USAID Uganda
Sanitation for Health Activity (USHA)

Early impact and learnings from USHA’s market-based sanitation pilot in Uganda
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is is an update to the document titled “Early impact and initial learnings from USHA’s market-based sanitation model in Uganda” developed in October 2020. The original document reported results up to August 2020. The data and analysis reported in this document covers the cumulative results achieved between October 2019 and February 2021.

Overview

In late 2019, the USAID Uganda Sanitation for Health Activity (USHAS) began piloting a market-based sanitation (MBS) model in 13 rural sub-counties across Central and Eastern Uganda to improve household access to basic sanitation. This document lays out the impact of the MBS model pilot over the first 18 months through February 2021 and discusses its potential to help households obtain basic sanitation in Uganda and similar contexts.

About USHA

USHA is a USAID funded five-year project (2018–2023) implemented by Tetra Tech with partners SNV USA, Sanitation Solutions Group, FSG, and BRAC. USHA works in 20 districts in three regions in Uganda implementing contemporary and integrated WASH interventions to increase access to sustainable water and sanitation products and services.

USHA outputs:
1. Increased household access to sanitation and water services
2. Key hygiene behaviors at home, school, and health facilities adopted and expanded
3. Strengthened district water and sanitation governance for sustainable services

Background and context

Household sanitation is a longstanding development priority for the Government of Uganda. However, despite significant effort, the country is off-track to meet the Sustainable Development Goal of universal access to basic sanitation by 2030. Currently, only about 20% of the population has access to basic sanitation. Further, government policy discourages subsidies towards sanitation. This provides a tremendous opportunity to foster MBS.

1 Sanitation facilities designed to hygienically separate excreta from human contact, and which are used by a single household. Refer to the sanitation ladder by the Joint Monitoring Programme for Water Supply and Sanitation by WHO and UNICEF (JMP) to understand the different sanitation levels.
2 The Uganda National Household Survey 2016-2017
Market-based approaches can help improve access to basic sanitation among Ugandan households: The model enabled approximately 9,000 households (14% of its target market) to gain access to basic sanitation in the first 18 months of implementation. This compares favorably to first-year sales figures achieved by successful MBS programs in other countries.

Households exhibit a good willingness to invest in sanitation: Households have invested approximately UGX 6.42 billion (USD 1.73M) in sanitation. Most households (67%) that constructed a new toilet chose the most expensive double-stance product. On average, household expenditure on sanitation was over 77% of the value of their household assets.

Households need not necessarily climb the sanitation ladder one rung at a time: The model encouraged 2,712 households who previously did not have any toilet to invest in one. Of these, 45% invested in basic sanitation, and nearly half of them invested in double-stance toilets.

MBS models that undertake demand creation, sales and delivery through organized different entrepreneurs in the target geographies, in conditions like rural Uganda, can benefit from the following insights:

- Community kick-off events and door-to-door sales can be powerful means of informing about product options and avenues for purchase. Ensuring adequate incentives for all the actors, especially promoters and sales agents, can help improve quality of these touchpoints.
- When the model allows households to choose their own toilets and builder (e.g., mason), implementers should choose partner builders based on a deeper understanding of household preferences in builders, or must on-board a larger number of builders to ensure uniform service quality.
- Introducing improved products that prioritize spending towards attractive externally visible features (e.g., plastered walls), with basic internal features (e.g., cement screed interface), may help increase adoption.

Summary of findings

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From April 2018 to July 2019, USHA supported the Ministry of Health’s Environmental Health Department and other stakeholders to develop the National Sanitation Market Guidelines for Basic Sanitation in Uganda (NSMG). The NSMG identifies key barriers and drivers influencing the uptake and provision of basic sanitation across 11 customer segments (Segment A – K). Each of these 11 segments are defined based on five variables – region, urban or rural setting, distance from main road, source of non-drinking water, and whether the household uses mobile money or not. Households within a segment are largely homogenous in regard to their needs and preferences towards improved toilets, but vary in income level and home ownership.

Using the insights from the NSMG, in late 2019, USHA began piloting a MBS model in 6 sub-counties in the Central region and 7 sub-counties in the Eastern region of Uganda.

