

USAID Transform WASH

Piloting Smart and Targeted Sanitation Subsidies



Learning Note, April 2023



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USAID Transform WASH aims to improve water, sanitation and hygiene (WASH) outcomes in Ethiopia by increasing market access to and sustained use of a broader spectrum of affordable WASH products and services, with a substantial focus on sanitation.

Transform WASH achieves this by transforming the market for low-cost quality WASH products and services: stimulating demand at the community level, strengthening supply chains, and improving the enabling environment for a vibrant private market.

USAID Transform WASH is a USAID-funded activity implemented by PSI in collaboration with SNV and IRC WASH. The consortium is working closely with government agencies, including the Ministry of Health, the Ministry of Water and Energy, the One WASH National Program coordination office, the Ministry of Labor and Skills, and regional and sub-regional governments.

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This learning note summarizes the findings of USAID Transform WASH's activities to pilot smart and targeted sanitation subsidies in line with the national sanitation subsidy protocol.

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Abbreviations & Glossary

CBHI	Community-based health insurance
CLTSH	Community-led total sanitation and hygiene
ETB	Ethiopian Birr (52.85 ETB/USD in August 2022)
FMoH	Federal Ministry of Health
HH	Household
JMP	WHO/UNICEF Joint Monitoring Programme
Kebele	Smallest administrative unit in Ethiopia (typically 1,000 to 2,000 households)
MBS	Market-based sanitation
SATO pan	Plastic toilet pan patented by Lixil Corporation (brand name)
T/WASH	USAID Transform WASH
USD	United States Dollar
WASH	Water, sanitation and hygiene
Woreda	Districts of Ethiopia (typically around 20,000 to 30,000 households)

1. Introduction

1.1. Background

Ethiopia made significant progress in reducing open defecation rates between 2000 and 2020, from 80 to 17 percent. However, the percentage of households with basic sanitation services only increased negligibly from 3 to 9 percent (JMP, 2017; JMP, 2021). Most Ethiopians transitioned from open defecation to using traditional, self-constructed dry pit latrines, which still pose a serious health risk as they are mostly "unimproved" and do not safely separate feces from human contact.

The Ethiopian Federal Ministry of Health (FMoH) has set a goal to increase the proportion of households with access to basic sanitation services to 60 percent by 2025, with the main strategic initiative of ensuring access to quality and affordable sanitation and hygiene products and services through a sustainable market-based system (FMoH, 2021).

Market-based sanitation (MBS) is being promoted as a key approach to increase access to basic sanitation services by making affordable quality sanitation products and services more widely available, while also creating demand for improved sanitation facilities. National MBS implementation guidelines have been developed to support scaling MBS activities in the country (FMoH, 2020).

1.2. Financing strategy

A household's willingness to invest in sanitation facilities is influenced by several factors, such as cultural and social norms, product availability and desirability, and perceived health risks. However, the sector widely acknowledges that affordability is a major obstacle.

According to the national MBS implementation guidelines (FMoH, 2020), households are divided into three

categories: (i) those who have the financial capacity to purchase improved sanitation products and services directly, (ii) those who are able to buy the products and services but only if they can pay in installments by regularly contributing to a credit and savings scheme, and (iii) those who are unable to afford sanitation products and services due to poverty, low income, or other persistent social issues.

In 2020, the FMoH collaborated with USAID Transform WASH (T/WASH) and other stakeholders to develop a financing strategy aimed to make improved sanitation facilities offered by the private sector more affordable. The strategy includes:

- Tax exemptions for certain sanitation products and services to enable more households to purchase them out-of-pocket.
- Greater availability of consumer loans for improving sanitation facilities.
- Sanitation subsidies for the poorest and most vulnerable.

1.3. Sanitation subsidy protocol

The stakeholders involved in the WASH sector in Ethiopia acknowledge that providing subsidies for sanitation can potentially disrupt the markets established through MBS activities. The widely utilized community-led total sanitation and hygiene (CLTSH) approach typically advises against subsidizing toilet installations.

To avoid disruptions to MBS activities, the FMoH has developed and endorsed a national sanitation subsidy protocol (FMoH, 2022) to formally encourage the use of sanitation subsidies. The subsidies must be SMART and not interfere with or impede the progress of MBS and CLTSH initiatives, but rather contribute to the overall growth of sanitation markets. Additionally, the subsidies must be TARGETED, meaning they should be

directed towards the most vulnerable groups who are unable to pay and construct improved sanitation facilities on their own.

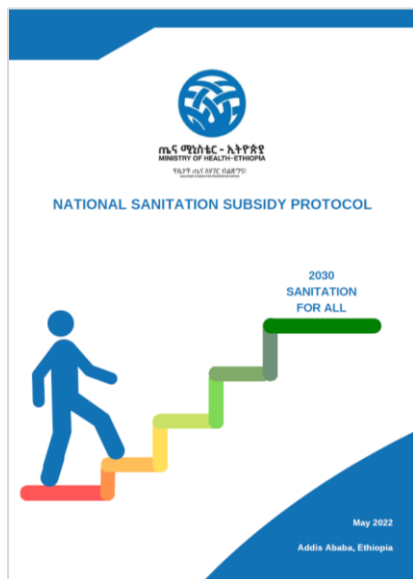


Figure 1: National sanitation subsidy protocol published by the Ministry of Health in 2022

The sanitation subsidy protocol introduces five guiding principles:

- 1) **Subsidies must be well-targeted.**
Households exempted from paying community-based health insurance (CBHI) could be eligible for subsidies.
- 2) **Subsidies should only target latrine sub-structures and flooring solutions.**¹
The superstructure should be constructed by the households.
- 3) **Subsidies should only cover a proportion of the overall cost.**
Direct subsidies paid to a household must not cover more than 80 percent of the total cost.²
- 4) **Subsidies should only be introduced in places with a well-established supply chain.**
Woreda-level coverage used as proxy and should be at least 50 percent for

¹ This principle has been widely discussed after the protocol was released and has been adjusted to “Subsidies should be designed to reach a minimum acceptable level of sanitation services” in an updated version of the protocol.

improved sanitation and less than 10 percent for open defecation.

