Posted Questions from TRANSFORM WASH webinar:

Meeting Consumers Where They Are: Evolving Business Models for Market-Based Sanitation in Ethiopia

September 27, 2022

What would you advise as type of service/business for areas where open defecation is still a common practice. So, what would be a first market step parallel with or right after CLTSH approach?

In cases of households that don't have toilets, masons or contactors can provide toilet construction services, and households can reduce the cost by preparing the pit themselves. Depending on affordability, product offerings can range from a simple slab floor (with no super structure) to a full toilet model.

The models for households with existing unimproved toilets can also apply to those that don't have toilets but with a somewhat different product and service offering.

Could you share the list with us on what were these 22 types of products and services?

Here is the list of sanitation products that had recorded sales by T/WASH business partners last year:

Product Category	Product
Concrete slab	Bamboo reinforced
	Iron bar reinforced
SATO pan related	SATO pan (only)
	Concrete slab with SATO pan - bamboo reinforced
	Concrete slab with SATO pan - iron bar reinforced
	Mini concrete slab with SATO pan - bamboo reinforced
	MIni concrete slab with SATO pan - iron bar reinforced
	Raised foot floor upgrade with SATO pan
	SATO pan installation on concrete floor (retrofit)
	SATO with concrete Skirting
SATO stool	SATO stool
	SATO stool and installation
Plastic slab	Plastic slab - medium
	Plastic slab - small
	Plastic slab medium and installation

	Plastic slab small and installation
Full toilet	Full toilet semi offset
	Full toilet simple pit
	Full toilet single offset
	Full toilet twin offset
	Concrete rings sub structure
	Toilet substructure - other materials

Monte, you mentioned a shift to upgrades options. Were customers upgrading what they had or upgrading incrementally over time? In other countries we have found customers usually only want to invest one time in a latrine. Did you see a trend of repeat customers who upgrade their infrastructure over time?

I don't have an immediate answer to this excellent question […] We plan to add questions about subsequent upgrades to our installation quality monitoring survey next year.

So interesting how the door-to-door sales model is scaling better than others and has the highest viability. Why are some businesses (21%) giving up on this business? How sustainable do you think these business models are?

There are two aspects of this that we're examining. The first one is the overall rate of partner dropouts, which has been decreasing over time. It was 40% in 2018 and decreased to 13% in 2021, which shows us that the value of the business seems to be growing. Digging deeper, however, we analyze dropouts by type of businesses, such as larger sanitation manufacturers/contractors, which is 31%, vs. mason/installers, which is 14%. This indicates that, despite the small size of the business, this service delivery model is the most viable one, while larger businesses that have focused on slab production and installation have seen less value in the portfolio since startup. We will be analyzing these trends further as more sales agents and larger businesses are trained in the problem-led sales techniques, and their higher-value offerings are broadened and promoted.

Does the programme provide any financing options for households to invest in (upgrading) their sanitation?

We've begun with financing for businesses first, which has shown promise. We're running a subsidy study at the moment and will present on that at UNC Water and Health Conference and will also have another webinar specifically on finance.

With regard to the Door-to-Door simple upgrades - who provided the independent masons with the stock of SATO pans? Did they have to pre-purchase a stock, or were they available on a sale-or return basis from PSI/SNV?

The SATO pans and other finished manufactured products are supplied through a fully commercial supply chain that runs from importer/supplier to distributor to local retailer. Generally, local hardware shops stock the products for local purchase. Masons have a working relationship with these shops whereby they acquire the stock in cash or through credit sales. However, this is a pure business relationship not facilitated by the program.