In the Eastern region, USHA targeted Segment E households – rural or urban households (USHA’s MBS model is predominantly rural) that get non-drinking water from tube wells, boreholes or other protected water sources, and may or may not be using mobile money. In the Central region, USHA targeted Segment C households – rural households that get non-drinking water from any source other than piped connections and may or may not be using mobile money. Households in Segment E more strongly desire respect from their community and more strongly value toilets that are durable and well ventilated, as compared to households in other segments. In contrast, households in Segment C more strongly desire products that households in urban areas use, and place greater value on toilets that can be easily cleaned with water, and which are safe and secure to use. Segment E has a lower...
median ability to pay for basic sanitation (UGX 539,000, or about USD 144) compared to Segment C (UGX 722,000, or about USD 190).

USHA partnered with seven community-based organizations (hereafter referred to as grantees), to manage the day-to-day implementation of the model. Prior to starting implementation, USHA conducted a baseline survey that captured the sanitation and handwashing service levels of households within the target sub-counties. Between August 2019 and March 2020, USHA baselined approximately 87,000 households in about 500 villages, of which approximately 83,000 households resided in villages where the model was ultimately implemented. As seen in Figure 1, about 23% of baselined households already had access to basic sanitation. Further, 8% had access to a handwashing facility with at least limited service.6

The model targeted the remaining 64,000 households that did not have access to basic sanitation. Through this document, we aim to lay out the impact of the MBS model, and assess whether it enabled households to build a new improved toilet or upgrade their existing toilet to become improved. We also aim to understand whether households engaged with the MBS model in the intended manner. But first, let us share an overview of the model.

Figure 1: Household sanitation and handwashing service levels as per baseline

The MBS model
The model is intended to address some of the key barriers that prevent households from investing in basic sanitation. Sanitation products available in the market are often unaffordable or unappealing to the households, or the household may be unaware of their existence. Further, there are almost no who see sanitation as a core business, or who devote appropriate attention to it. Hence, the construction process is highly disaggregated, and requires the household to collect all necessary information, and gather materials and services from 6-8 suppliers. Typically, a household is meant to engage with the model across three touchpoints

6 As per JMP, limited service is defined as availability of handwashing facility on premise without soap and water. Basic service is defined as availability of handwashing facility on premise with soap and water.
described in Figure 2.\textsuperscript{7}

The roll-out of the MBS model took place village-by-village, with triggering sessions beginning in October 2019. About 50% of the villages were triggered by the end of 2019, 40% were triggered between January and March 2020 (Figure 3). As of February 2021, target households had engaged with the model for an average of 15 months. However, program activities were limited during March to June 2020 because of restrictions of movement caused by the COVID-19 pandemic.

Figure 2: Overview of USHA’s MBS model, across key customer touchpoints

1. **Community triggering session facilitated by grantee**
   - Current sanitation status of the community is discussed
   - Sanitation and hygiene products on offer are explained. The session focuses more on the attractive product features and the related physical and emotional benefits to households, rather than on the shame and disgust of not owning a toilet (as is done in Community Led Total Sanitation triggering sessions)
   - Demand activators and sanitation entrepreneurs are introduced

2. **Sales pitch by community-based demand activator**
   - Demand activators (i.e. Sanitation Promoters - SP) visit households to help them identify the product best suited to their needs
   - The SP connects the interested households with a sanitation entrepreneur (i.e., a toilet builder – in this case, an USHA-trained mason)
   - The SP receives a commission from the mason for every successful job. Additionally, until most masons start paying regular and sufficient commissions, grantees are paying SPs a nominal stipend

3. **Mason visit and toilet construction**
   - An USHA-trained mason visits the interested household to finalize the product and price
   - The mason shares aggregated information on type, quantity, cost, and suppliers of required materials
   - The mason completes the construction once the household arranges for the materials
   - The mason pays the SP a commission on completion of the job

Figure 3: Overview of MBS pilot implementation timelines

<table>
<thead>
<tr>
<th>Trigger sessions started</th>
<th>Endline visits started</th>
<th>1st year completed*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 2019</td>
<td>Jun 2020</td>
<td>Sep 2020</td>
</tr>
<tr>
<td>Dec 2019</td>
<td>234 villages triggered</td>
<td>425 villages triggered</td>
</tr>
<tr>
<td>(50% of target)</td>
<td>(90% of target)</td>
<td>Operations affected by COVID-19 restrictions</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>Sep 2020</td>
<td>Sep 2020</td>
</tr>
<tr>
<td>6,581 basic facilities constructed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb 2021</td>
<td>9,075 basic facilities constructed</td>
<td></td>
</tr>
</tbody>
</table>