5) **The guiding principles must be applied by all stakeholders.**

All stakeholders subsidizing sanitation products and/or services are required to comply with the four guiding principles above.

1.4. Research objectives

T/WASH, in partnership with government partners, implemented a pilot project to test the sanitation subsidy protocol in selected *kebeles* located in two T/WASH-supported *woredas* (Aleta Wondo and Malga) within the Sidama region.

This learning note summarizes the findings of the T/WASH pilot to inform the scaling of sanitation subsidies in Ethiopia.

The main research questions for the pilot project were:

- *Woreda*-level eligibility: What minimum coverage of improved sanitation should be applied as eligibility criteria?
- Targeting: How can the poorest be identified? Do the sanitation subsidies reach the correct households?
- Effectiveness: How many households make use of the offered subsidy? What subsidy level should be applied?
- Smartness: Are there any indications of market distortion caused by the sanitation subsidies?
- Implementation modalities: Can the subsidy approach (based on direct subsidies with vouchers) be replicated? What are the challenges encountered during implementation?

² Exemption for particularly vulnerable households is foreseen with a 100% subsidy.

2. Design & methodology

2.1. Subsidy pilot design

Woreda and kebele selection

Aleta Wondo and Malga woreda were selected for the pilot study, in consultation with relevant government offices, and based on the following selection criteria: i) T/WASH-supported woredas, ii) high coverage of improved sanitation, iii) low level of open defecation, and iv) logistical considerations (easy accessibility and no security concerns). In both woredas, three kebeles with above-average coverage of improved sanitation were selected.

Table 1: Official sanitation coverage for the selected woredas provided by the health office

	Improved sanitation	Unimproved sanitation	Open defecation
Aleta Wondo	73%	24%	3%
Malga	42%*	55%	3%

* As we selected the three kebeles with the highest coverage, we assumed that in the selected kebeles improved sanitation would be above 50% and therefore in line with the national sanitation subsidy protocol

The kebeles were randomly assigned to an intervention group: high subsidy and medium subsidy, and a control group: no subsidy (see Table 2).

Household selection (“targeting”)

As proposed by government stakeholders, it was decided to use the community-based health insurance (CBHI) for “targeting”. Households exempted from paying for CBHI were declared eligible for the sanitation subsidy. For each kebele, lists of eligible households were obtained and stamped by the woreda health office to confirm the validity of the lists.

According to official records, the six kebeles have a total of 11,191 households (1,217 to 2,290 per kebele) of which a total of 815 are exempted from paying for the CBHI (80 to 186 per kebele). Using this targeting approach, on average, 7.3% of the households are eligible for sanitation subsidies (6.2% to 7.9% in a kebele). For this study, in each kebele, 50 eligible households were selected randomly from the household lists. In addition, 30 non-eligible households (i.e., households not exempted from paying the CBHI) were selected using an in-field randomization technique.³

Table 2: Number of selected households for the pilot study

	Aleta Wondo Woreda						Malga Woreda						Total	
	High subsidy kebele		Medium subsidy kebele		No subsidy Kebele		High subsidy kebele		Medium subsidy kebele		No subsidy kebele			
	Dobe		Habeja		Gordama		Sintaro		Manicho		Kocho			
	Eligible	Non-eligible	Eligible	Non-eligible	Eligible	Non-eligible	Eligible	Non-eligible	Eligible	Non-eligible	Eligible	Non-eligible	Eligible	Non-eligible
# selected HH	50	30	50	30	50	30	50	30	50	30	50	30	300	180
# HH in pre- and post-implementation survey	37	23	37	28	34	28	39	29	45	30	38	29	230	167

³ No complete household lists could be made available and therefore in-field randomization had to be applied. During the pre-implementation survey the enumerators visited the third household starting (in a

random direction) from selected subsidy-eligible households. It is possible that a few households recorded as “non-eligible” were actually subsidy eligible.

Subsidy pilot design

All selected households (eligible and non-eligible) were visited door-to-door by well-trained masons/installers selected by T/WASH. All households were offered an upgrade of their sanitation facilities using the problem-led DQ sales® approach (developed jointly by T/WASH and Whitten & Roy Partnership). Eligible households in the “high subsidy” and “medium subsidy” groups were offered a voucher (directly by the masons/installers during the home visit, see Figure 2) to install selected sanitation service packages at a reduced price. All other households were not offered a voucher and had to pay the full price. Sales activities and installations took place between July and November 2022.

Subsidized service packages

Two pre-defined service packages were subsidized for the eligible households: SATO skirting (which is the installation of a SATO pan on a traditional unimproved pit latrine including cement plastering of the floor) and the installation of a concrete slab with a SATO pan on a newly dug hole. The price of SATO skirting (including labor and materials) was initially fixed at 1,200 Birr during the design phase in April/May 2022, but later adjusted to 1,350 Birr (approx. 26 USD) due to a soar in cement prices. The price for a concrete slab with a SATO pan (including manufacturing and installation) was initially fixed at 1,900 Birr during the design phase in April/May 2022,

but later adjusted to 2,250 Birr. The cost of digging a 2 to 3 meter deep hole was estimated at 500 Birr, totaling 2,750 Birr (approx. 52 USD) for the construction of the slab and substructure.

