USAID Transform WASH

An Assessment of Health Extension Workers and Sales Agents in Creating Demand for Sanitation Products and Services



Research Report, September 2019







Table of Contents

Copyright and Publisher	3
Acronyms	4
1. Background and purpose	5
2. Methodology	7
3. Demand creation activities	9
4. Outcome of demand creation activities	18
5. Sustain demand creation activities beyond Transform WASH	22
6. Informants' ideas on how to increase demand for sanitation products	25
7. Conclusions	27
8. Recommendations	29
Annex 1 – Definition of improved sanitation facilities	32
Annex 2 – Sanitation products promoted by Transform WASH	33
Annex 3 - Health Extension Workers & Health Development Armies	35
Annex 4 - Challenges with supply impacting demand creation	36

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

The WASH market will be transformed by: stimulating demand at the community level, strengthening supply chains, improving local business practices, and building the enabling environment for a vibrant private sector.

USAID Transform WASH is a USAID-funded activity implemented by PSI in partnership with SNV, Plan International, and IRC. The consortium is working closely with government agencies, including the Ministry of Health, the National WASH Coordination Office and regional governments

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The objective of this action research report was to document the demand creation models that have been developed and tested in sanitation market development. The roles and interaction of HEWs and sales agents in demand generation was assessed in terms of persuading households to invest in improved sanitation products and services. IRC, with Plan and PSI, will identify recommendations to further strengthen demand creation by Transform WASH.

Author: Lars Osterwalder (IRC WASH)

Reviewers: Monte Achenbach (PSI), John Butterworth (IRC WASH), Dagim

Demirew (PSI), Abinet Kebede (IRC WASH), Siraj Mohammed (PLAN), Daniel Tesfaye (PSI) and Melaku Worku (IRC WASH)

Editor: Peter Feldman (IRC WASH)

Data Collection: Lars Osterwalder (IRC WASH), Sara Emiru (Consultant), Tereza Nega

(IRC WASH)

Design and layout: Tereza Nega (IRC WASH)

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Acronyms

AIM Plastics Corporation (originally Accurate Injection Molds company)

DHIS2 PSI's monitoring and information system

HDA Health Development Army

HEP Health Extension Program

HEW Health Extension Worker

KII Key Informant Interview

JMP Joint Monitoring Program

FMoH Federal Ministry of Health

GoE Government of Ethiopia

HH Household

MFI Micro-Finance Institution

NGO Non-Governmental Organization

PSI Population Services International

Safe Toilet (also known as 'SaTo')

SDG Sustainable Development Goals

SNNPR Southern Nations, Nationalities, and People's Region

SNV Netherlands Development Organization

TVEDO Technical and Vocational Enterprise Development Office

USAID United States Agency for International Development

WASH Water, Sanitation and Hygiene

WHO Woreda Health Office

1. Background and purpose

Enormous progress has been made in reducing open defecation in Ethiopia. According to the estimates of the UNICEF/WHO Joint Monitoring Program (JMP) the population practicing open defecation decreased from 80% to 27% from 2000 to 2015, i.e. 3.5% reduction per year.\(^1\) Nevertheless, the quality of sanitation facilities remains a big challenge and a serious concern. The JMP estimate for 2015 indicates that only 14% of Ethiopian households use improved sanitation facilities, approximately half of the households with improved facilities share them with one or more households, and in rural areas only 5% of the households use improved facilities.\(^1\) The vast majority of rural households in Ethiopia use pit latrines. Based on the definitions used for global monitoring, pit latrines which count as improved must have slabs constructed from materials that are durable and easy to clean (e.g. concrete or plastic).\(^2\) However, the Government Ethiopia's definition for improved sanitation also requires separation of the waste from the environment (e.g., a drop-hole cover), adequate superstructure, and a handwashing facility (detailed definitions in Annex 1).\(^3\)

The majority of rural households in Ethiopia construct their latrines on their own, usually using locally available materials such as wood and mud, without the support of artisans. However, improved concrete or plastic slabs are likely to be manufactured and sold through the local private sector. Therefore, the Federal Ministry of Health (FMoH) promotes sanitation marketing to improve household sanitation service levels. Ethiopia's National Sanitation Marketing Guideline⁴ provides direction on creating the enabling environment for private sanitation service providers, improving access to suitable sanitation technology options, and on creating demand among households for access to improved facilities.

'Transform WASH' is a five-year project that is supporting the development and expansion of the sanitation marketing approach in 41 Woredas (districts) in eight Regional states and the Dire Dawa city administration. The project is supported by the US Agency for International Development (USAID) and is being implemented by a consortium of four non-governmental organizations (NGOs) – Population Services International (PSI) who are the lead agency; Plan International Ethiopia; SNV Ethiopia, and IRC Ethiopia. Additional information about Transform WASH can be found here and from Transform WASH Learning Notes.^{5,6}

In each target Woreda, the intervention focuses on 15 Kebeles (villages). The project strengthens local enterprises producing concrete slabs and has complemented their product options with, initially, two new products: the SATO pan (manufactured by Lixil Corporation) and the plastic AIM slab (manufactured by Silafrica).⁷ The design of the project recognizes

¹ Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines. Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2017.

² Core questions on drinking water, sanitation and hygiene for household surveys: 2018 update. New York: United Nations Children's Fund (UNICEF) and World Health Organization, 2018.

³ On-site Household Latrine Technology Option Planning, Design, and Construction Manual. Addis Ababa: Federal Democratic Republic of Ethiopia, Ministry of Health, 2017.

⁴ Ethiopia Federal Ministry of Health. National Sanitation Marketing Guideline, 2013.

⁵ USAID Transform WASH. Learning Note: Assessment of Field Performance and Acceptance of the SATO Pan in Ethiopia, 2018.

⁶ USAID Transform WASH. Learning Note: Public-Private Collaboration in Sanitation Markets Global Scan and Potential for Ethiopia, 2017.

⁷ USAID Transform WASH. Learning Note: Facilitating the Introduction of New Sanitation Products into the Ethiopian Market, 2018.

the need for coordinated interventions to create demand that helps enable local sanitation artisans to grow and sustain their businesses.

This report summarizes the findings of action research conducted to assess the following:

- How do the different actors in the Transform WASH project create demand for sanitation products and services?
- How successful have these demand creation activities been?
- How likely is that these activities will be sustained?

The report also provides ideas, mainly gathered from local stakeholders, concerning how demand for sanitation products can be further strengthened.

2. Methodology

This study was conducted in three Woredas – two located in the Southern Nations, Nationalities, and Peoples' Region (SNNPR) and one in Amhara Region. In SNNPR, data collection was conducted in Aleta Chuko Woreda of Sidama Zone, and in Kindo Didaye Woreda of Wolayita Zone. In Amhara Region, da-ta collection was carried out in Kalu Woreda of Debub Wollo Zone.

Data collection involved key informant interviews (KIIs) with Health Extension Workers (HEWs), sales agents, retailers, slab manufacturers, and staff from Woreda Health Office (WHO) and Transform WASH (see Table 1). In total, 37 KIIs were conducted. In addition, a small sample of customers and non-customers were visited at household-level (total 23 households). The qualitative information collected from different informants was used for triangulation and eventually for producing a detailed overview about the current demand creation activities that are taking place on the ground. Transform WASH monitoring data available on PSI's monitoring and information system platform (DHIS2) also were re-viewed in order to triangulate the information gathered through this assessment's qualitative techniques.

Selection of Kebeles for this study was done in collaboration with the local PSI and WHO staff. In Aleta Chuko, two Kebeles were selected where the manufacturers and sales agents reside (Debeka and Korke) and one Kebele which was pre-selected by WHO (Rufo Chancho). In Kindo Didaye, the project Kebele where one of the manufacturers operates was visited (Sime Dolaye) plus two Kebeles relatively far from the center (Shela Sade and Mogisa). The Kebele where the only sales agent resides had no active HEW present at the time of the visit. In Kalu, a Kebele where one of the manufacturers resides (Chorisa), a Kebele where one of the sales agents resides (Abecho) and a Kebele far from the center (Tullubabagna) were visited.