* Other successful MBS programs facilitated an average of 5,300 toilet constructions in the first year

Impact of the MBS model so far

In July 2020, USHA began conducting “endline” visits to understand the type of toilets households chose to invest in and ask them questions about their toilet buying process. As of February 2021, 14,519 endline visits were made across both regions, out of which 13,148 households\textsuperscript{8} were considered for this analysis. Of these, 9,075

\textsuperscript{7} Refer to the blog, Developing a Market-Based Approach to Sanitation in Uganda, at Globalwaters.org for more details on the MBS model.
\textsuperscript{8} Data on respondent type was available for 65% of all entries. In most cases the respondent was the household head (65%) or their spouse (20%). In a few cases, the respondent was either another relative (10%), or a non-family member (5%).
\textsuperscript{9} Of the 14,519 visits, 1,371 entries were omitted from the dataset as these households made no changes to their toilet, already had basic sanitation at baseline, had toilets that could not be classified due to data collection errors, or were repeat entries for the same household.
households (69%) invested in basic sanitation, 987 households (8%) invested in limited sanitation, and the remaining 3,086 households (23%) invested in unimproved sanitation, after the MBS model was introduced (Figure 4). The 9,075 households that invested in basic sanitation represent approximately 14% of the target market; i.e., households that did not have access to basic sanitation at baseline. Other MBS programs that are considered successful (3Si Bihar, SanMark Cambodia, SMSU Cambodia), and went on to facilitate the sale of 150,000 – 200,000 improved toilets over 5-7 years, facilitated an average of 5,300 toilet sales in the first year.

Of the 13,148 endlined households, 39% had at least limited handwashing facilities, with a majority (70%) meeting the basic handwashing definition.

Further, 1,735 households who did not have a handwashing facility at baseline now have one.

By enabling households to gain access to basic sanitation and basic handwashing facilities, the model led to significant investments in the local economy. The 13,148 endlined households are estimated to have made a cumulative investment of close to UGX 6.42 billion (about USD 1.73M) in labor, materials, and transport, across all toilets built and upgraded (Figure 5). Seventy-nine percent of this investment was towards basic facilities. The household investments in sanitation generated by the model is over three times USHA’s approximately $500,000 investment, through 12-month grants to the seven local partners, to establish the model in the target districts.

Figure 4: Breakdown of the total number of households (HHs) that were endlined

<table>
<thead>
<tr>
<th>Total # of endline visits</th>
<th># of HHs omitted from the data set</th>
<th># of HHs with unimproved sanitation</th>
<th># of HHs with limited sanitation</th>
<th># of HHs with basic sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>14,519</td>
<td>1,371</td>
<td>3,086</td>
<td>987</td>
<td>9,075</td>
</tr>
<tr>
<td>HHs with a complete superstructure</td>
<td>6,434</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HHs without one or more superstructure features (e.g., no door)</td>
<td>2,368</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HHs without data on nature of superstructure</td>
<td>273</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10 The USHA project team reviewed a random sample of 100 toilet interface photographs taken during the endline survey to assess construction quality. Eighty-two toilets appeared to meet improved toilet standards, 7 appeared to be improved toilets that were still under construction, 7 appeared to be poorly constructed improved toilets that may not hygienically separate excreta from human contact, and the remaining 4 appeared to be unimproved toilets.
11 Calculated by dividing the number of households with basic sanitation (9,075) by the number of households that engaged with the MBS model and did not have access to basic sanitation at baseline (63,854—see Figure 1).
12 Due to unintended omissions during the baseline survey, baseline data is available for 8,607 (65%) of the 13,148 endlined households. Of the remaining 4,541 endlined households without a baseline record, we have assumed that all households that built a new improved toilet did not have access to basic sanitation prior to implementation. USHA has taken steps to enhance the comprehensiveness of the baselining process for the next phase of implementation.
13 Data was obtained from FSG analysis conducted during the development of WASHPaLS ‘Scaling Market-based sanitation’ desk review (Agarwal, Chennuri, and Mihaly, 2018).
14 Of the 13,148 households, information on toilet spend was shared by 5,656 households (43%). Based on this sample, we calculated the average toilet costs for different product types for each grantee and extrapolated to the overall dataset by multiplying these average costs with the corresponding number of households that invested in each of the product types.
Research conducted during the development of the NSMG suggests there are nearly 4.9 million households across Uganda that can afford a basic sanitation facility. These households represent a total market potential of UGX 3.5 trillion (approximately USD one billion).