Subsidy amount

In line with the national sanitation subsidy protocol, households that were offered a voucher had to pay at least 20 percent of the costs, either in cash or in-kind.

The high subsidy group contributed approximately 22 percent to the total costs.

- SATO skirting: 100 Birr in cash and 200 Birr in kind (estimated price for preparing sand and gravel) out of a total of 1,350 Birr.
- Concrete slab with SATO: 100 Birr in cash and 500 Birr in kind (estimated price for digging a 2 to 3 meter deep hole) out of a total of 2,750 Birr.

The medium subsidy group contributed approximately 33 percent to the total costs.

- SATO skirting: 450 Birr in cash out of a total of 1,350 Birr (no in-kind contribution, the mason/installer provided sand and gravel).
- Concrete slab with SATO: 450 Birr in cash and 500 Birr in kind (estimated price for digging a 2 to 3 meter deep hole) out of a total of 2,750 Birr.

Copy for Mason/Installer Shumate mine loosano ogeesira uyinani kope	Copy for Customer Shumate mine loosisiranohura/tera uyinani kope
Voucher ID: _____ Woocherete badooshi kiiri: _____ Woreda/Kebele: _____ Worada/kabale: _____ Customer's name: _____ Kaayyo horonsiranohu/dhanoti su'ma: _____ Customer's phone: _____ Kaayyo horonsiranohu/dhanoti bilbilu kiiri: _____ Mason's name: _____ Shumate mine loosano ogeesi su'ma: _____ Mason's phone: _____ Shumate mine loosano ogeesi bilbilu kiiri: _____ Selected service offer: Kaayyo aate doorrooni owante dana: _____ • SATO skirting (100 Birr instead of 1,200 Birr) <input type="checkbox"/> Customer to provide gravel/sand! Bushu aana saatopa (100 Birra baata 1200 hura) Loosisanču xaxare/ shaafa! • Concrete slab with SATO (100 Birr instead of 1,900 Birr) <input type="checkbox"/> Customer to prepare a hole of 2 to 3 meters depth! Islaabe saatopuni (100 Birra baata 1900 hura) Loosisaanču bale 2-3 meetire geesha ume qixeesirano!	Voucher ID: _____ Woocherete badooshi kiiri: _____ Woreda/Kebele: _____ Worada/kabale: _____ Customer's name: _____ Kaayyo horonsiranohu/dhanoti su'ma: _____ Customer's phone: _____ Kaayyo horonsiranohu/dhanoti bilbilu kiiri: _____ Mason's name: _____ Shumate mine loosano ogeesi su'ma: _____ Mason's phone: _____ Shumate mine loosano ogeesi bilbilu kiiri: _____ Selected service offer: Kaayyo aate doorrooni owante dana: _____ • SATO skirting (100 Birr instead of 1,200 Birr) <input type="checkbox"/> Customer to provide gravel/sand! Bushu aana saatopa (100 Birra baata 1200 hura) Loosisanču xaxare/ shaafa! • Concrete slab with SATO (100 Birr instead of 1,900 Birr) <input type="checkbox"/> Customer to prepare a hole of 2 to 3 meters depth! Islaabe saatopuni (100 Birra baata 1900 hura) Loosisaanču bale 2-3 meetire geesha ume qixeesirano!

Figure 2: Voucher design for “high subsidy” group, in English and Sidama

The non-eligible households in the intervention *kebeles* and all households in the control *kebeles* (“no subsidy”) were not offered a discounted price for the pre-defined service packages.

Payment modalities

Households that were offered a voucher and that were interested in an installation service were asked for an in-cash pre-payment of 100 Birr (high subsidy group) or 450 Birr (medium subsidy group) and to prepare the in-kind contribution (i.e., sand and gravel for SATO skirting for the medium subsidy group, or digging a hole). With a voucher signed by the eligible customer, the mason/installer was paid a first installment by T/WASH, which combined with the household's payment, made up 50 percent of the total costs.

Upon installation, the mason/installer collected a second payment of 250 Birr from the customer (medium subsidy group). The high subsidy group was not asked for a second payment. Finally, after verification and written confirmation by the *woreda* health office, T/WASH made a final payment to the masons/installers to cover the remaining amount.

Households that were not offered a voucher could choose from all products and services provided by the masons/installers (including the service packages specified above, but at full cost). For non-subsidized transactions, payment terms were agreed between the customer and the mason/installer.

2.2. Research methodology

Pre-implementation survey

The pre-implementation survey took place in April 2022 with 459 households interviewed by a team of six data collectors. mWater was used to record the survey data. As part of the pre-implementation survey, the wealth quintile of each household was determined using the EquityTool, a simplified asset-based

wealth index that mirrors the wealth index used in demographic health surveys (DHS), and integrated as an indicator in mWater. The questionnaire included four modules:

- EquityTool (wealth quintile)
- Sanitation service level as per the JMP
- Observation of the toilet facilities
- Satisfaction with toilet facilities and plans to make improvements.

Post-implementation survey

The post-implementation survey took place in October 2022 with 451 households interviewed by a team of 12 data collectors. mWater was used to record the survey data. The questionnaire included five modules:

- Sanitation service level as per the JMP
- Observation of the toilet facilities
- Recent improvements made to the toilet facilities
- Awareness of sanitation subsidies
- Satisfaction with toilet facilities and plans to make (further) improvements.