Table 1: Overview of methods

Woreda Selected		Number of KIIs and Household Visits					
(Region)	Kebeles	HEWs	Sales Agents	Manufacturers	Retailers	Woreda & Project staff	HHs
Aleta Chuko (SNNPR)	DebekaKorkeRufoChancho	3	5	2	0	4	10
Kindo Didaye (SNNPR)	 Mogisa Sime Dolaye Shela Sade	3	2	2	1	4	7
Kalu (Amhara)	AbechoChorisaTullubabagna	3	3	1	1	3	6
TOTALS	9 Kebeles	9	10	5	2	11	23

To assess the success of Transform WASH in terms of demand creation and stimulating the construction of improved latrines, two scenarios were created for reference:

- Scenario 1 "same pace as ending open defecation". According to the estimates of the JMP the population practicing open defecation in Ethiopia decreased from 80% to 27% from 2000 to 2015, i.e. 3.5% reduction per year.8 Assuming that a) the improvements of latrines would follow more or less the same average rate as ending open defecation in rural Ethiopia; and b) a Kebele typically consists of 1,000 to 1,500 households, so an annual construction of 35 to 50 improved latrines per Kebele could be expected. At Woreda-level with 15 project Kebeles, this corresponds to approx. 500 to 750 latrines per year, or 45 to 60 latrines per month.
- Scenario 2 "meeting the SDG on sanitation". SDG target 6.2 aims to achieve access to adequate and equitable sanitation and hygiene for all by 2030. Assuming that by 2018 approximately 1,000 households per Kebele were lacking an improved sanitation facility, an annual construction of at least 85 improved latrines per Kebele would be needed. At Woreda-level with 15 project Kebeles, this corresponds to approx. 1,275 latrines per year, or 105 latrines per month.

⁸ The annual increase of households with improved latrines between 2000 and 2015 was much lower (0.26%).

⁹ Assuming that 1,000 improved latrines need to be constructed per Kebele within 12 years (2019 until and including 2030), therefore 1,000/12 = 83 latrines need to be constructed per year.

3. Demand creation activities

As part of Transform WASH, a range of sanitation products are being promoted (Annex 2) and several actors are involved in strengthening the demand for the products. Their roles as per project design are described below.

- Health Extension Workers. HEWs are government employees and provide primary healthcare services at Kebele-level and are in regular contact with all residents. The HEWs' focus is on educating households on sanitation and hygiene issues, and on creating demand for the promoted sanitation products. The HEWs should ensure that all households in their Kebele are aware of the sanitation products and know where and how to buy them. However, the HEWs are not supposed to take any money from the households and are not allowed, by the laws of Ethiopia, to get a commission. If a household is interested in improving their latrine, the HEWs should put them in touch with a sales agent.
- Sales agents. Sales agents are the link between manufacturers/retailers and the end user. They are residents in rural communities and work part-time as sales agent. They receive a commission for each sale. While HEWs are responsible to create general awareness about the sanitation products, the sales agents spend more time on making an actual sale. Furthermore, sales agents collect the payments from customers, either full payment upon delivery (e.g. SATO pan, AIM slab) or advance payment for concrete slabs. In coordination with the HEWs, the sales agents should approach local residents through door-to-door visits and community meetings. Some manufacturers also act as sales agents, and in some Woredas all sales agents were selected to fulfil a combined role of being sales agent and slab manufacturer at the same time.
- Slab manufacturers. Slab manufacturers are local masons or farmers who received training on manufacturing and installing latrine slabs. Some manufacturers also act as sales agents. Upon receipt of an advance payment, the manufacturer prepares the concrete slab within approx. one month (incl. 21 days needed for proper curing of the slabs). Then the customer makes the final payment and organizes transport of the slab to his/her homestead. In most cases the manufacturer ensures proper installation of the slab.
- Retailers. Retailers purchase the plastic products (SATO pan, AIM slabs) from the wholesale distributor and should ensure availability of the products at Woreda-level. They pay for the sanitation products upfront. Retailers usually own a shop in the Woreda center and display the sanitation products. On customer request they provide contact details of an artisan for the installation of SATO pans and AIM slabs. Some retailers collaborate directly with sales agents to sell the products.
- Woreda Health Office. The WHO oversees the HEWs. HEWs meet on regular basis (approx. quarterly) at Woreda-level and the WHO regularly visits the HEWs at Kebele-level. The WHOWHO should oversee the slab manufacturers to ensure concrete slabs have the required quality and are sold at reasonable prices. WHO monitors and reports the sanitation coverage in the Woreda. To support the other actors, Transform WASH in collaboration with WHO organized promotion campaigns in some Woredas, including posters, banners and market place promotion.
- **Micro-finance institutions.** Microfinance institutions (e.g. Omo Microfinance and VisionFund) are involved to provide loans to manufacturers and potentially end users.
- **Business advisors.** Business advisors are PSI employees supporting market development in two to three Woredas. In addition to their salary they are expected to receive a commission on sales (about 5%).

The roles of HEWs, as per design and in practice, are described in more detail in Table 1. Annex 3 provides further information about HEWs and the Health Development Army (HDA) in Ethiopia.

Table 1: Demand creation activities by health extension workers: design and practice

	Design	Practice
Training	All HEWs in the project Kebeles were invited to attend a two-day training on sanitation marketing at Woreda-level provided by Plan International and the WHO. The training did not include any field practice.	Working well and according to project design: Most interviewed HEWs attended a training provided by Transform WASH. A few of the interviewed HEWs mentioned that they were not invited to attend the training, however more likely they were not active during the time of the training (e.g. in education, maternity/sick leave, recently assigned or transferred). Still, all interviewed HEWs were able to provide some information about the sanitation products promoted by Transform WASH.
		Not working well/deviations from project design: Some of the HEWs did not know all the products (e.g., none of the HEWs in Aleta Chuko knew about the AIM slab) or did not know the current price of all the products. Two interviewed HEWs did not yet start promoting the products as they expected a follow-up visit by the WHO to initiate the work.

	Design	Practice
Community outreach	HEWs are expected to reach all households in their Kebele on regular basis (officially around once every quarter) to deliver health messages at the grassroots level, including sanitation and hygiene information. The HEWs do door-to-door outreach (visit each household in the Kebele several times per year) and community meetings (organize gatherings at Kebeles, schools and religious institutions).	Working well and according to project design: All interviewed HEWs reported doing door-to-door visits 2 to 3 days per week and to reach approx. 10 to 25 HHs per week. Many HEWs reported that Kebele leaders and volunteer community health promoters are supporting the promotion of the sanitation products. Not working well/deviations from project design: Each HEW covers approx. 500 HHs and therefore each household is likely to only be visited once or twice per year rather than once every quarter. Some of the visited households reported they had not been visited by an HEW during the past 6 months, and some households reported not to be aware of the products even though they had been visited by an HEW. Some HEWs admitted that they are not able to reach all households, especially not the ones living far away from the Kebele center. In some Kebeles no HEW could be interviewed because they were on maternity leave, attending classes or were reported to be away for unspecified reasons at the time of visit. Also, trainings, vaccination campaigns and emergencies keep HEWs frequently away from their community outreach activities.
Key messages	Plan International trained the HEWs about the basics of sanitation and hygiene as a refresher of the existing health packages promoted by the HEWs. Using counselling cards (flipbooks) prepared by Plan, the HEWs were trained to provide an approx. 15-minute introduction about improved sanitation to households stressing the health benefits.	Working well and according to project design: All HEWs mentioned that they inform households about the importance of an improved latrine to prevent communicable diseases. Most HEWs reported to emphasize the benefits of having a SATO pan or a drophole cover in preventing from flies and smell, with safety for children as a special advantage of the SATO pan. Some of them also stress the benefits of a concrete or plastic slab compared to a wood/mud slab (easy to clean and durable). Some HEWs mentioned that, thanks to the durability, the overall costs for maintaining the latrine will be reduced with a concrete or plastic slab. Not working well/deviations from project design: Many HEWs deliver messages only for certain selected products: i.e., some exclusively promote concrete slabs while others exclusively promote the SATO pan.

