

ONEWASH Plus: Delivering Value for Money in Eight Towns in Ethiopia

SUMMARY

The purpose of this technical paper is to present a value for money analysis of the ONEWASH Plus Programme in eight towns in Ethiopia. The analysis assessed the costs, efficiency and effectiveness of the programme in Welenchiti, Abomsa and Sheno (Oromia), Maksegnit (Amhara), Kebridehar and Jigjiga (Somali) and Wukro and Adishihu (Tigray). Surrounding satellite villages for most cities are also part of the assessment.

Typically, most WASH infrastructure programmes in the medium and small towns of Ethiopia take seven years or more to complete. The ONEWASH Plus Programme had the ambition of completing a small-town infrastructure and institutional capacity building programme on water, sanitation and hygiene within five years. At the time of this value for money analysis (September 2019), the programme was concluding. However, part of the hardware (especially in Abomsa) was still under construction, while most of the hardware in all towns was not handed over and only partially operational. The analysis in this document therefore focuses on what has been achieved to date, considering the expected impact based on design populations and a comparison of Capital Expenditure (CapEx) with other small town WASH programmes in Ethiopia.

Preliminary conclusions include:

- ONEWASH Plus, once it delivers water to the population it has been intended for, is expected to have CapEx costs within the range 89-92 USD per person. When compared with the costs of other programmes, this is well within the range of typical costs. If the programme delivers its intended outcomes, then the costs are expected to be relatively low.
- So far, there have been very limited changes in the enabling environment as illustrated by the annual sustainability checks, especially with respect to institutional capacities.
- Given the limited improvements in management and institutional capacities in the past five years, changes in procurement processes (bundling contracts) did not yet have the desired impact of improving efficiency.
- "Red flags" raised by the annual sustainability checks have not been adequately dealt with. Adaptive management addressing the limitations identified could likely have ensured more value for money.

Based on the sustainability reports, the 2019 data collection and interviews, this report provides a critical perspective to be used for learning and reflection by UNICEF and other stakeholders involved in supporting programmes in small towns in Ethiopia.

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Introduction

The ONEWASH Plus Programme was implemented by UNICEF with the Government of Ethiopia and funding from DFID. The programme, with an overall budget of GBP 22 million (approx. 33.3 million USD) started in 2014. It was originally intended to be completed by the end of 2018, but was extended to September 2019.

Purpose of the technical paper

The aim of the value for money analysis is to assess the costs, efficiency and effectiveness of the programme in the towns of Maksegnit (Amhara), Abomsa, Sheno and Welenchiti (Oromia), Kebridehar and Jigjiga (Somali) and Wukro and Adishihu (Tigray).

Additionally, the analysis includes a comparison of the capital expenditure of the ONEWASH Plus Programme with other small town WASH programmes in Ethiopia.

Limitation of the analysis

The programme in the eight towns and surrounding villages included different components: town water supply, water supply in satellite villages, urban sanitation, including solid and liquid waste management, treatment and disposal, sanitation in the rural satellite villages, and institutional WASH. The programme also provided capacity building to local administrations and private public operators for both the water supply and the sanitation components.

At the time of writing this technical paper, the town water supplies were still under construction in many of the towns and therefore the costs can be compared with expected outputs (design population) but not with the outcomes (indicators reflecting the quality of the service).

Methodology

This working paper is based on a desk-based review of expenditure on the ONEWASH Plus Programme provided by UNICEF Ethiopia. Additional data was collected from available budgets and expenditure on other town WASH programmes in Ethiopia.

The outcomes achieved from the programme have been extracted from the sustainability checks and the analysis of the 2016 midline and 2019 assessment reports.

Interviews about the cost-efficiency and procurement processes were conducted with UNICEF and IRC staff during the week 6-9 August 2019.

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Results

Summary of main outcomes

Water services

Interventions to improve town water schemes have taken place in six project towns: Maksegnit, Abomsa, Sheno, Welenchiti, Kebridehar and Wukro. In order to improve water services in the satellite villages around these towns, public taps have also been constructed (with the exception of Kebridehar). Water kiosks have been built in Maksegnit, Sheno, Welenchiti and Abomsa.

However, at the time of writing this report, water services in the towns and satellite villages had not yet improved to the full expected extent, as interventions were still ongoing or had only recently been completed but not handed over to local implementing partners (technical water units and municipalities).

Compared with the baseline (2014), in September 2019 an estimated additional 33,864 people had gained access to the town water schemes as a result of rehabilitation and expansion works (Table 1).

People who already had access to the piped water scheme have so far benefited to some degree from improved reliability, quality and quantity of water services. This has especially been the case in Maksegnit, which has seen the biggest improvements in these areas. It is expected that in the next year (2020), water services will improve in these towns and the surrounding satellite villages, benefiting the entire population, covering an estimated 187,974 people in these towns and 59,948 people in the satellite villages.

Sanitation and hygiene services (including liquid and solid waste management)

Interventions related to improving the sanitation and hygiene situation have taken place in Maksegnit, Abomsa, Sheno, Welenchiti, Kebridehar, Adishihu and Wukro and their satellite villages (with the exception of villages around Kebridehar). In Jigjiga, interventions focused on improving solid waste management.

