

Uganda Sanitation for Health Activity (USHA)

SATO Early Purchasers Survey

Overview and Summary of Findings

- About 81% of households in Uganda do not have access to basic sanitation. The USAID Uganda Sanitation for Health Activity (USHA) aims to increase access water, hygiene, and sanitation (WASH) services in Uganda.
- Collaborating with Lixil Corporation and Nice House of Plastics (NHOP), USHA supports efforts to strengthen and expand the supply chain of SATO products.
- USHA conducted research of early SATO purchasers in nine districts to gain early insights into customer purchase and usage behaviour and potential challenges.
- We found that a market for SATO products exists among certain types of customers – those with improved toilets and sufficient access to water (e.g., from a piped source).
- Early adopters are almost universally satisfied with the products and installation.

Objective

This learning brief presents findings of a survey with households who were early purchasers of SATO sanitation products sold through two USHA-supported supply chains between November 2018 and September 2019

Background

Household sanitation is a key development priority in Uganda. While 7% of Ugandan households practice open defecation, 55% have access to unimproved sanitation, 20% have access to limited sanitation, and 19% have access to basic sanitation.

In 2015, the Government of Uganda adopted the Sustainable Development Goals (SDG) as part of the national development agenda. Specific to sanitation, SDG 6.2 aims to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation. Adoption of SDG 6.2 requires the Government of Uganda to continue its focus on eliminating open defecation, while also supporting an enabling environment for households to adopt basic sanitation.

The Uganda Sanitation for Health Activity (USHA) is a five-year program financed by the United States Agency for International Development (USAID) increases household access to water, hygiene, and sanitation (WASH) services in Uganda. In early 2018, USHA established a partnership with Lixil Corporation to support the expansion of its supply chain for SATO sanitation products. SATO products, designed for lower income customers, are intended to reduce smell, flies, and make a toilet look and feel more prestigious - features that many households value. Lixil is a global private sector producer of household and institutional sanitation products and owner of the SATO brand. It has a production agreement with Nice House of Plastics (NHOP) in Uganda to locally manufacture three SATO products (SATO Pan, SATO Flex and SATO Stool).



USHA’s support has focused on strengthening the supply chain for SATO products in select districts and sub-counties by linking independent retail outlets with NHOP’s distributors and marketing the products through BRAC’s community health program. USHA also has invested in increasing product awareness through marketing and mass media advertising. USHA introduced SATO products into the BRAC Community Health Promoter model in six USHA districts in November 2018. In January 2019, USHA began identifying independent retailers interested in stocking SATO products and linking them to the regional NHOP distribution network (see Figure 1).

About USHA

USHA is a five-year contract, February 2018 - January 2023, implemented by Tetra Tech in consortium with partners SNV, Sanitation Solutions Group, FSG, and BRAC.

The Activity works in 21 districts within three regions, implementing a series of contemporary and integrated WASH interventions at the district, community and household levels that lead to increased access to sustainable water and sanitation products and services.

Specifically, USHA aims to achieve three reinforcing outputs:

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

Figure 1: Description of the SATO Supply Chains

Community Health Promoters

Community Health Promoters (CHPs) are enterprising women who are recruited, trained and supported through USHA partner BRAC to provide health care services – counselling, referrals and sale of health products - in underserved communities. CHPs move door to door selling essential medicines, solar lamps and other products. USHA introduced SATO into the CHP sales model in November 2018. BRAC purchases SATOs from the local manufacturer, Nice House of Plastics, and re-sells them at low margins to CHPs who operate from their branch offices. During a four-day workshop, CHPs are introduced to the SATO products, the business proposition, trained how to “pitch” the products, and paired with a local mason trained in SATO installation. Through the end of March 2020, 318 active CHPs have sold over 12,000 SATO products.

Independent Retailers

In areas not reached by the CHP model, USHA identifies independent retailers (i.e. hardware stores and Savings and Credit Cooperative Organizations (SACCOs) to establish a supply chain for last mile SATO distribution. Independent retailers are given a one-day orientation on the SATO product line – product features, benefits, and maintenance, the unit economics of the SATO business opportunity. Interested retailers are connected to regional NHOP regional distributors to place an initial order. Some are linked to masons trained to install the product. Through the end of March 2020, over 100 independent retailers have sold over 8,000 products.

In 2019, USHA carried out formative customer and value chain research as part of a market evaluation of the sanitation sector in Uganda. In addition, the project undertook a survey of early SATO purchasers to gain insights into the sanitation conditions, user experience and challenges households faced in installing and using the SATO product.

The findings from this survey will inform refinements to the delivery models, sales and marketing, and overall product offering – depending on the target customers’ needs and preferences. The findings also have helped identify further areas of research (e.g., whether households with limited water access are interested in SATO products). To the best of our knowledge, this is the first study that tries to capture perceptions of SATO purchasers in Uganda.