	Design	Practice
Promotion materials	HEWs were supposed to receive counselling cards (flipbooks) during the training to support end-user education. In addition, HEWs were supposed to receive flyers showing all products available. The flyers should be signed by end users who are interested to buy one and pinned to their wall as a reminder for the household.	Working well and according to project design: Some HEWs reported to bring a SATO pan to meetings and for door-to-door visits, and one reported to show pictures on her mobile phone. Some refer to places where households can see the installed products (e.g. religious institutions, Health Posts or at the WHO). In Kalu Woreda, posters were available at Health Posts. Not working well/deviations from project design: None of the visited HEWs had counselling cards or flyers available at the time of visit. They promoted the products through oral explanations. Some HEWs mentioned that promotion material was promised during the training but that it was never delivered to the Health Post.
Facilitate sales	HEWs are supposed to actively create demand. If a household shows interest, they should share the contact details of a sales agent, retailer, or slab manufacturer. On the other hand, they should provide the contact details of interested households to sales agents so that they can make a follow-up visit. The HEWs should never collect any money from the households or deliver any products.	Working well and according to project design: The manufacturers and sales agents mentioned the names of a few HEWs that actively link them to clients. One of the interviewed HEWs was even able to share the slab manufacture's phone number from memory. Generally, HEWs seem to understand that they are not supposed to get a commission. Not working well/deviations from project design: Many HEWs were not mentioned by manufacturers or sales agents, indicating that they do not actively link them to clients. Thus, many HEWs seem not to be very active (or unsuccessful in raising demand). Some HEWs were found to be not aware of the sales process and would just refer interested households to the WHO for more information. In Kalu Woreda, some HEWs used to bring SATO pans from the retailer to interested households. It is possible that some HEWs may have been collecting commissions. However, now there are sales agents in each Kebele and the HEWs refer interested households to the sales agents.

	Design	Practice
Collaboration with other actors	HEWs should actively collaborate with sales agents and allow joint household visits. HEWs should also share contact information of interested households with the sales agents. Quarterly review meetings with one HEW per Kebele (head of the Health Post), sales agents, slab manufacturers and retailers are expected to take place facilitated by Transform WASH and WHO.	Working well and according to project design: Joint household visits by HEWs and sales agents and community gatherings jointly facilitated by HEWs and sales agents were reported to take place only in a few places. Having one sales agent in each Kebele in Kalu Woreda seems to help to clarify the roles and strengthen the collaboration. Not working well/deviations from project design: In many places no active collaboration between sales agents and HEWs was reported. In some Kebeles, the HEWs were reported not to be willing to conduct joint household visits with the sales agents. While there seems to be no competition between HEWs and sales agents, there is a lack of ability to effectively collaborate and communicate.
Monitoring	WHO monitors the performance of HEWs and provides technical support; but no incentives are linked to the HEW's performance. HEWs report the number of households reached with sanitation and hygiene messages. This information is summarized and shared with Transform WASH by the WASH focal person in WHO.	Working well and according to project design: The HEWs reported to be visited by the WHO approx. every one to three months including joint household visits. Places close to the woreda center or of special interest (e.g. model Kebele) might be visited more frequently than once a month. HEWs do perceive the visits as helpful and motivational. Not working well/deviations from project design: During the supervisory visits by the WHO, there seems to be no discussion with the HEWs regarding sanitation marketing. There seems to be no systematic check by the WHO on the number of households reported to have been reached with sanitation and hygiene messages through the HEWs.

The roles of sales agents, as per design and in practice, are described in more detail in table two.

Table 2: Demand creation activities by sales agents: design and practice

	Design	Practice
Recruitment	Sales agents are recruited by PSI's business advisors in consultation with the WHO, HEWs and slab manufacturers. Sales agents need to be literate, own a mobile phone, know the local language and be settled in a rural community. In SNNPR, the sales agents need to show commitment to work on three or more days per week, and are ideally active as volunteer community health promoters. In Amhara, the sales agents need to be masonry workers (as they are trained on slab production), have other sources of income and have time available for additional work. Ideally, the recruited sales agents show the ability to convince people and are quick in adopting new technologies. Target is to recruit approx. 50% female sales agents.	Working well and according to project design: Initially, 3 to 6 sales agents were recruited per woreda by PSI's business advisors in collaboration with other stakeholders. In Amhara, in a second attempt, 1 to 2 sales agents were recruited per Kebele. Not working well/deviations from project design: In SNNPR, some of the sales agents stopped working altogether, reporting that the commission is not attractive enough (e.g. in Kindo Didaye only one active sales agent was found at the time of the visit). The active sales agents interviewed were dominantly male.
Training	The training focuses on the background of sanitation and hygiene but also on sales tactics. Sales agents are advised to focus on high-income households, to target community leaders and their personal network, and to register all activities. Trainings include a short practical exercise. In Amhara, the training also included the manufacturing and installation of concrete slabs, and the development of a business plan.	Working well and according to project design: Most sales agents reported to have received training once or twice. Initially, trainings were reported to be centralized, but more recent trainings took place close to the Woreda and took 2 to 3 days. In Amhara, the masons/sales agents were trained by the Technical and Vocational Enterprise Development Office (TVEDO) for 3 days including training on manufacturing concrete slabs. Refresher training was provided after 3 months for 2 days. Not working well/deviations from project design: Some new sales agents, recruited by the slab manufacturers, reported to not yet have received any training. Furthermore, some sales agents reported difficulties with creating demand.

	Design	Practice
Community outreach	Sales agents should work directly with the slab manufacturers and support them in demand creation at their direction. Community outreach should be done in collaboration with the HEWs and Kebele leaders. Sales agents should do both door-to-door visits (ideally together with HEWs) and presentations at community meetings with the goal of reaching approx. 30 households per week.	Working well and according to project design: Sales agents reported to do both door-to-door visits and community meetings. Slab manufacturers (acting as sales agents) were found to rather focus on community meetings. Two sales agents reported that they convinced local churches to install a concrete slab. They can now showcase these latrines during gatherings organized on Sundays after church. The sales agents reported that approx. 10% to 40% of visited households can be convinced (note: that sales agents often pre-select households that they expect to be able to afford the products). Usually two interactions with the households are needed: first one to convince the households, second to collect (advance) payment from interested households. Not working well/deviations from project design: In SNNPR, the sales agents do not cover all 15 project Kebeles. Furthermore, it was observed that sales agents usually work less than 3 days per week. The interviewed sales agents reported to work 6 to 18 hours per week.
ssages	It is expected that households visited by sales agents are already aware of the health benefits of an improved latrine by prior contact with HEWs. Sales agents should therefore focus more than HEWs on convincing households to invest in an improved latrine.	Working well and according to project design: The focus of sales agents' messaging is on health benefits (no flies, washable slabs), improved comfort (no smell), reduced risk for children and durability of the improved slabs.
Key mes		Not working well/deviations from project design: Overall, the sales agents do not seem to use different key messages than the HEWs. Sales agents reported to spend a lot of time on general awareness creation about sanitation and hygiene.