Quality control

For both surveys, the data collectors attended a two-day training in Hawassa, and the T/WASH survey coordinator regularly visited the teams during survey implementation. Survey reports in mWater were used to track progress. Each individual questionnaire was checked for internal consistency by the T/WASH survey coordinator.

Data analysis

Microsoft Excel was used for data analysis. Most analyses presented in this learning note are limited to households for which a “perfect match” between pre-implementation and post-implementation surveys could be established (n = 397), mainly based on a check of GPS coordinates recorded during both surveys

(see Table 2).⁴ An independent expert conducted a technical review of the data analysis.

Due to time constraints, the post-implementation survey was conducted before the masons/installers could complete all constructions. For the data analysis, it was assumed that all households that have made a down payment (as per the mason/installer tracking list and self-reported) have access to at least basic sanitation services. This is a reasonable assumption because the local T/WASH team checked and confirmed that all installations had been completed before issuing the final payment at the end of the subsidy pilot implementation.

Reflection workshop

On January 12-13, 2023, a workshop with representatives from the Ministry of Health and regional health bureaus was organized in Hawassa. Reflections from the workshop were used to inform data interpretation.

Validation site visit

In February 2023, the T/WASH survey coordinator re-visited the pilot woredas and conducted eight focus group discussions (in groups of males and females, as well as targeted and non-targeted households) and 12 key informant interviews with *kebele* chairpersons, CBHI officers, representatives from *woreda* administration, *woreda* health office, and masons/installers. Findings from this qualitative investigation were used to inform data interpretation.

⁴ In few instances, the sanitation service level could not be established either for the pre- or the post-implementation surveys due to recording errors during

the survey. Results presented for sanitation service levels were obtained from 393 households.

3. Findings

3.1. Woreda eligibility

One of the objectives of the pilot study was to assess if the 50 percent threshold (for improved sanitation coverage) is a valid criterion to identify a well-established supply chain and determine woreda eligibility.

Official sanitation coverage data in the selected woredas showed that Aleta Wondo and Malga are both eligible for sanitation subsidies as per the national sanitation subsidy protocol (see Table 1). However, data from the pre-implementation survey conducted by the T/WASH team shows a much lower sanitation coverage, with only 13 percent of the non-eligible households (expected to be representative of the total population in the selected kebeles) using an improved pit latrine: 10 percent not shared with other households (=basic services) and 3 percent shared with other households (=limited services).

The results in Figure 3 only consider the presence of a slab for the classification of “improved”.⁵ However, if the presence of a superstructure providing adequate privacy and presence of a roof protecting from rain are considered (which is used as criteria for “improved” by the FMoH), the percentage of improved sanitation drops to 3 percent basic services and 1 percent limited/shared services (for non-eligible households).

These findings illustrate inconsistencies between the national definition of “improved” sanitation facilities and official sanitation coverage data provided by local health authorities. Official sanitation coverage data is aggregated on a quarterly basis from kebele-level

information provided by health extension workers.

Prior to introducing sanitation subsidies in the future, it is recommended to develop further guidance on the classification of “improved” versus “unimproved” pit latrines and to strengthen validation of official sanitation coverage data.

The pre-implementation results show that subsidy-eligible households access significantly lower sanitation service levels, with a much higher percentage of households practicing open defecation compared to non-eligible households. This finding suggests that the targeting using exemption from paying CBHI is a suitable criterion. This is elaborated in more detail in the next section on “targeting”.

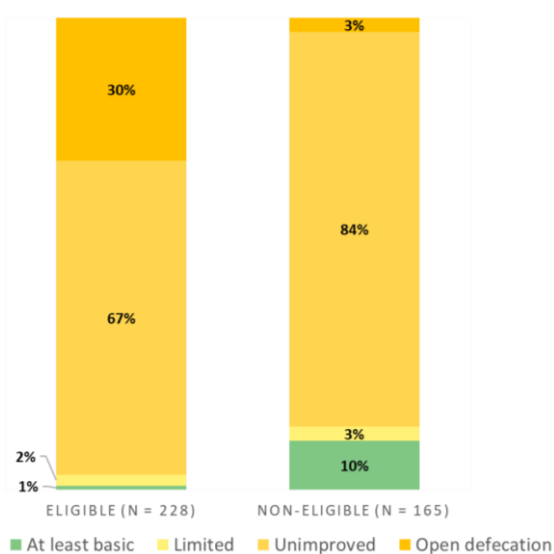


Figure 3: Sanitation coverage before the implementation of sanitation subsidies

⁵ Based on two criteria: 1) the latrine pit is completely covered with one small drop hole (exemption: a second hole as per design, e.g., for a ventilated, improved pit latrine) and 2) the area around the drop

hole (30 cm radius, approx. forearm length) is made out of a material that is smooth and washable (e.g., concrete, bricks, stone, fiberglass, ceramic, metal, wooden planks or durable plastic).

3.2. Targeting

One objective of the pilot study was to assess if the CBHI is an appropriate scheme to identify and reach the most vulnerable households with subsidies.

It was easy to obtain lists of households exempted from paying CBHI in the selected *woredas*. The lists were formally approved and stamped by the *woreda* health office. The T/WASH team only learned at a later stage that the CBHI-exemption status of a household may change on an annual basis. The household lists used for the subsidy pilot were a couple of years old and in the pre-implementation survey, only 135 out of 150 selected eligible households (in Aleta Wondo) and 137 out of 150 selected eligible households (in Malga) could be located.