Study Objectives

The specific objectives of the SATO early purchasers survey were to:

1. Determine the extent to which SATO early purchasers are installing the products on toilets that were previously basic, limited or unimproved
2. Understand the key attributes/ benefits that appealed to households and informed their decision to purchase and install the SATO
3. Identify post-purchase SATO installation challenges
4. Assess the daily water usage requirements of the SATO

Data and Methods

From November 2018 to March 2019, the BRAC model, through a network of 9 BRAC branches hosting 400 Community Health Promoters (CHP), sold 3,342 SATO products (83% of total sales)¹. The independent retailer model, with 17 active retail hardware stores and three SACCOs, had sold 685 SATO products (17% of total sales).

The survey was conducted in nine out of USHA's thirteen Phase 1² districts, by interviewing households that bought a SATO product through either BRAC CHPs or the independent retailers. The survey sample (as seen in table 1) was developed using a stratified sampling approach that was based on the proportion of sales from the two supply chain models for the five month period ending in March 2019.

A team of eight BRAC Research Assistants conducted 267 interviews with SATO purchasers from six BRAC branches serving six USHA districts, and USHA interns conducted 62 interviews with households that purchased through independent retailers. Three BRAC branches were selected from the Central region and three from the Eastern region with the number of interviews conducted in each being roughly proportional to the sales figures at the end of March 2019. Interviewers collected data digitally on tablets, using questionnaires with skip patterns. Overall, 76% of households interviewed were in the Eastern region, while 24% were in the Central region. Further, forty percent (40%) of households selected for interviews were in urban areas. Interviews were conducted in 242 communities/villages.

Table 1: Survey Locations and Number of Interviews

Survey Locations – USHA intervention districts	Number of Interviews
Independent retailers	
Namutumba	20
Kayunga	22
Sembabule	20
Sub-Total	62
BRAC	
Jinja – Bugembe Branch	118
Buikwe – Lugazi Branch	61
Kaliro – Kaliro Branch	28
Lwengo – Kinoni Branch	34
Kyotera – Kaliisizo Branch	11
Mpigi – Buwama Branch	15
Sub-Total	267
Total	329

Footnotes

1. Of the 400 CHPs trained in October 2019, between 109 to 206 (27 to 51 percent) were active in any given month during this period. A CHP is
2. Phase 1 refers to USHA's initial 13 target districts in the Central and Eastern regions of Uganda. The project has since expanded to an additional seven districts in the Northern region.

Project Assistants from BRAC linked the research teams to the historically active CHPs in the study/ survey sites. CHPs were then expected to randomly select households from communities within the BRAC branch’s catchment area. Additional demographic data of SATO purchasers (e.g., household income levels) would have helped enhance representativeness and reduce bias.

For the independent retailer interviews, USHA’s regional Sanitation Business Development Specialists linked the interviewers to the hardware store’s staff or to local masons connected to each hardware store, who in-turn randomly identified three households per village for data collection.

When analysing the data, we considered if responses showed variation based on factors such as urban/ rural setting, region, sales channel (BRAC or independent retailers), and whether the SATO was installed or not. However, in most cases, no such variation was observed.

Findings

The sections below detail the survey findings by objective. Additional areas of research that would build on the findings or fill remaining knowledge gaps are proposed in Figure 5.

Sanitation status of SATO product purchasers

Most households interviewed either had basic (67%) or limited (27%) sanitation facilities prior to purchasing the SATO product. Only six percent had unimproved toilets – indicating that the SATO is an attractive upgrade product for households that have toilets with a washable interface. Most toilets had permanent superstructures – typically, with walls made of mud burnt bricks, roofs made of corrugated iron sheets, and with wooden doors. However, as suggested by customer research conducted by USHA,³ it is likely that households with unimproved toilets are less interested in buying only a SATO product as it may not meet their needs and preferences. Further, it may be unsafe for households to install SATO products directly onto a log or mud floor.

Price of product and installation costs

Among the three SATO products available for purchase, the SATO Pan was the most popular (83% of households purchased it), followed by the SATO Flex (10%) and the SATO Stool (7%).

As seen in Figure 2, the total cost (including both product price and installation) of the SATO Pan is lower than the total cost of the SATO Stool and SATO Flex, in both the Central and Eastern regions. Interestingly, the average product and installation cost for the three variants is consistently higher in the Central region, which suggests sellers do not stick to a standard retail price but negotiate with each customer individually⁴. The variation in total cost to the household is due to differences in both product price and installation costs.