The total investment corresponds to an average household investment of USD 112 in the Eastern region, and USD 155 in the Central region. This expenditure is equivalent to 77% and 80% of the value of the assets owned by households in Segment E and C respectively, thereby highlighting good willingness to pay for sanitation. For reference, households in the Eastern region annually spend USD 51 and USD 41 on education and health, respectively, while those in the Central region spend USD 113 and USD 63, respectively.  

The rest of the document focuses on understanding the experiences of the 9,075 households that gained access to basic sanitation. This is presented across the four key stages of the customer buying process – information gathering and decision making, channel selection, toilet product selection, and construction. These learnings are primarily based on quantitative data gathered through the endline surveys between July 2020 and February 2021. In the next phase of implementation, USHA also intends to conduct qualitative household interviews (including households which did not invest in basic sanitation) to develop a deeper understanding of their experience with the model.

**Insights from household engagement**

**Information gathering and decision making**

Prior to making an investment decision, households typically gather information about available toilet products, their prices, and the construction process. True to the MBS model’s design, most households obtained this information through the triggering sessions and by speaking to SPs. Sixty-three percent of the households attended triggering sessions and also spoke to an SP. Thirty-three percent of the households either attended a triggering session or spoke with an SP, and only four percent did neither. It is encouraging that most households mentioned that these touch points convinced them to invest in basic sanitation (Figure 6).

However, due to uneven quality and consistency of implementation across sub-counties, households were not uniformly influenced by these two

**Figure 5: Total household investment in building new toilets, or upgrading existing toilets**

<table>
<thead>
<tr>
<th>Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HH</td>
</tr>
<tr>
<td>Basic</td>
</tr>
<tr>
<td>Limited</td>
</tr>
<tr>
<td>Unimproved</td>
</tr>
</tbody>
</table>

The following insights were obtained from the endline surveys:

- **Information gathering**
  - 64% of households mentioned that they gathered information about available toilet products, their prices, and the construction process.
  - 51% of households attended trigger sessions on behalf of the entire household.
  - 49% of households spoke to an SP.

- **Decision making**
  - 56% of households made a decision based on the information gathered.
  - 44% of households made a decision based on their own assessment.

15 Health and education expenditure data for the Central and Eastern region was obtained from the Uganda National Household Survey Report, 2016/17.
16 On average, one household member attended the trigger sessions on behalf of the entire household.
touchpoints. For example, in six out of thirteen sub-counties, only half of the households that engaged with both touchpoints cited SP interactions as a key factor, compared to 92% in the remaining seven sub-counties. Grantees in these six sub-counties did not always pay SPs on time or train them appropriately. A learning survey conducted by USHA on the payment of commission to SPs, revealed that USHA-trained masons, when engaged, are not sharing timely and adequate commissions for all successful leads. Thus, SPs from these sub-counties may have visited households less frequently and may not have conducted persuasive sales pitches.

Figure 6: Key factors that convinced households that both attended the triggering session and spoke to an SP to improve their toilets

![Bar chart showing key factors that convinced households to improve their toilets.]

Channel Selection

After deciding to make a purchase, the households were at liberty to choose their preferred toilet product, and select a mason or other individuals known to them (e.g., family members and friends), to construct their facility. However, the model is designed such that households would benefit from selecting an USHA-trained mason as they were trained on cost-optimized construction techniques, were linked to other value chain actors (e.g., material suppliers and local government officials).

17 Please refer to the Effectiveness of Referrals and Commission Sharing between SPs and Masons in USHA’s MBS Approach learning brief for more information.
18 Figure 6 represents households that attended triggering sessions and also spoke to SPs. Households that only attended the triggering session, or only interacted with the SP also cited the respective touch points to be most influential to their decision making – 69% and 87% respectively.
19 Consultation with the grantees and local government officials suggest women’s participation in the decision-making process may have been understated because of the way the question was phrased. USHA has modified the question for the next phase, taking these cultural nuances into account.
20 USHA on-boarded and trained about five masons in each sub-county based on the mason’s building experience, social standing within the community, familiarity to the local government, ability to read and write, and ability and willingness to travel to nearby villages to construct toilets.
suppliers, pit diggers), and were equipped to share relevant information on material quantities and costs with the households. Indeed, the endline survey indicated that households using USHA-trained masons were more likely to receive useful information than other households (refer to the section on material purchase for more details).

