

# Sustainability of WASH services Abomsa, Oromia

## Town audit statement

In June-July 2015, a sustainability check of WASH services was undertaken in Abomsa 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 town water utility scores very low on the sustainability indicators, with the exception of the environmental indicators.

Rural water supply: at woreda level, institutional and technical capacities are adequate, while at service provider level, scores on the institutional and technical sustainability indicators are low. Scores on finance and social indicators are adequate.

**Urban sanitation**: the main challenges are related to technical and financial sustainability. The solid waste management system is poor.

**Rural sanitation**: the main sustainability challenges are related to institutional and financial issues at woreda level.

**Institutional WASH**: main sustainability challenges are related to technical sustainability. Budget and logistics are not adequate for the woreda to take up its monitoring and supervision role related to institutional WASH in Abomsa.

## Overview of water supply and sanitation in Abomsa

The water supply system of Abomsa town is managed by a utility with an operator and a town water board which provides oversight. According to the utility (based on water connection and sales data) the water system serves 40% with public taps, 35% of the population are served with private yard connections while the remaining use shared systems. Although coverage of the town water supply system is high, the system functions sub-optimally and service levels are low in terms of queuing and quantity consumed. The per capita consumption is 10 litres per day.

According to the 2014 baseline study, the water supply coverage in the surrounding village is 98%. Most people here collect water from public taps connected to the piped water scheme or motorised boreholes. There are only two WASHCos in the rural areas around Abomsa.

Less than half of the people in Abomsa town (41%) access improved sanitation facilities. Improved sanitation coverage in rural surroundings is very low with only 7% of people accessing improved sanitation facilities.

During the baseline, five health facilities had been identified in Abomsa and its surrounding rural areas (within 8 km), all of which had access to improved water supply and 80% of which had latrine facilities. Of the eight schools, 88% have water supply and 75% 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					
Ind	Indicator Score					
	Effective utility management	50				
ī	Staff efficiency	50	44			
1	Effective Water Board (WB)	50	44			
	Town water utility staffing	25				
	Quality of infrastructure	75				
	Non-revenue water	75				
Т	Adequate supply of spare parts for minor maintenance (pipes, fittings etc.)	50	45			
	Effective maintenance system in place	25				
	Water quality management and disinfestations	0				
	Cost recovery	50				
F	Effective financial management	25	31			
r	Effective asset management	0	31			
	Effective billing and collection	50				
	Sanitary inspection of sources	100				
Е	Sanitary inspection public fountains	25	62.5			
S	Urban poor get affordable water	25	25			

	Table 2 Urban water supply sustainability scores – service authority level			
Ind	icator	Score		
Ι	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	00	
Е	Catchment management system in place	0	0	

As shown in Table 1 the town water supply sustainability fails to meet the benchmark on 7 of the 16 indicators, resulting in low average sustainability scores.

**Institutional sustainability**: The main challenge to institutional sustainability is the lack of trained town water utility staff.

**Technical sustainability**: The utility has information of the state of the infrastructure, which was assessed to be poor. The utility has capacity to execute simple repairs, but does not do so within 24 hours and does not practice disinfection of reservoirs.

**Financial sustainability:** The utility practices single entry of financial data. As such it does not meet the benchmark on the effective financial management indicator of having double entry. The town water utility has a very poor asset management system, as it does not have an asset register of all system components.

The utility has not done much to address **equity issues**.

The challenge service authority level is **environmental sustainability** of the urban water supply in Abomsa. The sources did not pass the sanitary inspection and there is no catchment management and source protection system in place.

At **service authority level**, the benchmark is met on the institutional and technical sustainability indicators. 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 provision level				
Indi	Indicator Score				
ī	Well-composed and trained WASHCo	50	38		
1	By laws and legal status of the WASHCo	25	30		
	Presence of WASH artisans in the woreda	25			
Т	Spare part supply	25	29		
	Routine (preventive) maintenance	38			
	User payment and tariffs	100			
F	Financial management	25	50		
	Revenue / standard annual expenditure balance	25			
E	WASHCo Water safety plan	50	50		
E	Sanitary Inspection (SI)	50	30		
S	Election of WASHCo by entire community	100	50		
	Women representation in WASHCos	0	30		

	Table 4 Rural water supply sustainability scores – service authority level				
Indi	cator	Score			
	Woreda WASH Team	75			
Ļ	Woreda Water Office	0	60		
I	Woreda level plan	100	69		
	Regional standard WASHCo by laws	100			
	Checks on construction quality	50			
Т	Monitoring of O&M and WASHCo performance	75	75		
	Scheme inventory and maintenance plan	100			
F	Woreda water office annual recurrent budget	25	50		
	Woreda water office logistics	75			

As shown in Table 3, the average indicator score is lower than 50 on 7 of the 12 indicators at service provision level.