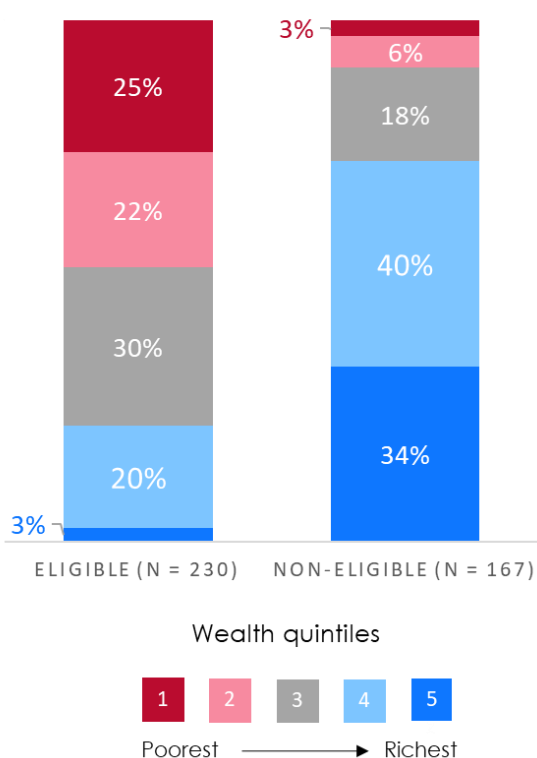


Figure 4: Wealth of sanitation subsidy-eligible and non-eligible households

CBHI-status, as per the household list provided by the *woreda* health office and self-reported by households during the post-implementation survey, was found to

Community-based health insurance

The community-based health insurance (CBHI) was introduced in 2010 and rolled out in almost all *woredas*.

Members pay a small yearly premium of approximately 500 Birr per household which allows access to medical services at health centers and hospitals without any further payment (WHO, 2022). Members receive a card as proof of their membership. The card is needed for the annual renewal of the CBHI and when seeking treatment at a health center or hospital. In some *woredas*, health authorities aim to register all households that work in the informal sector for the CBHI.

To address affordability issues, some households can be exempted from paying the annual premium (with a guidance that about 10 to 20 percent would be exempted). Identification of households for payment-exemption is led by the *kebele* administration, informed by consultation with community members and health extension workers, and finally approved by the CBHI-office established at *woreda*-level. Households paying the insurance have an insurance ID starting with a "P" while household exempted from paying the premium have an ID starting with an "I".

be relatively consistent in Malga *woreda* with 95 percent of eligible households reporting that they are exempted from paying for the CBHI, and 89 percent of the non-eligible households reporting that they are not exempted. However, the discrepancy was high in Aleta Wondo *woreda* with only 16 percent of eligible households reporting that they are exempted from paying for the CBHI, but 97 percent of the non-eligible households reported that they are not exempted. This discrepancy can possibly be explained by

less households being granted exemption from paying CBHI in Aleta Wondo in the current year.

Comparing CBHI-exemption against the asset-based wealth index (see Figure 4), indicates that the targeting proportionally includes more households in the lower quintiles. We found only a few exclusion errors, which means only a few poor households, as per the asset-based wealth index, were left behind. However, about half of the eligible households are not within the poor and poorest as per the asset-based wealth index. This second point needs some further investigation but can possibly be explained by the fact that widows are often granted an exemption to pay the CBHI premium due to a lack of income (while they may still have assets that make them score relatively high in the asset-based wealth index used for this assessment).

Inputs received during focus group discussions conducted as part of the validation site visit confirmed that the households that received the sanitation subsidies are indeed among the poorest and most vulnerable. This indicates that targeting using exemption from paying CBHI is a suitable criterion, and that an asset-based wealth index does not fully reflect the multi-dimensional nature of poverty.

Findings from the pilot study also showed that some people that are exempted from paying the CBHI premium may not need a latrine. For instance, young adults living with a family to support farming activities or household chores may be CBHI-exempt but have no need to construct their own toilet.

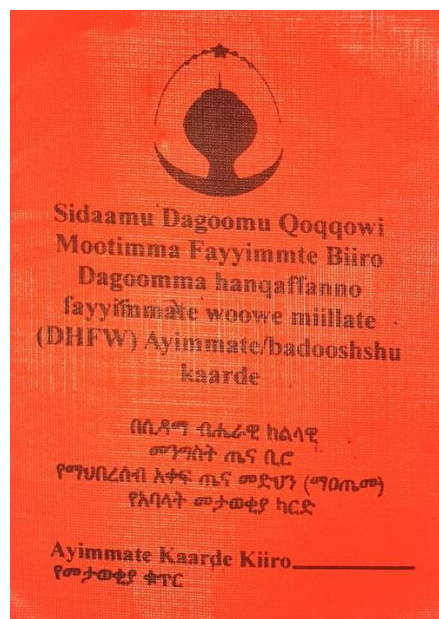


Figure 5: CBHI membership ID card (frontpage)

The results of the pre-implementation survey revealed a strong correlation between the asset-based wealth-index (established using the EquityTool in mWater) and sanitation service levels (see Figure 6). Using such an indicator could be considered as an alternative, or a complementary criterion, to the CBHI-based subsidy eligibility criteria.

