



Sustainability of WASH services Sheno, Oromia

Town audit statement

In June-July 2015, a sustainability check of WASH services was undertaken in Sheno 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: the technical viability of the utility is satisfactory; however, the financial, institutional, social and environmental factors are very weak.

Rural water supply: at woreda level institutional and technical capacities adequate, at service provider level it scores poorly in all five factors of sustainability.

Urban sanitation: institutional working at authority and service provider level, technical viability is limited. Service providers financial situation scores satisfactory however budget allocation at town is very low.

Rural sanitation: at service provider level sustainability is in place except low environmental consideration.

Institutional WASH: institutions work effectively, technical sustainability satisfactory, financial and environmental sustainability not viable.

Overview of water supply and sanitation in Sheno

The water supply system of Sheno town is managed by a utility with an operator and an oversight in a town board. According to the utility (based on water connection and sales data) the water system serves 11% with public taps, 36% of the population is served with private yard connections while the remaining use shared facilities. Although coverage is high, the system functions sub-optimally and service levels are low in terms of continuity (reliability) and quantity. The per capita consumption is only 13 litres per day.

According to the 2014 baseline study, the water supply coverage in the surrounding village is 94%. Water supplies in the selected satellite villages (mainly from hand-pumps) were found to be more reliable than the town water supply, but also with scope for improvement.

About 61% of the town population accesses improved sanitation facilities. However, waste management systems are poor. The liquid waste extraction, collection and transportation is provided primarily by operators from nearby towns. The solid waste connection is provided by micro private companies.

Improved sanitation coverage in rural surroundings is very low with only 9% of people accessing improved sanitation facilities.

Both health facilities in Sheno and its surrounding rural areas have water facilities and one has latrine facilities. Of the 14 schools, 93% have water supply and 71% have latrine facilities.

Sustainability check overview

Within the ONEWASH Plus Programme, annual sustainability checks have been programmed to assess and monitor 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	38
	Staff efficiency	75	
	Effective Water Board (WB)	25	
	Town water utility staffing	0	
T	Quality of infrastructure	75	60
	Non-revenue water	100	
	Adequate supply of spare parts for minor maintenance (pipes, fittings etc.)	50	
	Effective maintenance system in place	75	
	Water quality management and disinfestations	0	
F	Cost recovery	50	25
	Effective financial management	25	
	Effective asset management	0	
	Effective billing and collection	25	
E	Sanitary inspection of sources	0	12.5
	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 Sheno Town fails to meet the benchmark on 9 of the 16 urban water supply indicators, resulting in low sustainability scores, especially related to financial, environmental and social sustainability.

Institutional sustainability: Although there is a utility with three core departments (Operation, Finance, Customer), the number and qualification of staff is inadequate. The oversight board is also poorly organized, not trained do not have guidelines.

Technically sustainability: The utility has data on the quality of the infrastructure, which is generally qualified as poor. Non-revenue water is not a problem, with NWR of less than 10%. Spare parts for minor maintenance are available within three days and effective corrective and preventive maintenance is practiced. However, disinfestations of reservoirs is not practiced.

Financial sustainability: The utility has a single entry financial management system, which is inadequate. There is no asset management and manual billing has a backlog of more than 60 days.

Environmental sustainability: The sources and many of the public fountains do not pass the sanitary inspection.

Social sustainability: The utility has not done much to address equity issue. 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	35	38
	By laws and legal status of the WASHCo	41	
T	Presence of WASH artisans in the woreda	25	27
	Spare parts supply	30	
	Routine (preventive) maintenance	27	
F	User payment and tariffs	48	23
	Financial management	17	
	Revenue/standard annual expenditure balance	3	
E	WASHCo Water safety plan	14	20
	Sanitary Inspection (SI)	25	
S	Election of WASHCo by entire community	63	33
	Women representation in WASHCos	3	

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	100	75
	Monitoring of O&M and WASHCo performance	25	
	Scheme inventory and maintenance plan	100	
F	Woreda water office annual recurrent budget	50	37.5
	Woreda water office logistics	25	

As shown in Table 3, Sheno scores very low on the indicators related to rural water supply. The average indicator score is lower than 50 on 11 of the 12 indicators at service provision level.

Institutional sustainability: Almost half of the 32 WASHCos in the rural areas around Sheno are well composed. A large part of WASHCos (78%) have by-laws in place, but only one has a legal status, having been established and registered with the Regional Water Bureau.

Technical sustainability: There are insufficient WASH artisans present in the woreda. Less than half (44%) of the WASHCos manage to acquire spare parts within three days and even fewer (38%) practice routine maintenance on at least annual basis.