	Design	Practice
Promotion materials	In SNNPR, posters and flyers were made available for the sales agents. In Amhara, the sales agents were given counselling cards (flipbook) by PSI to advertise the products.	Working well and according to project design: In Kalu, all sales agents reported to use counselling cards during household visits. One manufacturer in Kalu produced his own advertisement material (sticker and business cards) to promote latrine slabs and improved cookstoves (Figure 1). Not working well/deviations from project design: Most sales agents in the visited woredas in SNNPR did not receive promotional materials and promoted the products mainly through oral explanations. One sales agent mentioned that he has a poster that he used during community meetings.
Collaboration with other actors	Sales agents should actively collaborate with HEWs and organize joint household visits. Sales agents should proactively inform the HEWs about their activities. Quarterly review meetings with one HEW per Kebele, sales agents, slab manufacturers and retailers are expected to take place facilitated by Transform WASH and WHO.	Working well and according to project design: Joint household visits by HEWs and sales agents and community gatherings jointly facilitated by HEWs and sales agents were reported to take place only in a few places. Having one sales agent in each Kebele in Kalu Woreda seems to help to clarify the roles and strengthen the collaboration. Not working well/deviations from project design: Generally, sales agents reported that they wished that HEWs would be more active in promoting the products and generate more actual sales.
Moniforing	A sales commission for the agents is included in the sales price of the sanitation products and paid to the sales agents through the manufacturer or the retailer. Overall, the performance of sales agents, retailers and slab manufacturers is measured by looking at the actual sales.	Working well and according to project design: Detailed sales number are collected and made available on DHIS2. Manufacturers report to get frequent visits by the WHOWHO and Transform WASH staff. Not working well/deviations from project design: Data available on DHIS2 do not necessarily show that an improved latrine has been constructed (e.g. a SATO pan may have been sold but not correctly installed) and can include double counting (e.g. a retailer may report the sales of a SATO pan and a manufacturer the sales of a concrete slab if in fact one concrete slab with SATO pan was sold).

Design	Practice

WHO monitors the performance of HEWs and provides technical support; but no incentives are linked to the HEW's performance. HEWs report the number of households reached with sanitation and hygiene messages. This information is summarized and shared with Transform WASH by the WASH focal person in WHO.

Monitoring

Working well and according to project design:

The HEWs reported to be visited by the WHO approx. every one to three months including joint household visits. Places close to the woreda center or of special interest (e.g. model Kebele) might be visited more frequently than once a month. HEWs do perceive the visits as helpful and motivational.

Not working well/deviations from project design:

During the supervisory visits by the WHO, there seems to be no discussion with the HEWs regarding sanitation marketing. There seems to be no systematic check by the WHO on the number of households reported to have been reached with sanitation and hygiene messages through the HEWs.

Figure 1: Sticker produced by slab manufacturer in Kalu

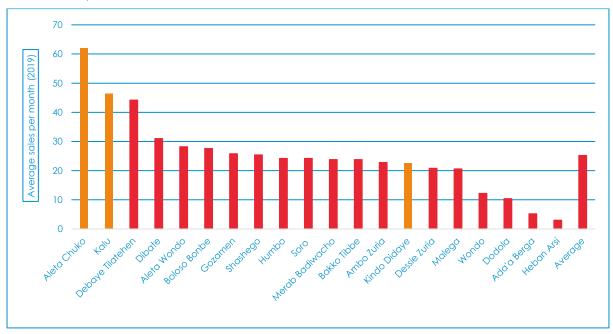


4. Outcome of demand creation activities

Sales data from 20 Woredas (where the project interventions started in 2018 or before) reveal that demand creation is generally relatively low (Figure 1). In the first five months of 2019, only two Woredas saw more than 45 sanitation products sold per month (Scenario 1) and none of the project Woredas are on track to meet the SDGs (Scenario 2). On average 25 products

have been sold per month which corresponds to an increase of improved sanitation of approximately 2% per year.¹⁰

Figure 1: Average monthly sales of sanitation products per project woreda from January to May 2019



The most popular sanitation products are the SATO pan and concrete slabs. ¹¹ Only a few plastic slabs have been sold (Figure 2). Most SATO pans (71%) were sold without concrete slab to the consumers and 19% were reportedly retrofitted at existing latrines (Figure 3). More circular concrete slabs were sold than rectangular concrete slabs and pre-cast mini-slabs (Figure 4).

¹⁰ On average 300 sanitation products are sold per year in the 15 project Kebeles in one Woreda. Assuming that a Kebele consists on average of 1,000 households, the annual increase is 300/15,000 = 2%.

¹¹ Concrete slabs with SATO (328) and mini-slab with SATO (11) are included in both SATO and concrete slab summary.

Figure 2: Total sales of sanitation products under Transform WASH (until May 2019)

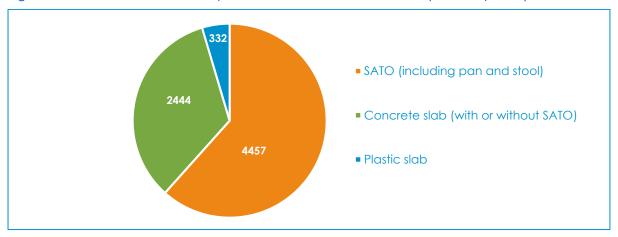


Figure 3. SATO pan sold under Transform WASH (until May 2019)

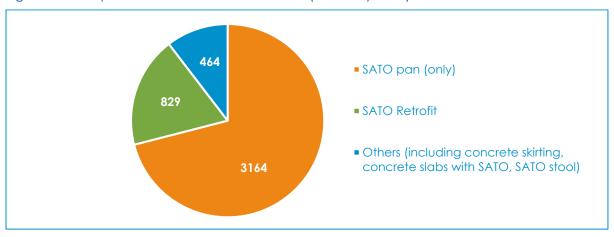
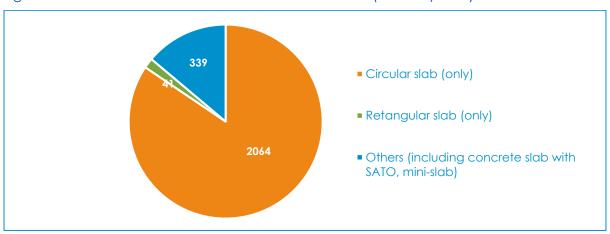


Figure 4. Total concrete slabs sold under Transform WASH (until May 2019)



While demand is relatively low, the KIIs revealed that households are generally happy with the offered products, especially households that have already constructed an improved latrine. One household was reported to mention that now it is even possible to eat food inside the toilet. Two examples of successful demand creation activities, in Aleta Chuko and Kalu Woredas, are described in the box below. The two Woredas had the highest sales of sanitation products in 2019 (refer to Figure 1).

Nevertheless, for some households the construction of an improved sanitation facility is just not a priority, and many households respond that the products are too expensive and that they do not have the money to pay for them. Especially in some Kebeles in Kalu Woreda where slabs were reportedly given out for free previously, it is difficult to convince households to invest their cash in a latrine slab. General challenges faced by HEWs and sales agents include long distances with up to three hours walking time to the farthest points in some Kebeles. Therefore, promotion is more intensive in areas close to the Kebele center and near where sales agents reside. Some HEWs feel uncomfortable to mention that the slabs need to be purchased, as households are used to receive services from HEWs for free. Generally, HEWs complain about the heavy workload and a lack of time to convince households to invest in the sanitation products. In some locations the soil is not suitable for digging a latrine and thus households have little motivation to invest.

Successful example: "Debeka Model"

Asefa Sale, a slab manufacturer, started producing concrete slabs four years ago as part of an iDE project. He resides in Debeka which is one of Transform WASH's project Kebeles in Aleta Chuko Woreda in SNNPR. Roughly half of his time he works as slab manufacturer (production and installation) and the other half as farmer. He produces the concrete slabs decentralized in seven Kebeles, often in the compound of the Kebele offices. Asefa gets the orders mainly through his sales agents but also directly from HEWs and through word-of-mouth. He sends one of his sales agents to collect an advance payment from interested households. The sales agent issues a receipt for the household. Within one month the concrete slab (with or without SATO pan) is finalized and can be collected by the buyer (transport to be paid by buyer). Finally, Asefa does the installation at the household.