Software interventions related to sanitation and hygiene included CLTSH activities in the towns and satellite villages. This has led to an initial decrease in open defecation, especially in the satellite villages, where open defecation was initially highly prevalent. However, the 2019 household survey revealed slippage and a drift

back to open defecation practices. This in line with the Capital Software expenditure pattern.

Town	# Additional p to piped	eople with access water access	# Additional people with solid waste	# School children benefiting from institutional WASH	
	Town	Satellite villages	services		
Maksegnit town	7,757	3,529	12,629	12,307	
Abomsa	4,854	0	3,134	8,208	
Sheno	3,886	7219	2,554	5,080	
Welenchiti	4,631	1,874	3,259	8,395	
Jigjiga [*]	NA	NA		10,583	
Kebridehar	4,366	NA	2,111	7884	
Adishihu	NA	NA	17,347	5,792	
Wukro	8,370	1,806	12,629	8,510	
Total	33,864	14,419	41,034	66,759	

Table 1: Number of people with improved services 2014-2019 (towns and satellite villages)

After the initial investment by UNICEF in awareness activities, the local government institutions (health extension workers) would need to continue the awareness activities regularly. This has not happened and as a result open defecation practices returned (Figure 1).

In each of the towns, two public latrines have been constructed. However, at the time of writing of this report, construction of these facilities had not been completed in Abomsa. In the other towns, the facilities had not been put into operation, awaiting official handover and establishment of clear management arrangements. When in use, the facilities will have the potential to contribute to ensuring an open defecation free environment in the towns, benefiting the entire population.

In addition, ONEWASH Plus has undertaken interventions to improve solid waste management. The programme supported the set-up and / or strengthening of micro-enterprises for solid waste management and provided the towns with required equipment and facilities as well as capacity building support in the form of trainings for improving solid and liquid waste management. This has led to improvements in solid waste management, with an estimated additional 41,034 people now making use of waste collection services (Table 1). In addition, the people who were already accessing such services, now have better to improved solid waste collection services. In the future, solid waste management is expected to benefit the entire population of the towns.

In order to improve liquid waste collection, ONEWASH Plus provided the towns with vacuum trucks. However, these have not been put into operation, because of technical challenges.

In order to improve safe treatment and disposal of solid and liquid waste, the programme supported the constructions of landfills and sludge dry beds in the towns. However, at the time of writing this report, none of these had started operating.

The facilities in Abomsa and Kebridehar were still under construction, while the other ones were awaiting official handover. The facility in Adishihu was not in use because of an outstanding land dispute.



Figure 1: Sanitation ladder 2014-2019

Source: 2019 OWP assessment

Assuming construction of these facilities will be finalized and outstanding challenges preventing the facilities to be put into use will be resolved, the facilities have the potential to benefit the entire population of the towns.

Institutional WASH

In each of the towns, two schools have been selected for implementation of additional sanitation blocks (gender-segregated and suitable for people with a disability). However, at the time of writing of this report, construction of these facilities was ongoing in Abomsa, while in the remaining towns, the facilities had not been handed over yet to the schools and had therefore not started providing services.

In addition, capacity building and behavioural change activities have been undertaken in the majority of schools and health facilities in the towns and their surrounding satellite villages, with a special focus on Menstrual Health and Hygiene in schools. This has led to an increase in schools with school health clubs. Schools in the project areas have also been found to have improved Menstrual Health and Hygiene (MHH) practices, with almost half of the schools (47%) having MHH rooms in place. Assuming all schools benefited from the interventions, a total of almost 55,000 students are estimated to have benefited (Table 2).

Costs of the programme

The capital expenditure of UNICEF for the eight towns has been roughly 30,753,167 USD. Capital expenditure includes both hardware and software related costs. Most of the institutional capacity building and sensitisation of communities on hygiene awareness and promotion was done at the start of the programme, but not (sufficiently) followed up by local government. It is therefore considered as software capital expenditure, rather than direct support costs. The expenditure includes DFID and GoE contributions (30% in Tigray, 25% in Oromia and 22% in Somali).

Capital expenditure on water accounts for 78% of the programme costs, sanitation 21% of the expenditure while institutional WASH totals 2%. Capital expenditure can be broken down in costs of hardware (80%) and software (20%). Capital expenditure on software includes design and supervision services, sanitation and hygiene promotion and urban sanitation capacity building support.

Additionally, about one million USD has been spent on knowledge management, learning, and monitoring and evaluation activities.

The overall capital expenditure per person for the expected served population in 2025 will be 89 USD excluding the knowledge management activities and 92 USD per person if these activities are included (Table 2).