As seen in Figure 7 below, most households in both regions chose to use untrained masons or other individuals to construct their toilet. Though USHA expected some households to use other masons, the actual extent was unexpected. We believe households may have done so for a few reasons.

Product Selection
Households’ product selection is influenced by their interaction with both SPs and masons. SPs were trained to conduct door-to-door marketing, while USHA-trained masons were taught how to construct the four toilet products developed by USHA to cater to the segments’ ability to pay, as well as their preferences. Prior to construction, households consult their selected mason and finalize the toilet features and agree on a price.

More households, 62%, chose to construct a new toilet while 38% chose to upgrade their existing unimproved facility. Of the households that constructed a new toilet, most chose to build two stances (67%) as opposed to a single stance (29%).

This matches with insights on product preferences for segments C and E documented in the NSMG.

Firstly, not all USHA-trained masons immediately realized the business potential in the model and were not consistently active in all sub-counties, especially during the early months of the pilot. Secondly, USHA-trained masons were not always uniformly spread across a sub-county, making it time-consuming and expensive for them to travel to distant households. Thirdly, households may have felt more comfortable with another mason due to higher familiarity and trust. The data suggests that even in villages that had an active USHA-trained mason, more households still chose other masons. The masonry expenses reported by households indicated that USHA-trained masons charged similar fees as other masons and other individuals. More households chose friends and family in the Eastern region, compared to the Central region. This may be due to the relatively lower ability to pay in the Eastern region.

Figure 7: Type of construction labor chosen by households

<table>
<thead>
<tr>
<th>% of households by type of construction labor, across regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>USHA-trained mason: 10%</td>
</tr>
<tr>
<td>Other masons: 61%</td>
</tr>
<tr>
<td>Other individuals: 29%</td>
</tr>
</tbody>
</table>

Eastern region Central region
Despite optimizing and standardizing the type of interface (i.e., toilet floor) across the four products, we expected households to incorporate some local innovations or adaptations. However, the extent of local adaptation was surprising. As seen in Figure 8 below, several households chose to apply cement screed (a mix of cement, sand, and water) on top of an unimproved interface as a means to obtain an improved toilet. In many cases, households chose to construct a cemented bathing area alongside their toilets.

Even though a log and mud floor with cement screed is cheaper (UGX 87,000) than a cement slab, the data indicates that toilets with cement screed were not consistently cheaper than similar toilets with a cement slab. This suggests that households that chose cement screed may be saving money on the interface to build a better superstructure or to dig a deeper pit. As a part of the planned qualitative interviews, USHA intends to develop a better understanding of the toilet features chosen by households and incorporate relevant learnings into product offerings for the next phase of implementation.

In all communities, USHA provided households with the option to fit a SATO product around the drop hole. However, most households (94%) across both regions did not invest in SATO. It is worth noting that most households (91% in the Eastern region and 95% in the Central region) did not have access to piped water for non-drinking purposes. Given that SATO is a pour-flush toilet, the data indicates that toilets with cement screed were not consistently cheaper than similar toilets with a cement slab. This suggests that households that chose cement screed may be saving money on the interface to build a better superstructure or to dig a deeper pit. As a part of the planned qualitative interviews, USHA intends to develop a better understanding of the toilet features chosen by households and incorporate relevant learnings into product offerings for the next phase of implementation.

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**Notes:**

22 Households may construct any superstructure that fits their needs and abilities; it may not necessarily be the same superstructure as suggested in the other USHA product options.

23 Based on product costing done by USHA for the Central, Eastern, and Northern region; includes mason labour and material costs. Of the UGX 87,000, the material cost for the cement screed is about UGX 25,000.

24 USHA collaborated with the SATO local manufacturer and distributors to enhance the availability of three products (pan, flex, stool) in hardware stores and through BRAC branches in and around the target sub-counties. Thus, product unavailability is unlikely a reason for households choosing not to install a SATO. Please refer to the SATO Early Purchasers learning brief for more information.