Asefa works with a team of three sales agents, of which all are volunteer community health promoters. Unfortunately, he had to fire his fourth sales agent because he misused some of the advance payments. The sales agents focus on two relatively big Kebeles close to each other: Debeka and Chancho Rufo with a total of almost 3,900 households. Most households are reachable within one-hour walking distance. The sales agents consider this job as a part-time job and only work a few hours every other day. Two of them consider farming as their main job and the third has a small shop. Regularly, the sales agents visit households jointly with two motivated HEWs based in Debeka and Chancho Rufo.

Over the past year, Asefa's operations delivered on average approx. 30 slabs per month. The team mentioned that they are motivated to serve the community and reported to be happy with their workload and compensation from the sanitation business. Currently, Asefa has almost 50 open orders and he is not worried about the demand for the sanitation products. The biggest threats to the business are the increasing costs of iron bar and concrete (Annex 4) which makes his profit so small that it is hard to pay back an existing loan. Furthermore, he would need to take a second loan for buying the raw materials for the open orders. Asefa mentioned that he would only increase the slab price in consultation with PSI.

Successful example: "Kalu Model"

In Kalu Woreda (Amhara region), PSI trained 1 to 2 local masons in each Kebele to become both sales agent and slab manufacturer. In total 24 sales agents (all male) serve 22,000 households residing in project Kebeles. The masons are locally known and trusted, and appreciate having an additional product that they can offer to their clients. One mason mentioned that frequent household visits help him promote his work more generally. In the "Kalu Model" it is the responsibility of the customer to buy and prepare the concrete, iron bar, sand and gravel. The sales agent will sell a SATO pan (profit 15 - 20 ETB) and do the construction work (profit 100 - 200 ETB).

An advantage of this model is that any changes in raw material costs are directly paid by end users and therefore the sales agents do not have to explain why the price of the product has increased. Furthermore, sales agents do not need to take out loans for buying raw materials. In case a household does not want to prepare the raw materials, then there is still the option to buy a pre-fabricated slab from one of the three manufacturers in the Woreda – who mainly serve customers living in semi-urban areas.

The main challenge anticipated for the "Kalu model" is to ensure quality of the installed concrete slabs. Random quality control checks by the WHO and project staff are therefore very important.

Sustain demand creation activities beyond Transform WASH

The duration of the Transform WASH project (2017 – 2021) is unlikely sufficient to trigger the construction of improved sanitation facilities at all households in the project area. Therefore, it is important to create a sanitation market that will sustain itself beyond the end of the project. This section looks at opportunities and risks for actors involved in the sanitation marketing system with a special focus on the likelihood that demand creation activities can be sustained and scaled.

The sanitation marketing approach considers sustainability issues from the very beginning: instead of distributing sanitation products to households for free, the intention is to create a market that is able to deliver the products on demand to consumers, without the need for external financial support after the close of the project. However, for all of the various actors involved in the sanitation marketing effort (HEWs, sales agents, manufacturers, retailers and the WHOs) - the end of the project will bring many changes. For example, there may no longer be regular trainings or workshops which are an important motivational factor. This section discusses the factors that could influence the sustainability of the sanitation markets.

Health Extension Workers

Two main factors will influence the sustainability of sanitation product promotion through HEWs:

- Effectiveness of the Health Extension Program. There are no indications that the national Health Extension Program (HEP) will be discontinued in the near future. The program is recognized as a success and a suitable model for reaching rural communities with primary healthcare services. Therefore, it is almost certain that the HEWs (with HDA support) will continue to reach the majority of rural households on regular basis with health education messages. Many HEWs are proud to serve their communities and happy to have a reliable salary, but on the other hand HEWs generally complain about heavy workload and the lack of promotion opportunities. The HEP needs to address absenteeism and underperformance of HEWs to ensure the effectiveness of the community outreach activities.
- Prioritization of sanitation marketing within the HEP. While sanitation marketing has been endorsed by the FMoH as the main strategy for improving the standards of latrine facilities in rural Ethiopia, the coming years will show to what extent the promotion of sanitation products will be pushed by national and regional governments. WHOs are confronted with many different health challenges. The momentum of regular sanitation marketing workshops (and related per diems) will fade after the end of Transform WASH, and may be replaced by other actors promoting different health interventions through HEWs. Therefore, only if regional governments regularly follow up on the effective implementation of sanitation marketing and provide the required resources for monitoring and technical support, will the HEWs be able to sustain their sanitation promotional work as a routine activity.

The HEWs are not allowed to accept any commission when convincing a household to buy a sanitation product. The findings of this study confirm that most HEWs¹² are aware that they

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¹² In Kindo Didaye, the slab manufacturers indicated that they would pay a commission of 20 to 30 ETB per slab to sales agents and to HEWs. However, most HEWs have not yet identified any interested household and it is not sure if the HEWs would eventually accept the commission. In Kalu, some HEWs bought SATO Pans on behalf of households from the retailer in the Woreda center, but indicated that they did not add any commission on the sales price. They mainly did that due to the absence of sales

need to put interested households in touch with a sales agent or slab manufacturer. The potential commission of sales agents is rather small compared to the monthly salary of HEWs which, depending on their experience, ranges from 2,400 to 4,100 ETB. Overall, HEWs said they were happy with the support they got from sales agents. HEWs seem to appreciate that some of their workload can now be shared with sales agents. They did not express any concerns related to the commissions that sales agents receive. All interviewed HEWs expressed satisfaction with the sanitation products on offer, and most of them stated their intention to install such a latrine at their own homes.

Sales Agents

Unlike slab manufacturers and HEWs, the role and incentives of sales agents is not clearly predetermined and can vary between Woredas. Transform WASH has explored and experimented with different ways of engaging the sales agents, who are needed because they:

- Provide targeted promotion and sales of specific sanitation products (whereas HEWs create general awareness for the products);
- Collect advance payments for concrete slabs;
- Deliver plastic products to the customer's doorstep.

In some cases, slab manufacturers also act as sales agents and can take over all of the functions described above, if they have the capacity and interest. It remains a challenge to reach households located at relatively great distances from Woreda centers.

Being a sales agent is neither a full-time, nor a permanent, job opportunity. The market size for sales agents is limited for several reasons. The main ones are because it is difficult for them to collect advance payments in areas where they are not known, and because it is difficult for them to travel to any areas that are farther than about one hour's walking from their home. In many cases it is expected that sales agents are able to reach all households living in the Kebele, commonly 1,000 to 1,500. Assuming a sales commission of 20 to 50 ETB per household, the maximum revenue potential for a sales agent is between 30,000 to 75,000 ETB. However, this income will be distributed over a time span that could be up to ten years or more.

- Scenario 1 ("same pace as ending open defecation") would result in 35 to 50 improved latrines constructed in one year in a typical sales agent's operating area. Their average monthly profit in this scenario would be less than 200 ETB.
- Scenario 2 ("meeting the SDG on sanitation") would result in about 105 improved latrines constructed per year. Under this scenario, monthly sales agent income could range up to several hundred ETB, perhaps as high as 500 ETB.
- Some sales agents interviewed for this study were successful in the past few months and reported selling an average of up to 25 slabs per month which translates to an even higher monthly income of 750 to 1,250 ETB. It is possible that the pace of such sales could decrease over time after the wealthier consumers have made their purchases. However, if their sales do continue at their current rate, all households in their Kebeles will own an improved latrine within 3 to 5 years. A successful sales agent could therefore earn about 1,000 ETB per month for up to 4 years.

agents during the time before sales agents were trained for each Kebele. Now they are expected to refer all interested households to the sales agents.

The most promising sales agents were found to be:

- Volunteer community health promoters who are already involved in delivering health
 messages to the community. They appreciate the commission as a compensation for the
 work they would otherwise have done for free.
- Masons that add an additional product to their offerings, and an additional source of income.

Many sales agents in SNNPR reported that they expect earnings of up to 2,000 ETB per month, which is hard to achieve without a significant increase of the commission per slab. Unrealistic income expectations are likely a main reason why many trained sales agents have become inactive. The per diems paid during the training is likely another reason why some sales agents are interested to attend the training, even though they might have no intention to work afterwards.

