



Water, sanitation and hygiene in Abomsa, Oromia

Baseline survey factsheet

In October 2014, a baseline survey for the One WASH Plus programme was undertaken in Abomsa town, Oromia and some of the surrounding satellite villages (the survey included Homba, Dambaka Iftu and Shamo Gado kebeles). This factsheet presents a summary of the key findings relating to water supply, sanitation and hygiene infrastructure and the services received by households and available at public institutions.

Key findings

Coverage of the town water supply system is high but the system functions sub-optimally and service levels are low in terms of queuing and quantity consumed.

Water supplies in the selected satellite villages (also from piped supplies) suffer similar issues.

Coverage with latrine facilities is lower than water supplies in both urban and rural areas, with open defecation common especially in the satellite villages

Some public institutions lack sanitation facilities and all need to improve quality and sustainability of facilities.

Abomsa is the only town in Merti woreda of Oromia which has an estimated urban population of 20,517 according to CSA population projections (to July 2014).

Farming is the major source of livelihoods in both the satellite villages (98% households) and the town itself (32% households). Other important livelihoods in the town are formal employment (25%), informal or formal trade and business (25%), day labour work (10%) and remittances. Annual household income in town is estimated to average 14,471 Birr in the town and is lower in the satellite villages (11,228 Birr).

The town has five schools, two health facilities, and a prison. In the satellite villages there are three further schools, and three further health facilities.

None of the families interviewed in Abomsa town indicated that a household member had suffered from diarrhoeal disease over the last two weeks. In the rural areas, 8.5% of households had at least one member affected.

Water services

Almost all the urban households surveyed (97%) use water from the piped water supply. Around half (52%) were found to use public standpipes and the remainder (45%) have household connections to the yard or plot. In the neighbouring kebeles, most households collect water from public standposts (94%) supplied by motorised boreholes or piped schemes.

Table 1 Main source of household water supply in the dry season	Total	Rural	Urban
Piped water to yard/plot	31%	0%	45%
Public tap or standpipe (public fountain)	65%	94%	52%
Communal protected dug well / tubewell or borehole with handpump	1%	4%	0%
Unprotected spring	1%	2%	0%
Private unprotected dugwell	1%	0%	1%
Tanker truck	1%	0%	1%
Don't know	1%	0%	1%

Water Infrastructure

Abomsa has a piped water supply system, managed by Abomsa water supply and sewerage utility services. The water supply system comprises two boreholes, two reservoirs and a large number of household, commercial and public stand pipes/fountains.

Table 2 Key features of urban piped water system	
Number of sources	2
Number of reservoirs	2
Total storage capacity (m3)	200
Number of household connections	1928
Number of public standpipes	29
Number of commercial connections	35
Institutional connections: schools (n.a.), Health (n.a.), Other public connections (n.a.), Industrial connections (n.a.), Other connections (n.a.)	

Water points in the satellite villages are mainly deep boreholes with limited distribution with other supplies from spring and town piped water supply systems.

Table 3 Water points in satellite villages	
Tap(s) - connected to deep well with limited distribution	4
Tap(s) - connected to spring with limited distribution	2

Functionality of infrastructure and service levels

While water point functionality is assessed to be reasonably high in the town (79% days) from water point surveys, the sources used by only a small proportion of households (18%) were considered reliable (available year-round and rapidly repaired).

Queues are indicated to be severe both from water point and household surveys leading to long waiting times. As a consequence only 40% urban households are estimated to use 20 litres per capita per day (lpcd).

Users report low satisfaction with respect to reliability and time required for water collection.