**Institutional sustainability**: The two WASHCos in the rural areas around Abomsa were both well composed, but only one had bylaws in place.

**Technical sustainability**: The WASHCos score poorly on the technical sustainability indicators. There are insufficient WaSH artisans in the woreda and it takes longer than three days to acquire spare parts for minor maintenance. Only one WASHCo executes routine maintenance of at least annual basis.

Financial sustainability: Both WASHCos have set volumetric tariffs but neither has an account with a financial institution and only one WASHCo has a positive revenue / standard annual expenditure ratio.

**Environmental sanitation**: Both WASHCos have a water safety plan in place and have water points that pass the sanitary inspection.

**Social sustainability**: Gender balance in WASHCos was an issue in both WASHCos with less than 50% of women represented in both WASHCos.

At **service authority level**, only two of the nine benchmarks have not been met. The main challenges are the weak woreda water office, with less than 75% of required staff and the low water office annual recurrent budget.







#### Urban sanitation

	Table 5 Urban sanitation sustainability scores - Service provider level			
Indi	cator	Score		
	Waste water services	50		
I	Solid waste management services	25	69	
	Local private sector with capacity to construct and repair latrines	100		
Т	Access to septic emptying services	25	25	
1	Public latrines built and effectively operational	25	25	
	Economic viability of liquid waste service provider	25		
F	Economic viability of solid waste service provider	100	42	
	Access to fund for sanitation service providers	0		
E	Open defecation free environment	89	89	
	Affordability of liquid waste management services for households	25		
S	Affordability of solid waste management services for households	100	58	
	Availability of social inclusive public latrine facilities	50		

	le 6 Urban sanitation sustainabili vice authority level	ty score	:s -
Indi	cator	Score	
I	Clear roles and responsibilities related to town sanitation and hygiene	25	
	Town council capacity to do sanitation and hygiene promotion	75	62.5
	Town sanitation master plan	50	
	Formalisation of pit and septic pit emptiers	100	
Т	Checks on construction quality	25	
	Effective messaging related to sanitation and hygiene	100	62.5
F	Town / municipality annual recurrent budget	0	
	Sufficient logistics for town staff to monitor and follow-up on sanitation and hygiene	25	12.5
Е	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	0	U
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 6 of the 12 urban sanitation sustainability indicators.

**Institutional sustainability**: Private service providers are engaged in extraction and transportation of liquid waste in the town. Solid waste management services are provided by informal service providers. Latrine artisans are available within town.

**Technical sustainability**: It generally takes longer than seven days for septic tank emptiers to respond to a request for septic tank emptying services. There is only one public latrine in the two, which is insufficient.

**Financial sustainability**: The informal solid waste service providers were reported to be economically viable, but liquid waste service providers required subsidies. Sanitation service providers have no access to (micro) finance.

**Environmental sustainability**: 89% of households reported not practice open defecation, while 11% do. This implies a potential minor environmental sustainability risk.

**Social sustainability**: Liquid waste water services are only affordable to households with subsidies (though only 2% of households reported to make use of such services), while solid waste services were 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 financial sustainability, with inadequate budget and logistical resources available for supporting urban sanitation services, and on environmental sustainability, with no designated place for dumping liquid or solid waste.

Furthermore, the town does not meet the benchmark on the indicators on the roles and responsibilities related to town sanitation and hygiene, and on the construction quality check indicator.







#### Rural sanitation

	Table 7 Rural sanitation sustainability scores – service provider level				
Ind	icators	Score			
I	Hygiene and Sanitation community Groups	38	38		
Т	Local private sector with capacity to construct and repair latrines	100	100		
F	Economic viability of sanitation service providers	NA	75		
	Access to fund for sanitation service providers	75	73		
Е	Open defecation free environment	40	40		
S	Affordability of latrines for households	75	75		

	Table 8 Rural sanitation sustainability scores – service authority level				
Ind	icator	Score			
I	Clear roles and responsibilities related to rural sanitation and hygiene	50			
	Capacity to do sanitation and hygiene promotion	25	42		
	SH& in woreda WASH plan	50			
Т	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**: Only about half of the communities in the woreda have a Hygiene and Sanitation Community Group which have been trained and retrained.

**Technical sustainability**: There are local latrine artisans available in both the town as well as in the rural areas.

**Financial sustainability**: Sanitation service providers are believed to have good access to sources of (micro) financing.

**Environmental sustainability**: Only 40% of households reported not to practice open defecation, which poses a serious environmental sustainability risk.

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

At **service authority level**, there are good sanitation plans, clear roles and responsibilities and strategy for reaching the poorest with sanitation facilities. However, there is inadequate public capacities at woreda and kebele level to do hygiene and sanitation promotion and there are insufficient logistical resources available to support these tasks. These issues are likely to contribute to the fact that effective messaging related to sanitation and hygiene does not take place in the entire woreda.