Figure 2: Average total cost to household (including product price and installation cost)⁵

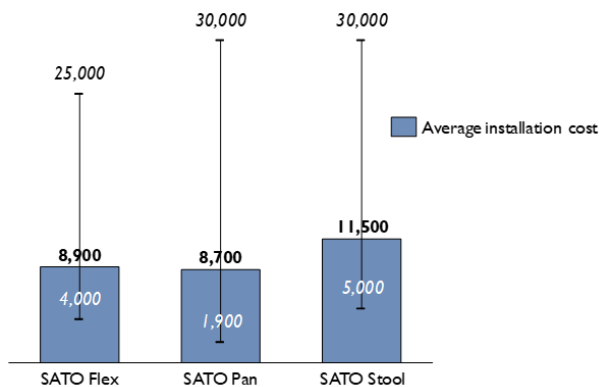
	Eastern			Central		
	Product price (UGX)	Installation cost (UGX)	Total cost (UGX)	Product price (UGX)	Installation cost (UGX)	Total cost (UGX)
SATO Pan	15,400	8,200	23,600	16,700	10,700	27,400
SATO Stool	36,200	11,500	47,700	40,400	11,500	51,900
SATO Flex	17,700	7,500	25,300	30,800	14,700	55,500

For each product, there was less variation in product price (as compared to the variation in installation cost) between and within a region or sub-county. For example, about 80% of the households paid 15,000 UGX for the SATO Pan – most households paid this price irrespective of region or sub county. However, 43% of households paid UGX 5,000 for the installation of the SATO Pan, while 40% of households cited an installation cost of UGX 10,000 – this variation is illustrated in Figure 3 below. Further research may be required to understand the

Footnotes

- <https://www.globalwaters.org/resources/blogs/customer-behavior-uganda-sanitation-marketplace>
- CHP and independent retailers purchase SATO products at a uniform price regardless of which supply chain they source from and which region they operate in.
- The average installation costs do not include households that did not need to pay for the installation (e.g., households that self-installed the SATO product)

Figure 3: Variation in installation costs for each SATO product (UGX)



Installation and product perception

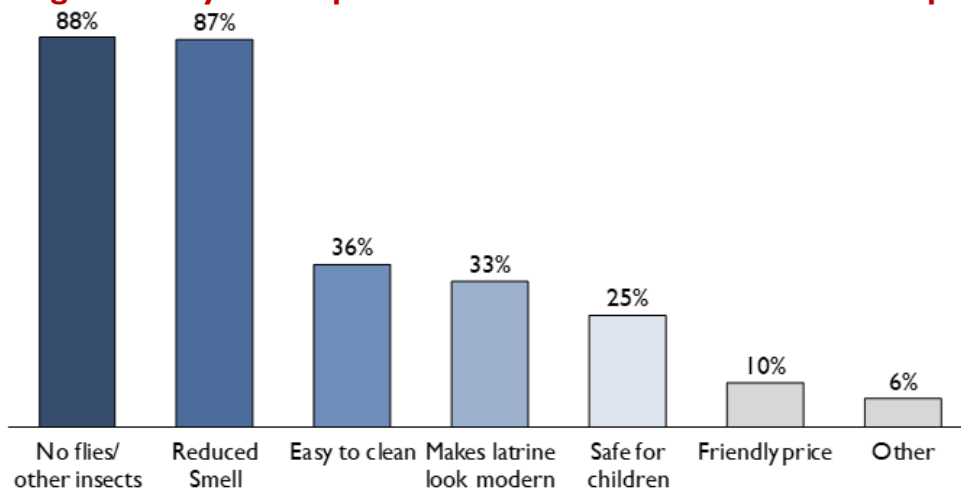
Ninety-five percent (95%) of all households were observed to have installed the SATO product on their toilets, indicating that nearly all households that had purchased a SATO product were also using them.

For product installation, 76% of households relied on a mason recommended by the seller and 18% relied on some other local mason in the community. However, irrespective of the choice of mason, interviewers observed that 92% of the households had well-fitted and functional SATOs at the time of the survey. Further, only (8%) of households reported having any installation related challenges.

Regardless of the SATO product chosen, nearly all households (98%) who had installed their product were satisfied or very satisfied with their SATO product and its installation⁶. One reason for this could be the reasonable costs (as mentioned above). Additionally, as seen in Figure 4, most households cited that the features that drove their purchase decision were reduced smell and no flies/ insects. Given that SATO products are expected to deliver on these features, this can be understood as an early indicator of satisfaction.

Some households also felt that the SATO product was easy to clean, and safe for children to use - features that may be more appealing to female household members (especially mothers) and could be used to create marketing messages that resonate with women and further influence a household’s decision to purchase the product.

Figure 4: Key SATO product features that were the most important in informing



Households cited the information provided by CHPs, and the households’ personal desire to improve their toilet as the key factors that influenced their decision to purchase a SATO product. Although radio campaigns promoting the products were conducted in the survey areas from December 2018 to March 2019, fewer households (26%) cited radio advertising as a key decision-making factor. Research from the USAID WASHPaLS market-based sanitation desk review⁷ suggests that interpersonal communication is a more effective and cost-efficient outreach channel compared to mass marketing campaigns alone (e.g., radio campaigns).