Town	Population 2025	CapEx hardware, per person	CapEx software, per person	Knowledge management, per person	Total Cost per person USD
Maksegnit	29,124	112.02	25.03	4.29	141.34
Abomsa	41,721	91.22	16.31	3.00	110.53
Sheno	44,145	93.72	15.41	2.83	111.96
Welenchiti	51,555	72.40	13.20	2.42	88.03
Jigjiga [*]	29,432	3.90	23.05	4.25	31.20
Kebridehar	57,201	88.97	11.86	2.19	103.02
Adishihu	21,474	11.96	30.94	5.82	48.72
Wukro	69,630	70.35	9.54	1.80	81.69
Total	344,282	73.48	15.85	2.90	92.23

Table 2: Cost per person per town for expected population 2025 (USD 2016)

*Only solid waste

Discussion

Comparison with other small town programmes

With the available information it is too early to make a proper value for money assessment. Only capital expenditure can be compared with other programmes. However, the information from other programmes is also incomplete, with population numbers estimated. This affects the cost per capital considerably.

Table 3 provides the costs per person made available by different organisations with small town programmes. It is worth mentioning that each programme has different components and the costs are not fully comparable

It can be concluded that at 89 – 92 USD per person (design population), the ONEWASH Plus programme has CapEx hardware and software within the same range of costs of other programmes from other organisations.

We cannot yet draw conclusions on value for money since it is not possible to assess the costs related to the final outcomes reached.

Procurement process

Aiming to improve efficiency of the existing procurement processes in Ethiopia, UNICEF and its partners trialled a new approach to procurement in the seven towns programme. This bundled contracting for infrastructure related components which are usually procured separately:

- Water source development and treatment works;
- Civil works;
- Supply and installation of pipes and fittings;
- Supply and installation of electromechanical components;
- And capacity building to utilities or local administration to improve service delivery.

The expected advantage of this procurement process was to simplify the process reducing the time between tender and award of contracts. More details can be found in a learning note "Build capacity-build transfer: piloting an innovative contracting arrangement for small towns" (2016).

In practice, there were some time savings achieved in procurement, but the lack of capacity

Small town programme (date)	Components included in the programme	Population benefiting (estimated)	Cost per person USD
Hosaena Water Supply Project (2013)	Includes water supply only No capacity building, no sanitation	143,857	34
5 Towns Urban Water Supply and Sanitation Project (IDE and GoE)	Includes water supply, sanitation (not major), institutional capacity building, programme management and WASH access to low income families	1,554,057	66
ONEWASH Plus (2016)	Includes water supply, institutional capacity building, sanitation (landfill, sludge drying bed, vacuum and garbage truck, solid waste collection, public and communal latrines) and [knowledge management component]	344,282	89 [93]
WSSP small and medium	Includes water supply, public latrines,	1,300,000	98
town component (2004-2013)	capacity building		
Small towns in Oromia (2016 study phase)	Includes water supply only No capacity building, no sanitation	64,534	101

Table 3: Cost comparisons of small town programmes (USD 2016)

of the main contractor to handle all the components in turn meant that there were delays throughout the construction phase. This was mainly because of technical problems. Some of these were serious and led to the finalization of the contract with the town of Abomsa.

There are several examples where the absence of relatively small investments are preventing the programme to reach potentially much larger outcomes. Examples include the landfill in Adishihu which is not operational because relatively minor funds are lacking for land compensation; lack of electro-mechanical equipment preventing expensive boreholes from being operational; and the poor state of the old piped distribution schemes in Kebridehar.

Responsibilities for capital maintenance expenditure, and asset management have not been clearly allocated within the procurement processes and are a potential risk of failure. The bundling process means that some of the subcontracts are not clear on some of the asset responsibilities and blockages will require strong UNICEF intervention to be solved.

The main areas of capacity building support provided to utilities covered establishing external accountability, internal accountability, operation and maintenance, and financial management. The capacity building was done only at the start of the programme (four years ago). The training on new knowledge on managing water services was done too early and many years before the infrastructure was completed.

The hygiene awareness had some impact on reduction of open defecation reflected in the midline, but without refresher campaigns the endline shows the same open defecation rates as at the start of the programme.

Overall, the expected outcome that bundling procurement contracts would ensure efficient sequencing of activities because there was better integration of implementation processes, has not been achieved in practice.

Conclusion

It is too early to draw definitive conclusions on the value for money of the programme. However, the fact that there have been little changes in the enabling environment over the past five years and that the majority of the population in the eight towns still do not have improved water and sanitation services, means that the intended outcomes of this ambitious programme have not yet been realized.

The ONEWASH PLUS Programme is more complete and encompassing in its interventions than other water, sanitation and hygiene town programmes. Comparisons cannot be made with other programmes on outcomes, as there are no reports on what the investments in these other towns have achieved.

Given the limited improvements on management and institutional capacities in the past five years, changes in procurement processes (bundling contracts) did not yet have the desired impact.

Capacity building was done too early (for managing water services) and only once (for hygiene awareness), therefore the expected results have not been realized.

The programme does not lack monitoring, information and analysis. Annual sustainability checks have provided information on lack of progress in the enabling environment that has not led to changes in the programme. Adaptive management and adequate timely measures could have ensured more value for money. These recommendations remain valid for potential follow-up phases.

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