Financial sustainability: For about half of the water points in the rural areas surrounding Sheno, a monthly tariff and for about 10% a volumetric tariff has been set. For the remaining water points, no tariff has been set, presenting a potential challenge for the financial sustainability of the water services provided by these water points. More than half of the WASHCos only keep simple records and do not have a bank account, while most others do not keep financial records at all. Only one WASHCo has up to date financial records, a dedicated bank account, and shares financial records with community. This was also the only WASHCo with a positive revenue/standard annual expenditure balance.

Environmental sanitation: Only a bit more than a quarter (28%) of the WASHCos have a water safety plan in place and only a bit more than 10% of the rural water points passed the sanitary inspection.

Social sustainability: About two-thirds of WASHCos were reported to have members elected by the entire community. Gender balance in WASHCos was an issue, with only 3% of WAHS Cost having at least 50% women.

At **service authority level**, three of the nine benchmarks have not been met. The main challenges are the fact that the Woreda Water Office has insufficient staff and does not have access to sufficient logistics in order to fulfil their roles and responsibilities. The woreda water office only provides monitoring and technical support to some of the WASHCos within its jurisdiction.

Urban sanitation

Table5 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	38
	Public latrines built and effectively operational	50	
F	Economic viability of liquid waste service provider	100	67
	Economic viability of solid waste service provider	100	
	Access to fund for sanitation service providers	0	
E	Open defecation free environment	76	76
S	Affordability of liquid waste management services for households	50	67
	Affordability of solid waste management services for households	100	
	Availability of social inclusive public latrine facilities	50	

Table6 Urban sanitation sustainability scores - Service authority level

Service authority indicator		Score	
I	Clear roles and responsibilities related to town sanitation and hygiene	75	56
	Town council capacity to do sanitation and hygiene promotion	75	
	Town sanitation master plan	25	
	Formalisation of pit and septic pit emptiers	50	
T	Checks on construction quality	25	62.5
	Effective messaging related to sanitation and hygiene	100	
F	Town / municipality annual recurrent budget	0	12.5
	Sufficient logistics for town staff to monitor and follow-up on sanitation and hygiene	25	
E	Safe disposal or reuse of sludge in an environmentally sound manner	25	12.5
	Safe disposal or recycling of solid waste in an environmentally sound manner	0	
S	Presence of strategy and service delivery models for reaching the poorest with sanitation facilities	75	75

At service provision level, the town fails to meet the benchmark on only 2 of the 12 urban sanitation sustainability indicators.

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

Technical sustainability: It generally takes longer than 7 days for septic tank emptiers to respond to a request for septic tank emptying services. There are sufficient public latrines in the town.

Financial sustainability: The liquid and solid waste service providers were reported to be economically viable. However, these sanitation service providers do not have access to (micro) finance.

Environmental sustainability: 76% of households reported not practice open defecation, while 24% do. This implies only a potential environmental sustainability risk.

Social sustainability: Liquid waste water services are reported to be affordable to some households, though only 3% of households reported to make use of such services. Solid waste services considered affordable to all. 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 only 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	94	94
T	Local private sector with capacity to construct and repair latrines	100	100
F	Economic viability of sanitation service provider	100	87.5
	Access to fund for sanitation service providers	75	
E	Open defecation free environment	32	32
S	Affordability of latrines for households	75	75

Table 8 Rural sanitation sustainability scores – service authority level

Indicator		Score	
I	Clear roles and responsibilities related to rural sanitation and hygiene	100	67
	Capacity to do sanitation and hygiene promotion	50	
	Sanitation and hygiene in woreda WaSH plan	50	
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	100	100

Institutional sustainability: The majority of communities have a Hygiene and Sanitation Community Group which has been trained and retrained and which meets at least quarterly.

Technical sustainability: There are local latrine artisans available in and around Sheno.

Financial sustainability: Latrine artisans are believed to be economically viable and have access to sources of (micro) financing.

Environmental sustainability: Only 32% of households reported not to practice open defecation, which poses a serious environmental sustainability risk.

Social sustainability: Latrines are considered to be affordable to households without subsidies.

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.

Institutional WASH

Indicators		Health facility		School	
I	Roles for cleaning and minor maintenance of institutional latrines	100	100	85	82
	Clear roles and responsibilities with regard to pit emptying/desludging /decommissioning	100		80	
T	Cleaning programme for sanitation facilities	38	10	41	17
	Availability of sufficient and appropriately equipped sanitation facilities including hand washing	13		4	
	Menstrual hygiene	0		7	
	Septic tank emptying practices	50		14	
F	Payment for water services	25	19	29	30
	Financing of capital maintenance of sanitation facilities	13		32	
E	Distance between latrines and water source (hand dug well / borehole / spring)	100	50	100	71
E	Open defecation free environment	0		43	
S	Social inclusion of latrine facilities	50	50	29	29

Indicators		Health facility		School	
I	Clarity on roles and responsibilities related to supporting institutional WASH	100	75	75	67
	Local government capacity to provide support to institutional sanitation	75		75	
	Formalization of pit and septic pit empties	50		50	
T	Monitoring of sanitation facility use and follow-up support	100	58	100	58
	Effective support to institutions related to their WASH facilities	25		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	25	13	25	13
	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 Sheno do not score well on technical and financial sustainability.