#### Institutional WASH

	Table 9 Institutional WASH sustainability score – service provider level						
Ind	licators	Healtl facility	-	Schoo	1		
	Roles for cleaning and minor maintenance of institutional latrines	nor maintenance of 100		86			
I	Clear roles and responsibilities with regard to pit emptying/desludging /decommissioning	75	5	100	93		
	Cleaning programme for sanitation facilities	55		38			
Т	Availability of sufficient and appropriately equipped sanitation facilities including hand washing	35	28	3	19		
	Menstrual hygiene	10		13			
	Septic tank emptying practices	10		0			
	Payment for water services	40		38			
F	Financing of capital maintenance of sanitation facilities	30	35	63	50		
E	Distance between latrines and water source (hand dug well / borehole / spring)	100	90	100	75		
	Open defecation free environment	80		63			
s	Social inclusion of latrine facilities	20	20	25	25		

Inc	licators	Healtl facility	-	Schoo	1
	Clarity on roles and responsibilities related to supporting institutional WASH	100		25	
I	Local government capacity to provide support to institutional sanitation	25	75	75	67
	Formalization of pit and septic pit empties	100		100	
	Monitoring of sanitation facility use and follow-up support	100		100	58
Т	Effective support to institutions related to their WASH facilities	25	58	25	
	Availability of septic tank emptiers	50		50	
म	Sufficient financing of staff to monitor and follow-up on institutional WASH service provision	50	37.	50	37.
r	Sufficient logistics for staff to monitor and follow-up on institutional WASH service provision	25	5	25	5
	Safe disposal and / or reuse of sludge in an environmentally sound manner	0	0	0	0
E	Safe disposal and / or recycling of solid waste in an environmentally sound manner	0	0	0	0

At service provision level, both health facilities as well as schools in Abomsa 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 Adishuhu.

**Technical sustainability**: In three of the five health facilities and in five of the eight schools there is a regular cleaning programme and latrines are cleaned at least once a week. Only few health facilities and even fewer schools have sanitation facilities which include hand washing facilities with water and soap and have menstrual hygiene disposal facilities in place. Septic tank emptying is not practiced in any of the schools and only in few health facilities.

**Financial sustainability**: Only part of the health facilities and schools pay for water services and pay for major repairs to 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 one of the five health facilities and in three of the eight schools.

At service authority level, there is clarity on roles and responsibilities related to health facility WASH, but less so for school WASH. In the Woreda Education office, there are sufficient dedicated staff that have received training to support institutional WASH. This was not reported to be the case in the Woreda Health Office. Main challenges for both health facility WASH as well as for school WASH are 1) the fact that it takes more than a week for the Health and Education Office to respond to a request for support from an institution, 2) the lack of logistic resources available to the woreda level staff to do their job in supporting institutional WASH, and 3) the lack of facilities for the safe disposal of liquid and solid waste.



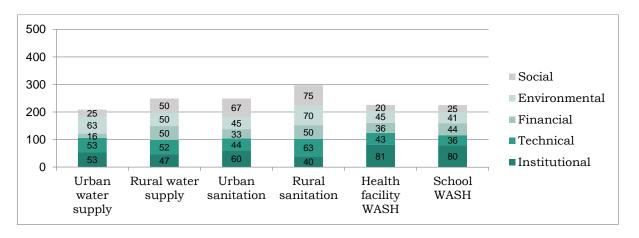




## Conclusions and recommendations

Figure 1 gives an overview of the average WASH sustainability check scores from service provision and service authority level in Abomsa. The critical bottleneck is financial sustainability where it scores low. In institutional and technical sustainability it scores generally adequately.

Figure 1 Aggregated scores



## Highlights of proposed actions

A priority for utility will be the introduction of proper water quality management.

Furthermore, there is a need to improve the maintenance capacity of utility and engaging private sector in this. Utility staff and board members require training and guidelines.

Asset management should be introduced in the utility. The financial management system should be improved through the introduction of an appropriate utility accounting system. Social sustainability could be enhanced with the introduction of shared yard connections in low income household compounds. In order to ensure environmental sustainability, catchment management should be introduced.

In urban sanitation, there is a need to improve solid waste management, to introduce appropriate waste extraction technologies, and to allocate adequate budget and logistics for the municipality to be able to take up its roles and responsibilities related to urban sanitation. Public latrines management could be improved through the introduction of performance agreements with operators and improved monitoring.

In rural water supply, the woreda water office needs to be strengthened, so it can take up its role in providing effective support WASHCOs. In addition, there is a need to improve the spare part supply chain through involvement of private sector. Bylaws of WASHCOS need to be introduced and WASHCos should be stimulated to develop water safety plans.

In rural sanitation the logistics at woreda level should be improved

In institutional WASH, the logistics available at woreda level needs to be improved. Further, WASH facilities at schools and health facilities should address the needs of girls. Institutions should develop a financing plan for operation and maintenance of WASH facilities.

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