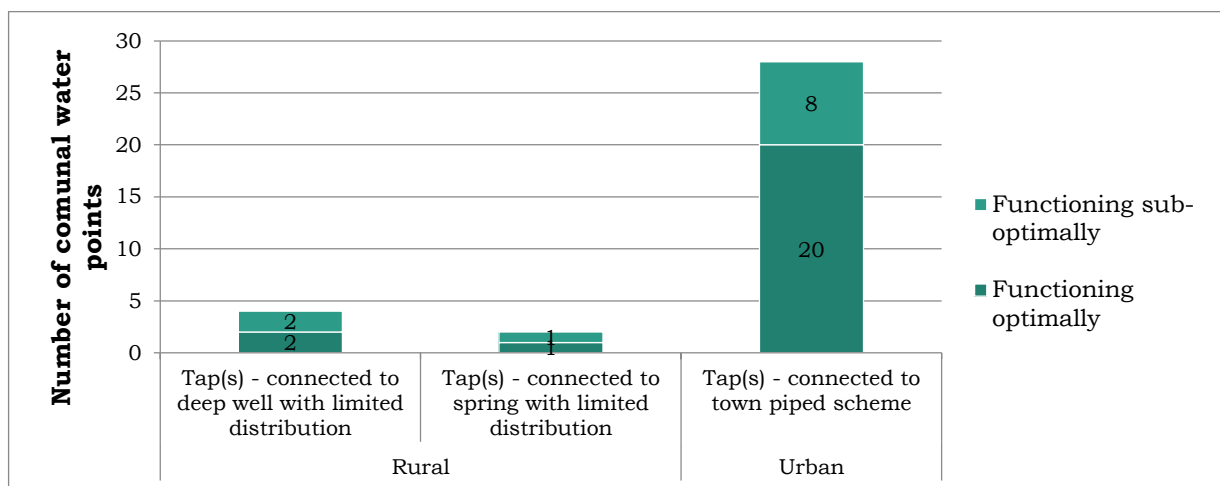


Photo: IRC

	Rural	Urban
Reliability (source available year-round and breakdowns < 3 days)	9%	18%
Spend less than 30 minutes on a round trip to fetch water	80%	81%
Queues for 30 minutes or less	26%	4.5%
Odour, colour, taste perceived acceptable	94%	95%
At least 15 litres per person in rural areas and 20 in urban areas	51%	40%

Although perceived water quality is largely satisfactory, measured microbial water quality was found to be satisfactory/ low risk in only three out of five samples from public standpipes (*E. coli* concentrations up to 10 MPN/100ml) with two samples failing at this level. The two samples taken in the satellite villages were free of *E. coli*.

	Rural	Urban
Average % days per year that the water point is functional	94%	79%
Average % households using water point living within 500m	46%	65%
Proportion of water points without queues of less than 10 people	0%	9%
Proportion of water points with perceived acceptable quality	100%	100%
Water points with low microbial contam. (<i>E. coli</i> <10 MPN/100 ml)	100%	60%
Average sanitary inspection score	n.a.	n.a.

Water services are similar in the satellite villages with main concerns related to reliability, queuing and low water consumption (only 51% households using 15 lpcd).

	Rural	Urban
Satisfied with reliability	36%	39%
Satisfied with distance	68%	66%
Satisfied with time	40%	42%
Satisfied with quality	87%	94%
Satisfied with quantity	45%	40%

Sanitation and hygiene

While a large proportion of Abomsa residents have a latrine (89%), only 36% households have an improved facility (e.g. with slab) and a substantial minority of households (10%) still rely upon open defecation. In rural areas, less households have latrines (41%) but far fewer are improved (only 2% households) and the majority practice open defecation (57%).

Table 7 Household access to sanitation	Total	Rural	Urban
Pit latrine with slab	25%	2%	35%
Other improved sanitation facility	1%	0%	1%
Private latrine / toilet owned by neighbour	1%	0%	1%
Flush toilet to elsewhere	1%	2%	0%
Pit latrine without slab	49%	39%	53%
Bush/ open defecation	24%	57%	10%

Level of service provided and user satisfaction

Few urban latrines provide adequate privacy, most are not clean and there is very little emptying of pits (only 2% households had waste collected). In rural areas, the standard of facilities is even lower.