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

Technical sustainability: Only the health facility in Sheno Town has sanitation facilities, while the one in Injifano village, in the rural area around Sheno does not. The Sheno Town health facility has a regular cleaning programme and latrines are cleaned at least once a day. It has cleaning materials available and has hand washing facilities with water and soap. Septic waste is collected and disposed of on about annual basis. Of the 14 schools, 8 have a regular cleaning programme and latrines are cleaned at least once a week. Only few schools have sanitation facilities which include hand washing facilities with water and soap. Menstrual hygiene disposal facilities are only in place in two schools. Septic tank emptying is only practiced in three schools.

Financial sustainability: The Health facility in Sheno town pays for their piped water supply, while the one in Injifano village does not pay for their use of the nearby borehole. Neither pays for rehabilitation and major repairs to the sanitation facilities. Of the 14 schools, 8 paid for water supply and 5 pay for rehabilitation and major repairs to the sanitation facilities.

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 both health facilities and in eight of the 14 schools.

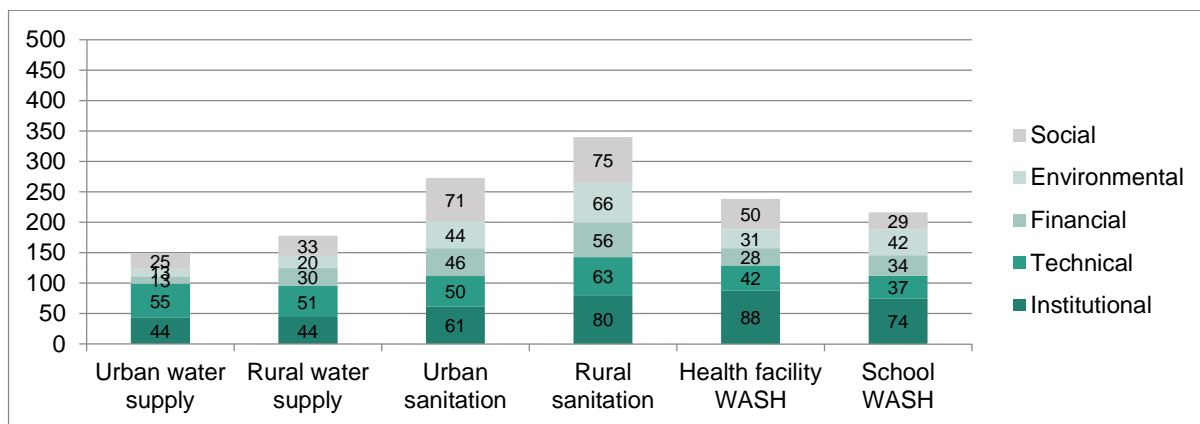
At **service authority level**, the main issues are lack of effective support to institutions related to their WASH facilities, lack of sufficient logistical resources for the Woreda Offices and lack of facilities for the safe disposal of liquid and solid waste.

Conclusions and recommendations

Figure 1 gives an overview of the average WASH sustainability check scores from service provision and service authority level in Sheno. Scores on the institutional sustainability

indicators are generally high, while the scores on especially the financial and environmental sustainability are low.

Figure 1 Aggregated scores



Highlights of proposed actions

The institutional capacity of the town water utility needs to be strengthened. Training needs to be provided to staff and water board members and guidelines need to be made available to board members. Asset management needs to be introduced in the utility and the financial management system needs to be improved through the introduction of an appropriate utility accounting systems. Shared yard connections need to be provided in low income household compounds in order to improve social sustainability. In order to ensure environmental sustainability, catchment management should be introduced.

Related to urban sanitation, there is a need to strengthening municipality in logistics, and in developing environmental sound disposal solutions. Improving public latrines management could be improved through performance agreement with operators and improved monitoring.

To improve sustainability of rural water supply, the woreda water office needs to provide effective support to WASHCOs. Furthermore, the spare part supply chain

could be improved through involvement of private sector. There is also a need to improving financial management of the WASHCOs and to introduce water safety plans.

In rural sanitation the logistics at woreda level should be improved

To ensure sustainability of institutional WASH, budget and logistics at woreda level need to be increased. Further, WASH facilities at schools and health facilities should address needs of girls. Institutions should develop a financing plan for operation and maintenance of WASH facilities.

This factsheet was produced by the IRC/Hoarec consortium providing independent monitoring and knowledge management services to the ONEWASH Plus programme. The ONEWASH Plus Programme is jointly implemented by the Government of Ethiopia and UNICEF to support the ONEWASH National Programme. Funding is provided by UKaid.