The incentive structure for sales agents varies between woredas. A few examples:

- Aleta Chuko: there is a clear agreement between all actors that the sales agents receive 30 ETB from the slab manufacturers for each concrete slab for which they collect the advance payment. For some sales agents the manufacturers pay 50% at the time of receiving the advance payment and 50% at the time the construction has been finalized. There is no extra commission for the sales of a SATO pan. AIM slabs were not promoted in Aleta Chuko at the time of visit.
- Kindo Didaye: there is no clear agreement between actors regarding sales commission. The only active sales agent is not sure who he will get the commission from (either the WHO, the manufacturer, or the household). He hopes to get a commission of approx. 50 ETB per slab, which is higher than what the manufacturers are prepared to pay (20 to 30 ETB) per slab. The manufacturers also indicated a willingness to pay commissions to HEWs.
- Kalu: all sales agents are also masons and get a fee of 100 to 400 ETB when manufacturing and installing a slab at household-level. In addition, they get a small profit from SATO pan sales (15 to 20 ETB per piece).

Manufacturers

Whether manufacturers will continue producing and installing concrete slabs after the end of the project will mainly depend upon whether they can make a reasonable profit compared to other products they sell (e.g. concrete bricks, masonry work). PSI estimated that the profit needs to be 50 to 80 ETB per slab to keep the manufacturers active. The selling price needs to be regularly updated based on raw material costs. If the profit margin is sufficient, manufacturers can be expected to continue preparing and marketing the slabs.

The more Kebeles covered by one manufacturer, the more likely he is to invest in slab production as a main part of his business. Assuming one manufacturer produces slabs for five Kebeles, he can produce up to 45 slabs and generate a profit of up to 3,500 ETB per month. In Aleta Chuko, the WHO and manufacturers even agreed on a target of 80 slabs per manufacturer per month.

The "Kalu model" seems to be an attractive option if capable masons are available in each Kebele. However, if quality concerns become an issue, the number of manufacturers might need to be reduced. The remaining manufacturers would then need to work with sales agents from different Kebeles.

Informants' ideas on how to increase demand for sanitation products

Key informants were asked for suggestions on how to increase demand and ensure sustainability. These ideas are summarized below. Figures in brackets represent the number of key informants mentioning this point out of a total of 37 interviewees.

Make products more affordable/product innovation

- Make products cheaper. Product innovation (e.g. bamboo instead of iron bar), introduction of alternative low-cost products, or subsidies on raw materials. (15)
- Access to finance for households. Allow payments in instalments to manufacturers, or provide access to loan schemes for households (e.g., Safety Net Program, Vision Fund). (8)
- Make production faster, e.g. by using concrete with shorter curing times. (2)
- Improve quality. Make plastic products bigger and use thicker plastic. (1)

Strengthen demand creation activities

- Involve more actors at Kebele-level. Involve and provide training to Kebele and religious leaders, Health Development Army, teachers, and WASH committees in promotion activities. (15)
- Diversify promotion activities. Use additional marketing tools to support HEWs and sales agents with creating demand (e.g. market day promotions, radio and TV spots). (5)
- Woreda support for demand creation. WHO representatives could join community meetings to increase credibility and to encourage community mobilization. (4)
- Assign more sales agents. Sales agents need to cover all project Kebeles. (4)
- Demonstration sites. Support construction of public latrines with concrete and plastic slabs as demonstration sites which can be used to promote the products during community meetings. (3)
- Integration of HEWs and sales agents, e.g. joint HH visits, Kebele-level exchanges. (3)
- Consider seasonality. Intensify promotion activities during harvesting season because that is when farmers have more liquidity. (2)
- Make promotional materials more available. (2)
- Revise selection criteria for sales agents. (1)

More training and incentives

- Refresher trainings. Provide regular refresher trainings for HEWs, sales agents, manufacturers and WHO officials. Trainings are motivational. (9)
- Intensive coaching. Provide more intensive coaching for sales agents and HEWs in the field to make them more active, possibly through joint monitoring visits by WHO and Transform WASH. (3)
- Provide additional incentives to sales agents and/or HEWs. (3)
- Ensure that review meetings for experience sharing are scheduled and take place. (3)
- Train all HEWs. Provide training to all HEWs and not only to one HEW per Kebele. (2)

Strengthen supply

- Solve transport issues. Produce slabs closer to the end users, or agree with WHOs to organize and pay for transport to distant portions of Kebeles. (7)
- Access to finance for manufacturers. Support manufacturers to access affordable financing for opening a shop, buying stock of raw materials, and improving production facilities. (2)
- Assign more manufacturers. (1)
- Allow direct purchase of SATO pans through manufacturers instead of retailers. (1)

Strengthen supervision and support

- Additional budget. Provide additional budget for WHOs and project partners for implementing as well as for monitoring demand creation activities. (4)
- Support and monitoring of HEWs and sales agents. More technical support, follow-up and monitoring by WHO and project staff is needed. (3)
- Strengthen the Woreda WASH Team. Address high turnover issues, reduce the number of meetings, and increase meeting effectiveness. Provide better support on the ground. (2)

7. Conclusions

Sales data reveal that demand creation is generally relatively low and that with the current rate of implementation the SDGs for sanitation will not be met in the project Kebeles. However, arguably it is more important to create sustainable processes, including demand creation. The study also identified two examples of successful demand creation activities which confirm that the project is in a position to substantially increase the coverage of improved sanitation facilities in rural Ethiopia.

Success factors in the "Debeka Model":

- A well-organized team of one slab manufacturer and three sales agents that operates in two project Kebeles. They have a clear agreement on the sales commission.
- The sales agents closely collaborate with the HEWs in the two Kebeles: they conduct joint household visits and jointly facilitate discussions at community gatherings.
- The sales agents are volunteer community health promoters dedicated to improving public health in their community and promote the sanitation products during one or two days per week.
- Manufacturer and sales agents have other income sources. While the sales agents
 appreciate the sales commission, they mentioned that they would promote the products
 even without payment.

Success factors in the "Kalu Model":

- One or two local masons are present in each Kebele and act as sales agent and manufacturer.
- The masons are locally known and trusted, and appreciate having an additional product that they can offer to their customers.
- No loan is needed by the masons to purchase raw materials upfront. The customer is responsible to buy and prepare the concrete, iron bar, sand and gravel. The masons sell the SATO pans.
- No need for transporting slabs as the construction work is done by the mason directly at the customer's homestead.

The case studies above confirm that the sales agent model and the HEW model promoted by Transform WASH are effective for creating demand. However, the challenge is to identify the optimal business model for each Woreda and to facilitate the creation of a system in which all actors fulfill their respective roles.

This study found that the demand creation activities implemented by the public sector are not very effective. All interviewed HEWs received training, directly or indirectly, but some of them lacked information or had not yet started promoting sanitation products. None of the visited HEWs had counselling cards or flyers available at the time of visit. They promoted the products mainly through oral explanations. Many of the randomly visited households in project Kebeles were not aware of the promoted sanitation products and some of them have not been visited by an HEW in the past six months. Only a few HEWs were mentioned by manufacturers and sales agents to actively promote the sanitation products and to regularly refer customers for purchasing the products. HEWs are often overloaded and have limited time to convince households to buy a product. Nevertheless, working with HEWs as anticipated by the project is likely the most effective way to make the majority of rural households aware of the sanitation products available from manufacturers and other

artisans, however the focus of their engagement is awareness creation rather than demand creation. The HEWs are usually trusted individuals in the community and their messaging is expected to legitimize the operation of the sales agents.