Table 8 Sanitation service level accessed by households	Rural	Urban
Latrine with wall and door	0%	13%
Latrine is clean without many flies	11%	28%
Latrine separates user from faeces	2%	30%
Human waste is collected	0%	2%

Table 9 User satisfaction with sanitation services	Rural	Urban
Satisfied with privacy	17%	51%
Satisfied with cleanliness	17%	49%
Satisfied with comfort	19%	49%
Satisfied with safety	28%	48%

Satisfaction levels with respect to sanitation indicators are fairly low both within the towns (around 50% families satisfied on each indicator) and the satellite villages (only around a quarter of households expressing satisfaction).

Handwashing practices

54% of households reported that they practice handwashing at all six critical moments (before eating, after defecation, before preparing food, before feeding a baby, after cleaning a baby, after touching something dirty). In urban areas, the proportion is 56% and, in rural areas, it is 51%.

However, only 7% of interviewees washed their hands with water and soap or ash when asked to show how they do it. In urban areas, the proportion was 10% and in rural areas, none.

Liquid waste management

There are no organised liquid waste collection, transportation and disposal services in the town.

Solid waste management

Burning of solid waste either within or outside the household compound is common in the town (48%) followed by use of pits within or outside the plot. A minority (13%) have their waste regularly collected.

In the satellite villages burning is less common (21%) but composting is more widely practiced (34%), while the majority pile their rubbish in or near the compound (43%).

Institutional WASH

WASH facilities at the prison are inadequate with no sanitation facilities. While the urban schools and health institutions are better equipped with facilities, most of the school latrines are not cleaned properly and in need of improvement.

Table 10 Institutional sanitation

	Rural		Urban		
	Health facility	Schools	Health facility	Prison	Schools
Number of institutions	2	3	3	1	5
with latrines with walls and doors	1	0	3	0	4
with latrines that are clean	1	0	1	0	0
with latrines separating faeces from user	1	1	3	0	5
where human waste is collected	0	0	2	0	0
with ALL of the above	0	0	1	0	0
with menstrual disposal	0	1	1	0	1
with separate facilities for males and females	0	0	1	0	4
with all males reported to use the facilities	1	1	3	0	5
with all females reported to use the facilities	0	0	3	0	5

Menstrual disposal facilities and collection are also lacking. The health institutions are ranked better.

Similar gaps are identified at institutions in the satellite villages.

Conclusions

- Coverage of the town water supply system is high, with 97% of urban residents having access to an improved source (the most common types of access are public standpost or a yard connection) but the water supply system functions sub-optimally and queues are often long;
- As a result only 40% urban households use at least 20 lpcd water;
- Water quality is a further concern and measured microbial water quality (*E. coli*) was not satisfactory in the town at the time of survey;
- Water supplies in the selected satellite villages (mainly from public standposts) are similar with high levels of coverage comprised by low reliability, queues and low quantity of consumption.
- Coverage with latrine facilities is lower than water supplies in both urban and rural areas, with open defecation practised by 10% households in the town and 57% households in satellite villages;
- The prison lacks sanitation facilities and most public institutions have facilities that could be improved in terms of quality and sustainability.



About One WASH Plus

Further information on baseline study findings from Abomsa and other towns are discussed in the main baseline report. This report is available from UNICEF.

This factsheet was produced by the IRC/HOAREC consortium providing independent monitoring and knowledge management services to the One WASH Plus programme. The One WASH Plus programme is jointly implemented by the Government of Ethiopia and UNICEF to support the One WASH National Programme. Funding is provided by UK Department for International Development.

Planned One WASH Plus interventions in Abomsa

The approach being developed under the One WASH Plus project includes an integrated package of improvements to water, sanitation and hygiene infrastructure and services.

Improvements planned to water supplies include phased development of the source of water for the town, pipelines and pumping, storage facilities and distribution network. The satellite village of Teclehaimanot will also be connected or supplied through a separate system.

A sanitation master plan is being developed for the town with plans to improve sanitation facilities at public institutions (schools and health facilities), provision of some public sanitation, and new solutions found for solid and liquid waste collection and disposal (including a new landfill and sludge drying facilities).

Integrated promotion of sanitation and better hygiene practices and improvements in waste management are expected to lead to better living conditions and health improvements.