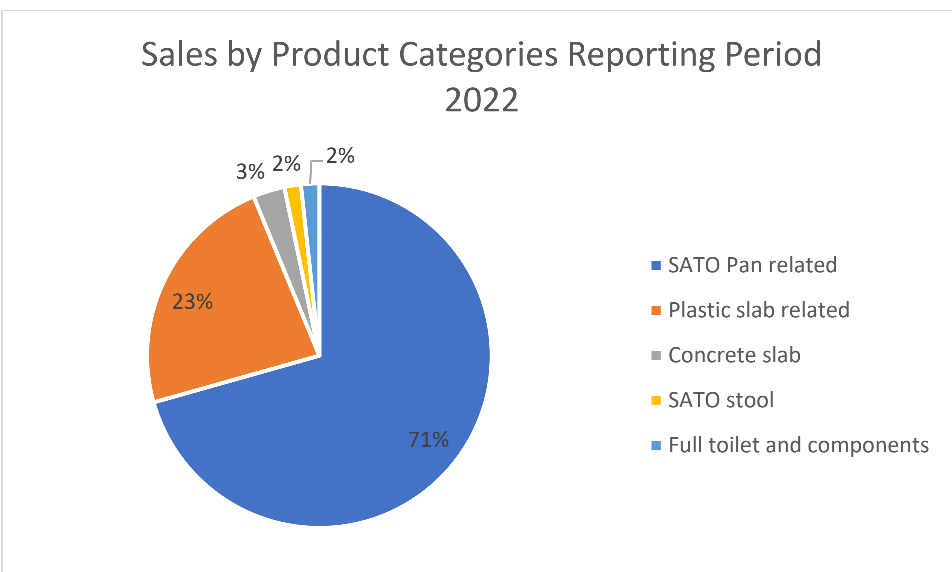
In my experience, training existing masons hasn't led to significant additional sales for a variety of reasons. Were new people trained as masons or was there some other way to encourage masons who might already have enough work to do to undertake door to door sales?

Our business partner assessment data shows that 31% of masons are startups who were unemployed and 51% have previous experience in construction. Out of the novice masons, more than 85% are still active.

We prefer to work with masons who have already engaged in some level of construction business for obvious reasons related to existing skill sets. They may wish to start up their own fledgling solo business, and sanitation installation is a good way to do it, or they may add it to a broader construction portfolio. 20% of masons take contracts and recruit support and labor to meet customer demands

Do you have a pie chart or other graphic that show the uptake of each upgrade option used? What impact did the door-to-door promotion have? Number of beneficiaries? Finally, apart from the number of business partners you had, what measurable impact did you have on the enabling environment? Market share?

Please see graphic below with sales by product type. These are the only products of their kind that exist in most peri-urban and rural markets. Door-to-door upgrade solutions accounted for 80% of sanitation sales reported by business partners in 2022. Nearly 40,000 toilets were sold by T/WASH business partners from October 2021 to September 2022 through door-to-door sales.



On the enabling environment question the most measurable result has been the publication and adoption of the Ministry of Health's Market-Based Sanitation Guideline. Also, T/WASH has supported enabling environment work at the woreda (district) level, and this has resulted in measurable improvements in Institutional Strength Index scores, a tool we introduced for self-evaluation of woreda programs across a range of capacity measures. Much more work is also underway on taxation, subsidy, and finance issues, and there will be more to report on these issues in the coming year.

Interesting to see the deskilled options alongside the full toilet options. Do you have information on the durability of different options? Do you have a sense of whether simple upgrades are taking business away from skilled masons, or is the market being segmented based on assumed willingness to pay?

The options we promote through business partners have so far proven to be durable, but we will need to assess on-going maintenance issues and how long products continue to serve households. To date, we haven't had complaints on durability but some on installation quality, which we've worked with TVETs (vocational colleges) and mason/installers to address. Some products, like SATO pans, are better suited to households and may be damaged more easily when used in public and institutional latrines.

The upgrades are not taking business away from skilled masons, who have not provided such services and sometimes engage in installing upgrades and other sanitation services as an add-on to their portfolios. The full toilet business is a low-volume, high-margin one for which it has been challenging to reach scale and is not a segment of highest need for improving rates of improved household sanitation.

My understanding is that often the very simple latrines that are self-dug in homes in rural Ethiopia can suffer from collapse after a short time. The door-to-door upgrades that masons provide - do they address this issue? Have you seen this as a problem where SATO pans have been installed on an unimproved substructure? When talking about the number of toilets sold is this referring to the slabs/SATO pans?

The door-to-door upgrades don't address this issue directly because they don't upgrade latrines that are prone to collapse. For those unstable latrines, masons would recommend that households dig a new pit so they can be provided with more stable flooring suitable for self-dug latrines. In areas where there is danger of collapse due to the soil formation, different pit lining options have been introduced, and masons are trained on how to construct (e.g. using cement rings, used tires, masonry, and stabilized soil cement bricks). There has been a gradual increase in uptake of substructures in the market.

Toilets sold refers to products and installation services that upgrade household facilities to basic sanitation status. There are a range of products and services from a simple floor upgrade to full toilet options. The types of products include but are not limited to installation of plastic products (SATO pans, plastic slabs) and pre-cast concrete slabs with embedded SATO pans. In the 2022 reporting period, SATO-pan-related floor products accounted for 70% of all toilet sales. SATO pans is an attractive, affordable product for upgrading existing latrines; however, the SATO pan must be accompanied by cleanable flooring to qualify as a basic sanitation service. T/WASH has addressed this by building business capacity to install "skirting," a method of installing SATO pans with a layer of concrete finishing to make the floor smooth and easy to clean. We are also exploring with Rwanda-based EarthEnable an inexpensive earthen flooring solutions using a flax resin to create an alternative cleanable surface.