The private sector can often be as, or more, effective in creating demand than the public sector and sales agents play a crucial role in connecting customers with suppliers. However, it was found that not all project Kebeles are reached by sales agents and many sales agents do not get the sales commission that they initially expected. The setup of the private sector currently varies from woreda to woreda, and it is unlikely that there will be a one-fits-all business model for all rural Ethiopia due to different local conditions such as topography, socioeconomic status, population density, and the interests and capabilities of individual manufacturers and retailers. The market size is limited because sales agents need to be trusted individuals to allow them to collect advance payments from households, furthermore they are unlikely to reach households much further than a one-hour walking distance from their home. Thus, the number of target customers is limited, and the monthly commission of a successful sales agent is unlikely to exceed 500 ETB per month (which is well below an HEW's salary) and therefore is not attractive as full-time job. This study did not reveal any (perceived) competition between HEWs and sales agents, but rather an appreciation by HEWs for the support provided by effective sales agents towards their overall mission.

8. Recommendations

Roles of the private sector actors (manufacturers, retailers, sales agents) and public sector (WHO and HEWs) are obviously critical to the sanitation marketing effort. Each set of actors plays an important and different role from the others. However, it also was noted that the roles of the various sets of actors (e.g., sales agents) differ from woreda to woreda. This adds some complexity to the overall model, but this sort of local adaptation may prove to be an asset for the project. However, it is important that each actor clearly understands his or her role, as well as those of the other actors.

The above is an example of how Transform WASH has innovated and adapted to local needs in the many parts of the country where it is active. It is advised that the project continue to explore and experiment with its various models and approaches, gage their effectiveness, and to share these learnings among the project Woredas and the involved agencies and partners at the national level.

Regarding demand creation, the study identified several possible ways to strengthen project performance:

Awareness creation activities by public sector

- Train HEWs on short and concise messaging. It is expected that HEWs have a solid understanding of hygiene and environmental sanitation. Thus, the HEWs' training under Transform WASH should focus on a short (e.g., three-minute) sales pitch to maximize the number of households that can be reached with minimum additional effort. The sales pitch should include information on where to buy and how to finance product purchase. Make sure leaflets are made available to HEWs for use and distribution. The leaflets should illustrate all sanitation products available and provide contact information for sales agents and/or suppliers.
- Provide on-site coaching to HEWs. Schedule a visit to each Kebele by project staff and WHO within a few weeks after the training to support an initial community meeting (including Kebele and religious leaders, WASH committee members) and to coach HEWs during their first door-to door visits. The on-site support would send a clear signal to HEWs that they are expected to incorporate the sanitation promotion in their daily activities. In addition, presence of WHO staff in a community gathering should strengthen the engagement of local community leaders.
- **Develop a check-list for WHO**. The check-list should focus specifically on sanitation marketing topics and be used during the regular visits of WHO staff to HEWs. The check-list should include, for example, a check to see if all HEWs are aware of where to purchase sanitation products, if promotional material is available, and if Kebele and religious leaders have been engaged in promoting the products. Encourage WHO to share the findings of monitoring visits during regular meetings when all HEWs meet in the woreda center (as a reminder and to facilitate joint learning).
- Introduce incentive schemes for HEWs. HEW contributions to improvements in sanitation coverage in their Kebele should be recognized perhaps through a formal appreciation at the regular HEW meetings, or through invitations to participate in zonal or regional workshops to present success stories from their working areas.
- Advocate for sanitation marketing in the HEP. To help ensure that sanitation marketing
 activities will continue after the end of the project, sanitation marketing should be formally
 added to the HEWs' job description and training packages. Coordinators of the HEP at

national and regional levels need to be convinced about the value of sanitation marketing in order for this change to take place.

Demand creation activities by private sector

- Ensure sales agents are present in all Kebeles. Sufficient sales agents should be recruited from local communities. Ideally, one or at most two sales agents are recruited per Kebele to ensure they are locally known while leaving a sufficiently large number of households per sales agent.
- Manage sales agents' expectations. Being a sales agent is a part-time job and generates only limited income. Good sales agent candidates are individuals such as volunteer community health promoters (who are already delivering health messages to the community) and masons that act in a combined role of sales agent and manufacturer (as the sanitation products add an additional source of income).
- **Provide short but regular trainings to sales agents**. Keep the initial training for sales agents relatively short to avoid attracting unsuitable candidates due to high per diem for many days. Re-invite the ones who are performing well for refresher trainings and review meetings. However, stop providing training to sales agents that do not perform well, and replace them with other more motivated or suitable candidates.
- Ensure men and women receive promotion messages. Usually it is the men controlling household finance and making decisions on whether to buy a specific product like a toilet. Women however can exert considerable influence over these decisions. Typically, women are reached during door-to-door visits and men during public gatherings. The gender of the sales agent may influence what promotion strategies are most suitable in a specific setting.
- Improve value proposition by manufacturer. Customers usually have to wait for at least a month to get a concrete slab and they may have to transport the slabs a great distance. Explore business models that reduce transport costs (e.g., produce slabs as close to customers as possible) and that reduce waiting time (e.g. encourage manufacturers to keep a stock of completed concrete slabs on hand).
- Optimize roles taken on by different actors. Private sector actors (retailers, manufacturers
 and sales agents) all have distinct roles but more than one role can be played by each of
 these actors. For example, retailers could be trained as sales agents; slab manufacturers
 could purchase plastic products from wholesale distributors and sell them as retailers
 directly to their customers.

Collaboration between public and private sector

- Establish sanitation marketing teams at Kebele-level. Recruitment of at least one sales agent per Kebele is expected to establish a clear relationship between HEWs and sales agents at Kebele-level. WHO should regularly encourage HEWs to collaborate with sales agents, and manufacturers and retailers should regularly encourage their sales agents to collaborate with the HEWs.
- Organize regular review meetings. Review meetings involving all actors (HEWs, sales
 agents, manufacturers and retailers) are part of the project's learning platform. It is
 recommended to ensure that these meetings take place and to further explore how the
 meetings need to be structured to maximize learning and knowledge exchange. Ideally,
 the project team would coach WHO staff in hosting and facilitating the review meetings.

Monitoring activities by WHO and Transform WASH on project outcomes

- Strengthen monitoring of sanitation coverage at Kebele-level. Reliable data about Kebele-level progress on improved sanitation coverage is expected to be an effective tool to improve learning and to encourage discussion and debate during review meetings. Data on sanitation coverage can be used to cross-check sales figures to confirm if the promoted sanitation products are correctly installed and sustainably in use. Strengthening the capacity of the WHO in monitoring sanitation coverage through primary data collection at household-level is therefore recommended.
- Introduce monitoring of awareness creation activities by HEWs. The HEWs primary task is to create awareness and their effectiveness cannot reliable be measured through sales data nor through HEW-reported outreach activities. It would be helpful to have data on, for example, whether households have been regularly visited by an HEW (or sales agent), and whether households know where sanitation products can be purchased. Ideally, such monitoring could be added to the ongoing monitoring of sanitation coverage performed by WHO.
- Ensure quality of constructed latrines. The more decentralized the concrete slab production, the higher the risk of sub-standard slab quality. It is recommended to clarify WHO's role in checking the quality of slabs and in providing technical support to slab manufacturers.
- Monitor individual sales agent performance. Ideally, sales data would identify the person involved in making a household sanitation product sale. Such data could support decisions on selecting which sales agents should continue working on the program, and also would generate additional evidence regarding demand creation by different actors. This information could be generated through the manufacturer's and retailer's logbook records, i.e., by indicating names of sales agents, HEWs or others involved in the sale.

Product portfolio and product financing

- **Expand product portfolio.** At the beginning of the project, Transform WASH put a lot of emphasis on the SATO pan. While the SATO pan is a good product, it is recommended to further expand the range of products with a focus on other low-cost options that still ensure the construction of a latrine that is recognized as improved per GoE definitions.
- Explore market potential for aspirational latrines. A superstructure offering adequate privacy is one criterion to fulfill the GoE definition of 'improved sanitation'. Micro-finance institutions (MFIs) may be more likely to introduce financial products for a latrine that cost in the range of 3,000 to 4,000 ETB. Introduction of such aspirational latrines for 'early adopters' might help build up the business for local masons and to prepare the market for longer-term sustainability.
- Further explore financing options for households. While Transform WASH has successfully linked slab manufacturers with MFIs, small loans to private households (i.e., in the range of a several hundred ETB) are probably not very attractive for these institutions.
 Strengthening the Village Saving and Loan Associations, or exploring other mechanisms such as smart subsidies, may be needed to help overcome the limitations of low purchasing power by many households.

