility use and follow-up support	100	50	100	58
	Effective support to institutions related to their WASH facilities	0		25	
	Availability of septic tank emptiers	50		50	
F	Sufficient financing of staff to monitor and follow-up on institutional WASH service provision	50	38	50	38
	Sufficient logistics for staff to monitor and follow-up on institutional WASH service provision	25		25	
E	Safe disposal and / or reuse of sludge in an environmentally sound manner	0	0	0	0
	Safe disposal and / or recycling of solid waste in an environmentally sound manner	0		0	

At service provision level, both health facilities as well as schools in Welenchiti do not score well on technical and social sustainability.

**Institutional sustainability:** Roles and responsibilities related to latrine cleaning, minor and major maintenance and de-sludging are clear at health facilities and schools in Welenchiti.

**Technical sustainability:** Only one of the three health facilities and in eight of the ten schools there is a regular cleaning programme and latrines are cleaned at least once a week. Only one school and none of the health facilities have sanitation facilities which include hand washing facilities with water and soap. Only one health facility and two schools have menstrual hygiene disposal facilities in place. Septic tank emptying is not practiced in any of the health facilities and only in two of the schools.

**Financial sustainability:** All health facilities and schools pay for water services. Although all schools pay for major repairs to sanitation facilities, only one of the three health facilities does so as well.

**Environmental sustainability:** As institutional sanitation facilities are generally located away from hand dug wells, boreholes and springs, the environmental sustainability risks are limited. Open defecation, which could present an environmental sustainability risk, is practiced in one of the five health facilities and in four of the ten schools.

**Social sustainability:** Only one of the health facilities and half of the schools have separate sanitation facilities for men and women.

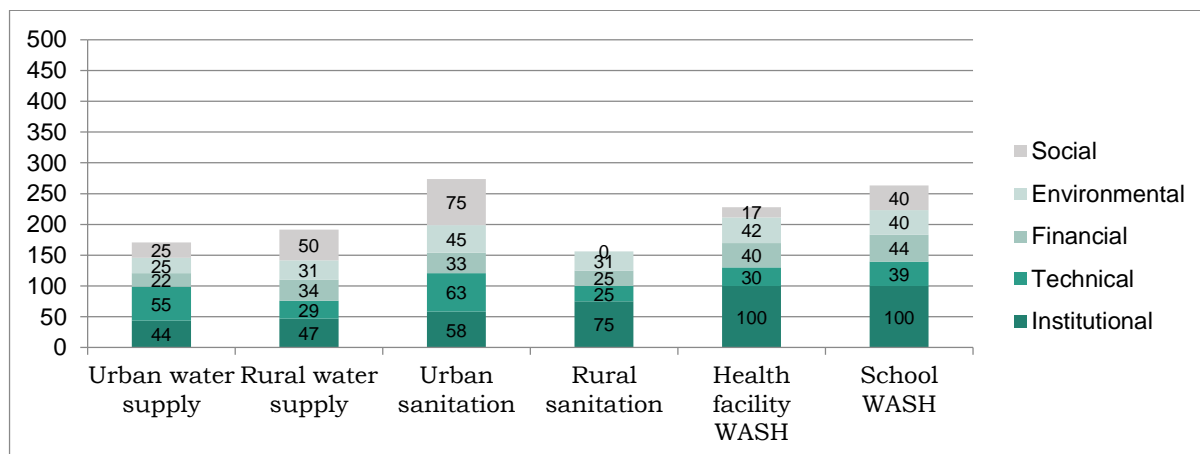
At **service authority level**, the main issues are lack of effective support to institutions related to their WASH facilities, lack of sufficient logistical resources for the Woreda Offices and lack of facilities for the safe disposal of liquid and solid waste.

# Conclusions and recommendations

Figure 1 gives an overview of the average WASH sustainability check scores from service provision and service authority level in Welenchiti. While financial sustainability is the

major bottleneck, WASH services are also hampered due to weak institutions and limited technical viability.

**Figure 1 Aggregated scores**



## Highlights of proposed actions

The institutional capacity of the town water utility needs to be strengthened and staff needs to be trained. Guideline need to be made available to water board members. Asset management should be introduced in the utility. The provision of shared yard connections in low income household compounds could strengthen the social sustainability of urban water supply. In order to ensure environmental sustainability, catchment management should be introduced.

To enhance the sustainability of urban sanitation in Welenchiti, private companies could be encouraged to engage in waste extraction services, introducing waste management technologies. Furthermore, public latrines management could be improved through performance agreements with operators and improved monitoring. Institutional coordination and integration needs to be improved in parallel.

Sustainability of rural water supply could be enhanced by improving spare part supply through involvement of private sector. Furthermore, there is a need to ensure the allocation of adequate budget at woreda level to improve monitoring and support to WASHCOs.

In rural sanitation the logistics at woreda level should be improved.

There is a need to improve maintenance of WASH facilities at schools and health facilities

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