What were the factors that contributed to the masons and others' businesses commitment to the whole process?

What it comes down to is business viability. Profit margins are highest for masons among business partner types with approximately 50% gross profit from sale and installation of a SATO pan. On average, a mason has to sell and install five toilet upgrade products per week for this component of the portfolio to provide a tangible proportion of business revenue. There are some masons who completely rely on sanitation-related business for their income. Masons have an average operating profit of 1,600 ETB (US $30) per month from their sanitation-related work, which is quite motivating for an individual who resides in rural Ethiopia. In the coaching of mason/installers, we engage them in setting of goals for what they want to earn in a month, then we help them to figure out how many households they need to reach to result in the sales / installations required to achieve that goal. We help them achieve their goals through coaching on effective sales techniques, and achieving success motivates the masons and increases their commitment.

Is there an income level tipping point beyond which families are willing to spend funds on an improved latrine? Did you pay attention to hand washing stations as part of improvement and was the door-to-door approach your best selling point or did you use other means to have people pay?

We haven't determined such a tipping point, but equity analysis of our installation quality monitoring survey indicates that customers tend to fall within the top two quintiles of rural households, according to a possessions index. We did increase our focus on establishing supply chains for hand washing stations, particularly after the onset of the Covid-19 pandemic, but they were not made part of the door-to-door approach. We wanted mason/installers to hone their selling technique on sanitation options, but we plan to expand that approach and messaging in the future. We worked with business partners to improve marketing techniques more broadly than door-to-door, such as by training on marketing planning, market day promotions, retail over branding, and materials such as fliers, signboards, and posters, for example.

Why are the toilets not made of ceramic (porcelain)? Is it a cost issue or the raw materials not available locally? what is plastic toilets' lifespan?

Ceramic products are not locally manufactured, and imports of these products are prohibitively expensive in Ethiopia.

Can you speak more to why you saw the rise and then drop in average monthly sales for retailers? And, are masons sourcing SATO pans directly, or are they sourcing from retailers?

The drop in sales by retailers was not in total but directly to households, which indicated success of our efforts. Total retail sales increased substantially with a shift to business-to-business sales to masons and construction contractors, who then sold directly to households with quality installation services. Thus, direct-to-household sales by masons have surpassed that of retailers. Masons mostly purchase SATO pans from nearby retailers, but we're working on helping them acquire products less expensively through regional wholesalers, where possible.

I'm interested to hear about how the recently developed and approved the smart and target get subsidy is affecting the business models you came across?

We think if subsidies are targeted and smart, they will support the business models rather than impede them. To ensure this, T/WASH worked with the MoH on developing its sanitation subsidy protocol and is conducting a pilot study of modes of implementation. We will be sharing soon results of the study and recommendations for scaling such a program. We see bigger challenges with supply-side subsidies that distort business incentives and heighten businesses' expectations from and dependence on external funders.

I presume door-to-door sales was the most expensive from a business point of view? With cost often being one of the most important considerations, are customers willing to pay more for door-to-door sales approaches? who pays for sales?

Door-to-door is a viable business model of its own and does not add significantly to the cost to the consumer. Construction businesses that build homes and other facilities also thrive by offering on-site services. There is a limit to reaching scale if offerings are not diversified over time or if mason/installers, for example, only rely on doing both promotion and services on their own (rather than employing a sales agent to promote ahead). From the point of view of facilitation, training and coaching is rather intensive and needs institutionalization into regional and district public programs to be sustained and scaled.

I have a concern when we talk about investing in innovative products (even simple ones, like the SATO pan), when the level of safety and status of the latrine is far from the definition of being improved - lockable doors, washable slabs, handwashing facilities, structural safety, etc.

What you mentioned are important components of quality sanitation facilities, and everything we are doing is to promote business models around broadly improving toilets, not just selling SATO pans. The pans are an attractive, innovative hook for consumers to become interested in making these improvements, but businesses are trained to offer whole packages that do more to achieve improved status than stick a SATO pan into a mud surface, for example. The key is to make these improvements affordable and variable enough to meet consumers where they are ready to invest. What they cannot afford (or are not willing) to do now, perhaps they will do later, if they have a good experience. This is something that needs more study….to understand how sales and marketing can grow households' willingness to continue investing.