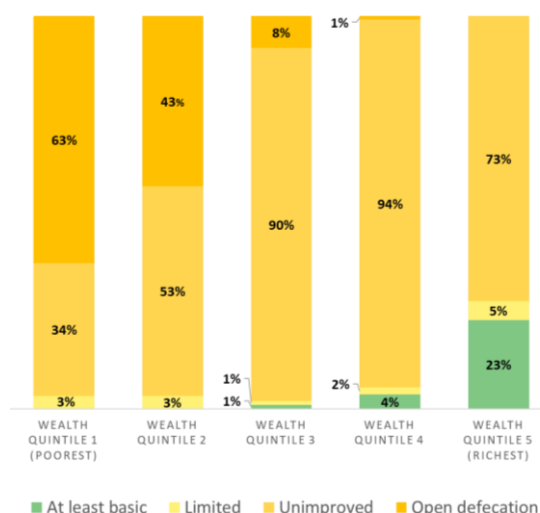


Figure 6: Correlation between asset-based wealth-index and sanitation service levels (data from pre-implementation survey)

3.3. Effectiveness

Another objective of the pilot study was to assess the level of subsidies required for eligible households to make use of them.

According to the implementation records, all vouchers were used in Aleta Wondo for both high and medium subsidies (all for concrete slabs with SATO). In Malga, all of the vouchers were used for the high subsidy (19 for concrete slabs with SATO, six for SATO skirting) but only 36 percent of the vouchers were used for the medium subsidy (eight for concrete slabs with SATO, one for SATO skirting).

However, when looking at the 158 eligible households (76 high subsidy, 82 medium subsidy) for which a “perfect match” between pre- and post-implementation survey could be established, only 71 percent in the high subsidy group and 43 percent in the medium subsidy group reported having made use of the voucher. 23 percent of the high subsidy group and 39 percent of the medium subsidy group reported that they could not afford the cash payment. The remaining households reported that they had not been approached by a mason/installer or that they were not offered a discounted price.

The discrepancy between implementation records and household surveys suggests that there has been a certain lack of transparency in the process that caused “leaking” of subsidies to households not selected for the pilot.

The sanitation subsidy led to a significant improvement of sanitation service levels for subsidy-eligible households in the intervention group. However, subsidy-eligible households in the control group showed no changes between pre- and post-implementation survey (see Figure 7).

Interestingly, the percentage of households that reported practicing open defecation decreased in the intervention and control groups at about the same level. Thus, the reduction in open defecation cannot be attributed to the sanitation subsidies, but rather must be explained by the implementation design (e.g., overreporting of open defecation during the pre-implementation survey due to wrong expectations or construction of unimproved latrines due to the repeated reminders about sanitation by data collectors and masons/installers).

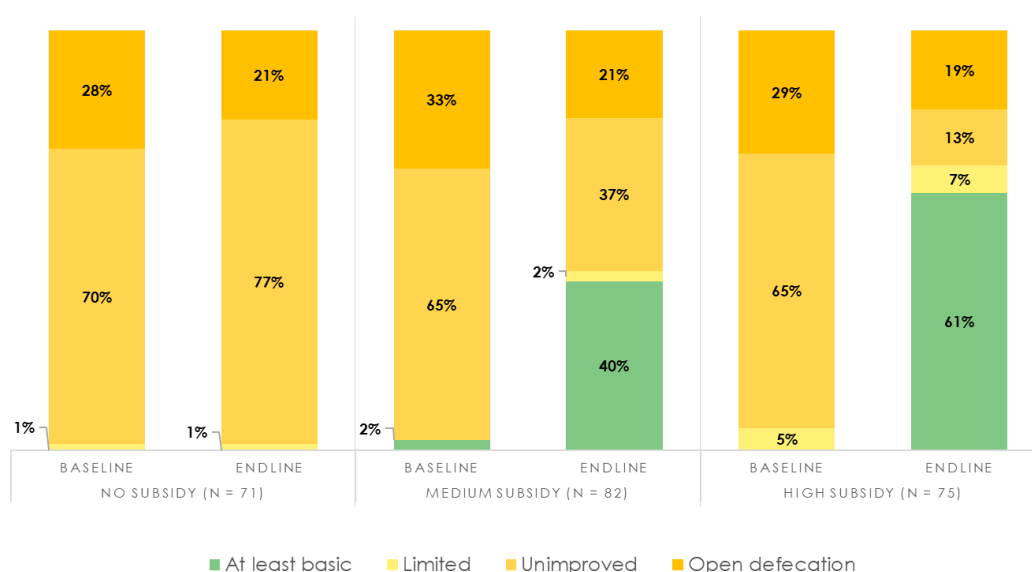


Figure 7: Change of sanitation service levels for subsidy-eligible households in the intervention and control groups

Of the 397 households for which a “perfect match” could be established, 320 reported to have been approached by a mason/installer (72 high subsidy, 73 medium subsidy, 175 no subsidy and non-eligible households). For these households, the “conversion rate” by wealth quintile was calculated (i.e., the percentage of households that reported to have invested in upgrading their latrine after the mason/installer sales pitch).

The results in Figure 8 show that without subsidies, only households in the fourth and fifth wealth quintile reported to have invested in upgrading their latrine after the mason/installer sales pitch.⁶ With the medium subsidy, the conversion rate increases for the third and fourth wealth quintile, while most of the poorest only invested if they were offered the high subsidy. These findings suggest that a high subsidy amount is required to reach the poorest, while a medium subsidy amount may need to be considered for households in the third and possibly the fourth wealth quintile.

T/WASH activity monitoring data between September 2021 and December 2022 show a conversion rate of 28 percent in Aleta Wondo and 32 percent in Malga (for masons/installers following the DQ sales[®] approach). Comparing the T/WASH activity monitoring data with the results of the sanitation subsidy pilot survey raises the question if masons/installers generally only targeted the richer households or if the masons/installers engaged in the subsidy pilot did not make a full effort to convince non-eligible households or households in the control group. It is also possible that non-eligible and control households heard about the subsidies and decided not to invest for this reason, however, this seems unlikely as elaborated in section 3.4.