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technology, not having access to piped water near the premises could have been a barrier for uptake. Thus, to reduce smell (a household preference, particularly in Segment E), USHA may consider including a locally made drop-hole cover to its product offering.

Finally, it is worth noting that out of the 13,148 households considered for this analysis, 2,712 (20%) of households were practicing open defecation at baseline. Out of these, 45% invested in basic sanitation, of which 46% were double-stance toilets, 51% were single-stance toilets, and the remaining were base products. While households practicing open defecation were not singularly targeted by the intervention, this demonstrates that a well-suited set of products, appropriate marketing and a less cumbersome delivery model can help households to move directly from no toilet to basic sanitation, without making incremental investments as suggested by the “sanitation ladder”.

Material purchase and toilet construction
The mason’s role to aggregate information on behalf of the household is an important aspect of the model’s design. While few households used a USHA-trained mason, it is encouraging that most of those who did received information about the quantities and costs of construction materials needed. A much lower proportion of households who used other masons or individuals, received adequate information regarding materials (Figure 9).

25 Of the 3,482 households that upgraded their existing toilet, interface data was not available for 152 households due to errors in the survey process. Of the remaining 3,330 households with data on upgrade interface, some households chose a cement slab interface. However, it is very uncommon to upgrade an existing toilet by retrofitting it with a cement slab. After examining 20 sample images of such toilet upgrades, we believe that the enumerator may have incorrectly classified the interface of these toilets as a cement slab upgrade. Most toilets classified in this way are likely to be cement screed upgrades and the remaining may be SanPlat upgrades or new constructions with a cement slab.
This was also the case for information about where to purchase materials – 75% of households that used USHA-trained masons were given this information, compared to 37% of households that used other masons, and 10% of households that used other individuals. This is not surprising, given that other masons and other individuals were not provided with the necessary training or collaterals related to information sharing.

The information shared by USHA-trained masons also appears to have been more useful. Around 65% of households that used USHA-trained masons and received information on where to buy materials from, purchased all materials from the recommended suppliers, compared to only 32% of households that used other masons, and 21% of households that used other individuals.

**Figure 9: Level of information sharing about construction materials by type of mason**

<table>
<thead>
<tr>
<th>% of households that received information on construction material needs, quantities and costs, by type of mason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received complete or most information</td>
</tr>
<tr>
<td>USHA-trained mason</td>
</tr>
<tr>
<td>85%</td>
</tr>
<tr>
<td>Received some information</td>
</tr>
<tr>
<td>44%</td>
</tr>
<tr>
<td>Received no information</td>
</tr>
<tr>
<td>11%</td>
</tr>
</tbody>
</table>

SPs and masons were also expected to share cost estimates for the four toilet products so that households could make an informed decision. As seen in Figure 10, the stated actual spend on masonry and materials for USHA’s toilet products closely matched the estimates that SPs and masons were asked to share with the households. This indicates that it is possible to develop and market attractive products, and deliver them at an intended, affordable cost, through an MBS model.

Overall, most households (72%) surveyed did not report any challenges relating to cost, or product financing, through the construction process. However, 24% of households in the Eastern region and 15% of the households in the Central Region mentioned that they ran out of money after starting the construction process. As a result, households may have been forced to extend the duration of construction. In fact, as part of the learning survey on the payment of commissions to SPs, 50% of the masons interviewed in the Central region stated that delay or default in payment by the household was a key challenge for them.

**Takeaways**

We are encouraged by the results of the pilot MBS model. The interventions have shown that it is possible to improve sanitation among rural Ugandan households using a market-based approach. Apart from bringing health and hygiene benefits to the community, households have made substantial investments into the local economy. The results also illustrate that some households practicing open defecation do not need to climb up the sanitation ladder one rung at a time.

The households’ engagement with the MBS model across the buying process provides implementers

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26 Masonry and material costs for single and double stance toilets were calculated for toilets with a cement slab interface without a SATO, but with complete and sturdy superstructures. Masonry and material costs for Upgrades were calculated for toilets with a SanPlat interface without a SATO, and without any improvements to the superstructure. Material costs for all product types were calculated for households that included material transportation costs in their quotation of total material costs.