Annex 1 – Definition of improved sanitation facilities

The definition used by the GoE for 'improved sanitation' for on-site household latrines is somewhat different from the definition used by the JMP for global monitoring.

JMP Definition¹³

- The principal difference between improved and unimproved pit latrines is the presence
 of a 'slab'. Pit latrines with slabs that completely cover the pit, with a small drop hole, and
 are constructed from materials that are durable and easy to clean (e.g. concrete, bricks,
 fiberglass, porcelain, stainless steel, wood or durable plastic) should be counted as
 improved.
- Definitions of unimproved sanitation facility: Pit latrine without slab/open pit: is a dry
 sanitation system that uses a pit in the ground for excreta collection and does not have a
 squatting slab, platform or seat. An open pit is a rudimentary hole in the ground where
 excreta is collected.
- Notes on classification: Pit latrines with slabs that only partially cover the pit, or with slabs constructed from materials that are not durable and easy to clean (e.g. mud or earth) should be classified as 'pit latrine without slab' and counted as 'unimproved'.

GoE Definition¹⁴

- An improved pit latrine consists of an excavated pit, covered with cleanable mudplastered wooden materials, and/or with a concrete SanPlat slab with no rebar (washable) and with squat-hole fitted with a tight squat-hole cover, through which excreta falls into the pit. Improvements made include a wall that provides adequate privacy, the absence of openings on the floor other than a squat-hole, and a substructure that is constructed from stable/durable materials and provided with hand washing facilities.
- Operational definition of basic unimproved latrine: sanitation facility that does not provide privacy or separate human excreta from human contact.
- Operational definition of improved latrine: improved sanitation facilities are defined as a facility that provides privacy and separates human excreta from human contact.
- The 'ladder' for household latrine technology options:
 - o Open defecation
 - Unimproved latrines
 - Fixed point defecation
 - Basic unimproved latrine
 - Locally improved traditional pit latrine
 - Improved latrines
 - Improved pit latrines (VIP, compost, on-set¹⁵ pour flush)
 - Water carriage, off-set pour flush toilet, septic tank

32

¹³ Core questions on drinking water, sanitation and hygiene for household surveys: 2018 update. New York: United Nations Children's Fund (UNICEF) and World Health Organization, 2018. (Page 12).

¹⁴ On-site Household Latrine Technology Option Planning, Design, and Construction Manual. Addis Ababa: Federal Democratic Republic of Ethiopia, Ministry of Health, 2017. (Page v, 5 and 6)

¹⁵ Direct-drop, as opposed to 'off-set' latrines.

Annex 2 – Sanitation products promoted by Transform WASH

- The Pre-cast concrete slabs produced with molds and reinforced with iron bar:
 - o Circular (120 cm diameter, 5 cm thick, without SATO pan): approx. 500 ETB
 - o Circular (120 cm diameter, 5 cm thick, with SATO pan): approx. 650 ETB
 - o Rectangular (120 cm x 120 cm, 5 cm thick, without SATO pan): approx. 600 ETB
 - o Rectangular (120 cm x 120 cm, 5 cm thick, with SATO pan): approx. 750 ETB
 - o Mini-slabs (80 x 60 cm, 5 cm thick, with SATO pan): approx. 350 ETB
- AIM plastic slabs (manufactured by SilAfrica) imported from Kenya:
 - o AIM slab small (61 cm x 61 cm) [price not known/not seen in field]
 - o AIM slab medium (61 cm x 81 cm): approx. 550 ETB
- SATO pan (manufactured by Lixil) imported from Kenya
 - o SATO pan: approx. 150 ETB
 - SATO pan retrofitting on slabs constructed from wood and mud: approx. 350
 - SATO pan with concrete skirting: > 750 ETB



Pre-cast circular concrete slab (120 cm) with removable drop-hole cover



Pre-cast rectangular concrete slab (120 x 120 cm) with SATO pan



Pre-cast concrete mini-slab (60 x 80 cm) with SATO pan



Pre-cast circular concrete slab (120 cm) with SATO pan



SATO pan with concrete skirting



SATO pan with concrete skirting



Retrofit of SATO pan on wood/mud slab



SATO pan



AIM slab medium



AIM slab small

Annex 3 - Health Extension Workers & Health Development Armies

In rural Ethiopia primary health care is delivered through hospitals, Health Centers and Health Posts. Kebele-level Health Posts are usually staffed with two Health Extension Workers (HEWs) who as a team provide service to 3,000 to 5,000 people with the goal of having one HEW per 500 households. The HEWs are exclusively women with at least grade 10 education and are recruited from the Kebele that they are intended to serve. They receive a one-year training on 16 health care packages The health extension workers are expected to spend most of their time (more than 4 days per week) on community outreach program visitation to households. The monthly salary of HEWs depends on their experience and ranges between 2,400 to 4,100 ETB in the Woredas visited for this study.

The Health Development Army (HDA) refers to a voluntary community movement that is intended to facilitate participatory learning on health issues at the grassroot level. A health development team comprises up to 30 households in a neighborhood. Volunteer community health promoters, usually organized into the HDA, are expected to apply health education in their own households and to help HEWs to mobilize the community and to act as community role models. 18

HEW Health Care Packages

Hygiene and environmental sanitation

- 1. Construction and maintenance of sanitary latrines
- 2. Solid and liquid waste disposal
- 3. Water supply safety measures
- 4. Control of insects and rodents
- 5. Food hygiene and safety
- 6. Personal hygiene
- 7. Healthy home environment

Disease prevention and control

- 1. HIV/AIDS and STI prevention and control
- 2. TB prevention and control
- 3. Malaria prevention and control
- 4. First aid

Family health services

- 1. Maternal, newborn, and child health
- 2. Family planning
- 3. Immunization
- 4. Nutrition

Cross-Cutting

1. Health Education and Communication 19

¹⁶ Ethiopia Federal Ministry of Health. Health Sector Development Program IV, 2010.

¹⁷ Maternal Health Task Force. Health Extension Workers in Ethiopia, 2014.

¹⁸ World Bank Group. Ethiopia Health Extension Program, 2016. Note: two health care packages have recently been added, one on non-communicable diseases and one on community-based health insurance scheme.

¹⁹ Recently, additional services were included in this package, particularly for children and women, such as integrated community-based case management, community-based newborn care, and providing long-acting family planning (Mangham-Jefferies, et al., 2014. How do health extension workers in Ethiopia allocate their time? Human Resources for Health 2014, 12:61)

Annex 4 - Challenges with supply impacting demand creation

Profit margin. PSI agrees with the slab manufacturers on the prices for the sanitation products. The price for concrete slabs is based on the costs of the raw materials (concrete, iron bar, gravel and sand) and a profit margin of 50 to 80 ETB. In the past few months the prices for concrete and iron bars went up dramatically, however the sales price for concrete slabs has not (yet) been adjusted. Therefore, slab manufacturers appear to have little interest in generating additional demand at the moment.

Transport. The sales price agreed between PSI and slab manufacturers does not include transport costs. However, in some locations (e.g., the hilly topography of Kindo Didaye) it is very costly to transport heavy concrete slabs from a central manufacturing point to the end user's homestead.

As a response to the challenges described above, the PSI team decided on a few changes: e.g., in Kalu all sales agents are trained in manufacturing concrete slabs and they prepare slabs at the end user's location. The households have to acquire and prepare concrete, iron bar, gravel and sand. Then the sales agent constructs the slab on the spot for a fee of 100 to 200 ETB per slab. All sales agents are trained masons and usually offer additional work on the latrine for a fee of up to 400 ETB.

36