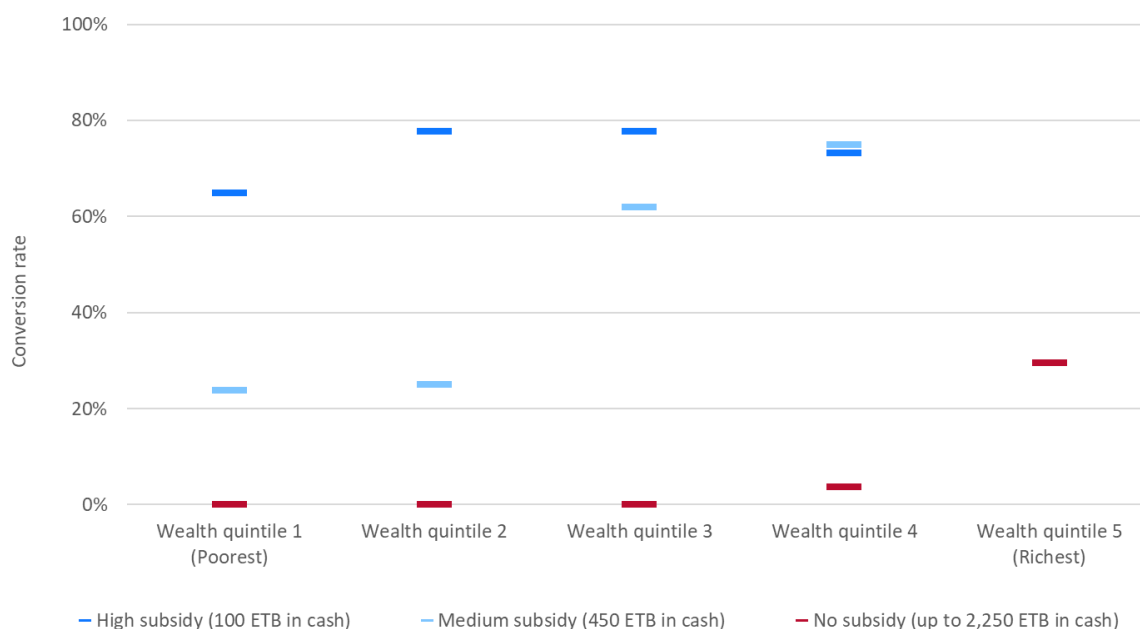


Figure 8: Percentage of visited households investing in upgrading their latrine (= conversion rate)

⁶ For “high subsidy” and “medium subsidy”, the survey included 12 to 21 records for each of the wealth quintiles 1 to 4. Records for wealth quintile 5 (richest)

were below three and therefore no results are presented in Figure 8.

3.4. Smartness

One objective of the pilot study was to assess if the sanitation subsidies had been implemented in a “smart” way, i.e., to check if there are any indications of market distortion caused by the subsidies.

The key informant interviews with the masons/installers, conducted during the validation site visit about half a year after implementation, indicate that no direct market distortion happened: the masons/installers did not report a negative impact on their business. Similarly, the T/WASH activity monitoring data between September 2021 and December 2022 does not show any significant changes in sales or conversion rates in the two pilot *woredas*.

Only 41 out of 239 households that were not offered a subsidy (17 percent) were aware that some households had received support to improve their toilets. These 41 households responded that other households received support because they were the poorest or because they had a poor-quality toilet that needed improvement. None of them responded that the beneficiaries received the support because they have better connections or are more influential. The 41 knowledgeable households also responded that they are happy that the poorest received support and that this will help the community to get sanitation for everyone. None of them stated feeling left out or that they should also have received support.

These findings indicate that there was little transparency within the communities about the sanitation subsidies (which needs improvement), however, it also shows that households that did not receive a subsidy had a generally positive reaction to the project – which may reduce the risk of market distortion by raising wrong expectations of government support.

Nevertheless, 99 percent of the subsidy-eligible households in the intervention

groups responded with yes when asked if they expect any financial support to (further) improve their toilet in the coming two years. The percentage of households was lower for control households aware that some other households received subsidies (90 percent) and the lowest for control households that were not aware that others received subsidies (84 percent). These findings indicate that overall, there are high expectations for external support, irrespective of whether households were offered subsidies or are aware that some households received financial support.

Finally, we analyzed the change of service levels for non-eligible households located in intervention *kebeles* versus non-eligible households located in control *kebeles* (see Figure 9). This analysis indicates that the subsidies may have led to market distortion because non-eligible households in the control group were found to be more likely to invest in a toilet upgrade than their peers in the intervention group.

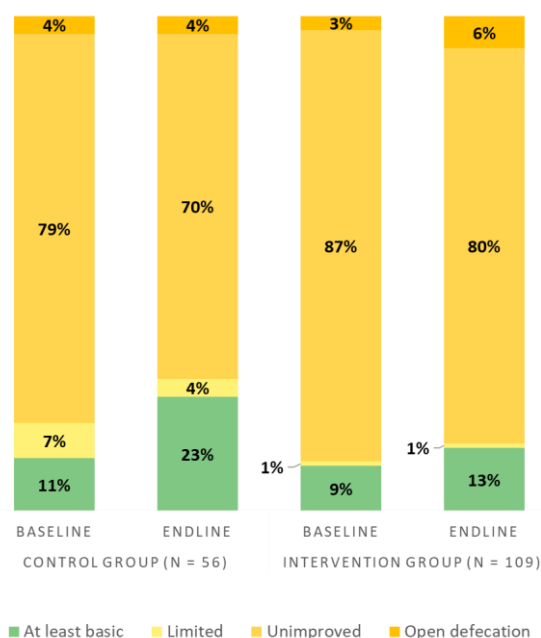


Figure 9: Change of sanitation service levels for non-eligible HHs in control and intervention group

3.5. Implementation modalities

An important objective of the subsidy pilot was to test a sanitation subsidy implementation approach aligned with the national protocol, and to identify challenges encountered during implementation to inform the scaling of sanitation subsidies in Ethiopia.