27 USHA had not formally introduced financing solutions in the first year of pilots and hence it is unclear if these households had access to financing or not. Please refer to the Innovative Community Financing Initiatives learning brief for more information on community approaches that emerged in some sub-counties.
with learnings that can influence model design and implementation of other MBS models (Figure 11). USHA has considered these learnings for its next phase of implementation at a larger scale.

**Information gathering**
Implementers should pay attention to the quality of sales and marketing touchpoints (such as community kick-off events, door-to-door communication), and ensure that sales agents are adequately incentivized. This work has shown that households are greatly influenced by these touchpoints. To further improve effectiveness,

**Figure 10: Comparison of masonry and material costs with USHA estimated costs**

![Comparison of masonry and material costs](image)

Implementers should frequently shadow and observe sales agents and other actors involved in demand activation activities to provide immediate, and actionable feedback – especially during the early days of the intervention.

While sanitation entrepreneurs (i.e., toilet builders) are often intrinsically incentivized by increased business, sales and marketing agents require a commission-based incentive. USHA is now testing a new incentive model for SPs by restructuring the fully-fixed monthly stipend (approximately USD 12) to a partly-fixed stipend and a performance-based incentive. However, program-funded incentives can only serve as a temporary solution. Implementers must facilitate the sharing of commissions from the entrepreneur to the sales agents for the model to sustain itself without external funds. To encourage this practice, USHA has started facilitating regular in-person interactions between masons and SPs to increase social pressure on the masons to share a commission with the SP.

Further, given the low participation of women in the buying process, USHA is working on identifying ways to increase their participation (e.g., mobilizing increased women participation in trigger sessions and being more targeted in follow ups). USHA is also making necessary changes to the questions asked during the end line visits to develop a better understanding of the gender-based decision-making dynamics within households.

**Figure 11: Key learnings across the customer buying process**

1. **Information gathering**
   - Continuously improve quality of influential sales and marketing touchpoints; ensure actors are adequately incentivized

2. **Channel selection**
   - Enable more uniform service quality by selecting and training entrepreneurs (i.e., a toilet builder) that households are likely to choose

3. **Product selection**
   - Introduce product options that enable households to prioritize investing in features that are visible from the outside

4. **Material purchase and construction**
   - Leverage influential touchpoints to share information that households are currently not receiving
Channel selection
Implementers should strive to understand the criteria and process used by their target customers to choose an entrepreneur, or business, from which to buy services or materials. Doing so will allow implementers to select and train entrepreneurs that households are more likely to use, and help households receive a more uniform service quality. USHA identified masons as the most appropriate entrepreneur type for the pilot sub-counties. While USHA selected partner masons based on criteria perceived as important (e.g., technical skill, ability to read and write, respect in the community), the fact that most households eventually chose other masons indicates that, while masons are the right entrepreneur type, USHA may need to do more to understand how and why customers choose their masons.

If this is infeasible, or if implementers learn or believe that households will inevitably end up choosing a wide range of entrepreneurs, implementers can consider on-boarding and skilling a larger number of entrepreneurs in each location.

Product selection
It is possible that households may be prioritizing investments in externally-visible features (e.g., doors, walls) over internal features (e.g., the toilet floor). Thus, implementers should consider designing and offering product options that enable households to reduce spend on the interface, while providing more focus on externally-visible features that customers value.

USHA should continue promoting the existing toilet products, especially the most popular two-stance toilet, but also consider including cement screed as an interface upgrade option. If formally trained in cement screeding, masons will be able to assess whether the toilet is sufficiently structurally sound to upgrade; e.g., whether the toilet floor can bear the additional weight of the screed – an important safety check that masons may not be carrying out at present. USHA should also attempt to maintain the typical cost that households are paying for screed interfaces to ensure affordability. For instance, one household need only a fraction of a 50-kg bag of cement for screeding, and USHA should introduce mechanisms, such as some of the community financing examples that emerged, that encourage households to aggregate and share materials and reduce costs.

Material purchase and toilet construction
Implementers should leverage impactful touchpoints and activities to support other activities that may not be functioning optimally. For example, USHA could leverage the highly attended, and highly influential triggering sessions and SP visits to share details on where households can purchase materials. This is because other masons are not consistently sharing complete information with households, and it may take time for USHA to on-board and train a larger set of masons.
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