Footnotes

- 6. Most households would have installed the SATO product at least three months prior to the survey.
- 7. USAID, 2018. *Scaling Market Based Sanitation: Desk review on market-based rural sanitation development programs*. Washington, DC. USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) Project.

Water access and usage

Most interviewed households reported having access to an improved water source, enabling them to use and clean their SATO products. In particular, 53% of the households obtain water from a piped source, 35% from other protected sources (e.g., tube well/borehole), and only five percent obtain water from unprotected sources (e.g., surface water)⁸.

Households used an average of 1.6 liters of water to flush fecal waste and 0.7 liters of water to flush urine, after each use. This amounts to a total of 5.8 liters of water, on average, per person per day for flushing⁹. Additionally, 73% of the households used another 3 - 10 liters of water per day to clean their toilet. Most households reported having no difficulties obtaining enough water for using and cleaning their toilet. This suggests that with these sources of water (mainly piped and borehole) and volume requirements, an increase in a household's daily water consumption because of using the SATO product is not a barrier to product uptake in survey areas.

Figure 5: Additional research areas

The following additional research areas have emerged from our findings, and require further understanding:

1. The reasons cited for not purchasing a SATO product by households that had been approached by a CHP but chose not to make a purchase
2. The factors that drove a large proportion of households to purchase the SATO Pan compared to the other two SATO products
 - Verify whether the lower price of the SATO Pan was among the factors
3. The significance of having CHPs in driving women to make SATO purchases
4. The appeal of SATO products amongst households with limited access to water

Takeaways

There is a market for SATO products among certain types of households

- Households with improved toilets and sufficient access to water (e.g., through piped water) appear to be an attractive market segment for SATO products. These households, ostensibly more urban and likely with a higher ability to pay, noted the total cost of an installed product was in the range of what they were prepared to pay, and were largely satisfied with the product and its installation a few months after purchase.

Among these households, the quantity of water required is not a barrier to using SATO products

- Most interviewed households with sufficient access to water, and with already improved toilets, were able to use and clean the SATO product without any water-related challenges.
- However, USHA's VCAS research suggests that 60% of rural and 33% of urban households in Uganda travel for more than 20 minutes to obtain non-drinking water. Therefore, additional research may be required to understand whether SATO products are equally appealing to households with limited access to water.

A more holistic sanitation product system and delivery model may help increase the uptake of SATO products among households with unimproved toilets

- Households with unimproved toilets were few among the early SATO purchasers. These households, the primary group targeted by sanitation programs like USHA, have a need for toilets that are hygienic, easy to clean, and provide safety and security. Some may desire toilets that are prestigious. SATO products alone may not fulfill these needs and preferences.

Footnotes

8. Represents the percentage of households that obtained their drinking as well as non-drinking water from this particular source

9. Water usage for flushing was calculated by assuming that an individual uses the toilet an average of 2,500 times a year - amounting to seven visits a day (World Toilet Organisation). Based on this, we have assumed that six toilet visits are for urination and one visit is for faecal waste.

- Therefore, when targeting households without basic sanitation, it is important to offer the SATO as part of a complete toilet product offering. For a lower income segment, a possible product offering may be to offer the SATO as an add-on to a SanPlat and to make improvements to the superstructure for additional safety and security.
- Specific to the BRAC model, CHPs may require more support and incentives to intentionally target households with unimproved toilets. If the information is available, CHPs could be given a list of households with no or unimproved toilets in their sales areas, or, they can be trained on how to identify such toilets during their door-to-door visits. In addition to this, CHPs would need to be trained to sell a more complete product offering that responds to the needs of the HH with unimproved toilets in a specific geographic location. Further, CHPs could be incentivized (e.g., using a commission) to target households with unimproved toilets since it may be more difficult to sell to them.
- Similarly, in the independent retailer’s model, hardware stores and SACCOs could be trained to ask customers interested in SATO about the status of their toilets and modify their sales pitch accordingly. Customers with unimproved toilets would be guided on how to purchase a complete toilet offering.

CHPs have an opportunity to aggregate and share information on total product costs with households to help reduce variation in installation costs

- Variation in installation costs even within a sub-county highlights the opportunity to standardize costs on behalf of the households.
- Although CHPs and independent retailers negotiate SATO prices individually with customers as part of a common trade practice (particularly in Western region), by sharing an expected installation cost range with households, on average, households may be able to negotiate a fair price with a mason that is trying to overcharge them.

Mass marketing (e.g., through radio) alone may be insufficient outreach channel for SATO

- While radio campaigns rolled out in the survey areas may have helped in promoting awareness about SATO products, it appears that information provided by CHPs played a greater role in the households’ purchasing decision.



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