A voucher-based system was found to be adequate as it provided clear incentives to local service providers to serve the poorest. However, the selected approach of providing the vouchers through the masons/installers lacked transparency and resulted in a high percentage of vouchers "leaking" to non-selected households. To improve transparency and accountability, it is recommended to establish a sanitation subsidy team at *woreda*-level and possibly at *kebele*-level to prepare updated lists of eligible households which are then linked through unique IDs (e.g., the CBHI number) to the vouchers. The vouchers should then be given directly to the subsidy-eligible households by the health authorities accompanied with information about how to use the voucher and stressing the importance of having an improved toilet.

In the pilot only two service packages were subsidized, of which a concrete slab with SATO (127 vouchers used) was the preferred option over the SATO skirting (seven vouchers used). Given the high percentage of subsidy eligible households without a latrine, options for constructing new toilets should be further diversified and could, for instance, include the installation of a platform using traditional materials (wood, gravel and mud), fitted with an AIM plastic slab and plastered with cement to ensure the whole toilet floor is washable. Further, the selection of service providers should be designed in a more transparent way to make sure all interested entrepreneurs with the required skills are aware of how to serve customers with vouchers.

The duration of implementation was relatively short, and in the case of Malga,

outside the main harvesting season (households have limited cash available to make investments). Also, only a sample of all subsidy-eligible households in the selected *kebeles* received a voucher. It is recommended that all eligible households within a *kebele* receive the vouchers at the same time and that vouchers can be used for a longer time period (e.g., one year) while having an expiration date transparently shown on the voucher.

Further, local service providers were paid for the vouchers directly by the T/WASH team. To localize the payment process and make it scalable, it is recommended to test the involvement of local micro-finance institutions in providing payments (and possible loans) to businesses accredited to make use of the vouchers.

Finally, the pilot did not include financing solutions (e.g., consumer loans for sanitation) for households that do not yet have access to basic sanitation services but are not eligible for sanitation subsidies. It is recommended to embed subsidies in a comprehensive set of activities with the aim of reaching universal coverage of improved sanitation services.

4. Lessons learned & recommendations

The pilot study confirmed that there is a need for smart and targeted subsidies to complement market-based approaches – without subsidies the most vulnerable will not be reached in the near future. Poor households are less likely to have access to adequate sanitation services compared to richer households. The pilot study showed that these vulnerable households are not able to pay the full cost of improved sanitation products and services and that a relatively high subsidy amount is required to make these affordable for the poorest. To ensure equitable progress towards universal access to basic sanitation services, it is recommended to continue exploring the role and impact of smart and targeted subsidies. Introducing smart subsidies can make poor households an attractive customer base for local service providers.

Community transparency needs to be improved to ensure proper targeting of sanitation subsidies. Channeling the vouchers directly through local service providers coupled with limited clarity on CBHI-exempted households led to a high “leakage” of subsidies to non-eligible households during the pilot. With further testing of sanitation subsidies, it is recommended to give more attention to community transparency as a measure to ensure subsidies reach the targeted households. Transparency could be improved by e.g., the establishment of a *woreda*-level sanitation subsidy team, led by the *woreda* health office, with the responsibility to transparently select subsidy-eligible households (possibly based on CBHI status), provide vouchers directly to the subsidy-eligible households and verify latrine upgrades with eligible households to trigger payments to local service providers. Further, it is expected that transparency can prevent market distortion by making it very clear who receives subsidies and why.

The *woreda*-level eligibility criteria need to be reviewed: official sanitation coverage data may not be accurate, and the current threshold of 50 percent of improved sanitation may be too high.

Coverage of improved sanitation in the selected *woreda* was reported to be above the threshold of 50 percent while the coverage found in the pre-implementation survey was much lower. This is possibly because of different criteria applied for classifying a pit latrine as “improved” versus “unimproved”. It is recommended to prepare a guidance document about the classification of improved/unimproved pit latrines and introduce a process to validate the sanitation coverage in a *woreda* prior to introducing sanitation subsidies. It should also be noted that the 50 percent threshold (stated in the national sanitation subsidy protocol) may not be fulfilled in any *woreda* if a strict definition of improved pit latrine is applied. This threshold was added to the protocol with the assumption that the higher the sanitation coverage the lower the risk for market distortion through subsidies. It is recommended to conduct more research to confirm or reject this hypothesis.

Community-based health insurance seems to be an appropriate scheme for targeting sanitation subsidies.

Implementation of sanitation subsidies is ideally linked to an existing poverty alleviation scheme. The CBHI seems to be an appropriate scheme, e.g., because households own CBHI cards in which name and (partly) exemption-status can be seen. These cards can be used for unique identification of subsidy-eligible households. However, the lists obtained for the pilot were outdated and it was not straightforward to identify all households. Therefore, it is recommended to use sanitation subsidies as an opportunity to compile updated lists of households exempted from paying CBHI, and to do a careful validation of the household lists to avoid any misuse and/or exclusions.

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