

# Healthy Household Initiative

## Results from Maharashtra, India

### BACKGROUND

Tremendous progress is being made in reducing mortality among children under five years of age. However, pneumonia and diarrhea remain the top causes of under-five mortality from infectious diseases. Public health systems are striving to tackle these diseases by providing vaccinations, promoting healthy behaviors, and diagnosing and treating infections, but with 1.5 million under-five deaths due to these two diseases each year, more needs to be done to prevent these illnesses.<sup>i</sup> To reduce these causes of childhood deaths, the World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF) urge families to use latrines, drink safe water, and reduce indoor air pollution.<sup>ii</sup> However, many families are unable to access or afford latrines, water filters (which provide safe drinking water), and improved cookstoves. To address this gap, PATH partners with the private sector to create commercial models that increase household access to these products, which in turn improves the health of families. Secondary benefits are also being realized, such as improved product distribution networks, more accessible financing options for consumers, and creation of improved livelihoods for social entrepreneurs, many of whom are women with limited financial means.

### PROJECT ACTIVITIES

The goal of PATH's Healthy Household Initiative (HHI) is to increase the accessibility, affordability, and use of health products by households in low-resource settings. PATH works with microfinance institutions (MFIs) to enable consumers to purchase products through low-interest consumer loans. PATH is also strengthening the capacity of social entrepreneurs and other supply chain actors to manufacture, source, and distribute products to vulnerable communities.

In 2014, PATH worked with distribution partner Sakhi Unique Rural Enterprise (SURE) and financing partner Sakhi Samudaya Kosh (SSK) to pilot an HHI model in two districts of Maharashtra, India. The pilot ran from April to December 2014, and sales began in May.

The primary objectives of the project were to:

- Test the feasibility of a consumer financing approach using bundled products (with a bundle consisting of two or more health products sold as a package).
- Compare the success (via total sales figures) of the bundled approach with that of a single-product, cash-only approach.

Our premise was that if consumers were able to purchase products using novel financial mechanisms and were also able to purchase more than one product, the resulting outcome would be a healthier home environment and a more commercially viable model that requires less donor support to scale up.

### KEY RESULTS

- Loans unlock customer demand: 89% of consumers chose the loan and multiple-product bundle offered.
- Entrepreneur income significantly increases: For the women entrepreneurs who remained in the pilot (17), income rose by an average of 128%. Incomes of the top sellers (7) increased by 377%.
- Positive margins drive sustainability: The HHI model approached full cost recovery in under a year, with 109% positive net margin for the microfinance partner and 88% for the social enterprise.
- 100% loan repayment: During the eight-month pilot, not a single client defaulted on their loan. Nearly all (94%) of monthly payments were made on time.

## IMPACT

### CONSUMER FINANCING UNLOCKS DEMAND BY LOW-INCOME HOUSEHOLDS IN RURAL MAHARASHTRA

At baseline, 71% of households ( $n = 249$ ) in the two project districts—Osmanabad and Latur—lacked latrines. Of HHI consumers, 70% reported annual incomes between US\$157 and US\$785, and average family size was four to seven members (75.1%).

Latrines accounted for nearly half of all products sold during the pilot and were included in every product bundle sold (Table 1 and 2). Solar lights were the second most popular item, with 97% of buyers choosing the smaller of two solar light options. Water filter ownership increased from zero at baseline to 120 units sold during the pilot. Only two cookstoves were purchased by consumers because they did not want to have to buy pellets for fuel.

The majority (77.5%) of HHI consumers were from Socio Economic Classification (SEC) R3, which is the second poorest category out of four categories in rural India. These consumers overwhelmingly reported the lack of cash as a principal barrier to purchasing goods; however, with consumer financing offered for the purchase of the HHI products, these families were able to overcome that barrier (Table 3).

### SAKHIS EXPAND THEIR ROLE TO OFFER LOANS

Women entrepreneurs from the rural community are called Sakhis, which also means “friend” in the local language of Marathi. Sakhis usually have an existing business in the family (typically run by the husband) and use the same counter/window for SURE product sales. To help their communities be able to afford HHI products, Sakhis offered and provided guidance on loan applications to women who formed joint liability groups to share responsibility for repayment of loans.

Sakhis’ responsibilities for the HHI project included:

- Conducting various marketing and promotional activities for selling HHI products, which is more proactive than retail sales.
- Informing consumers on loan terms and assisting them with loan applications and getting a deposit check from a bank.
- Informing consumers on product usage and assisting them in case of any product-related issues.

Coupling the loan application process with sales meetings allowed SSK, the financing partner, to streamline their operations and focus on reviewing applications for eligibility and collecting loans. These efficiencies, introduced by PATH as part of the pilot, led to administrative cost savings for SSK, which in turn increased the margins they were able to earn. SSK secured concessional loan capital at 2% cost of funds (subsidized) and charged 14% reducing annual interest, so payments got smaller as principal was paid off.

## PRODUCTS AVAILABLE FOR PURCHASE



**Solar lantern** – There are two variants of solar lantern offered by SURE, one priced at Indian Rupee (INR) ₹645 (US\$10) and the other priced at INR₹1,845 (US\$29). Solar lanterns run on solar energy, which reduces indoor air pollution and conserves energy.



**Water filter** – priced at INR₹1,900 (US\$30). Treatment cartridges that last up to six months are priced at INR₹500 (US\$8). Filtered drinking water reduces health challenges related to unsafe water, including diarrhea.



**Cookstove** – priced at INR₹3,000 (US\$48). Fuel pellets are priced at INR 11/kg (\$0.2/kg). The cookstove generates less smoke. It has a built-in fan, which is charged by a battery pack that needs to be recharged periodically.



**Latrine** – priced at INR₹12,500 (US\$199). It is a prefabricated latrine with an option of one or two reinforced concrete pits. It can last ten years for a family of five without the need for waste removal. The cost of installation is included in the price.

TABLE 1: Total products sold in 8 months of 2014

	Total Product Sold	Percent of total products sold
Latrines	282	48%
Solar lamps	182	31%
Water filter	119	20%
Cookstoves	2	-
<b>Total Products</b>	<b>585</b>	<b>100%</b>

TABLE 2: Total bundles sold in 8 months of 2014

Product Bundles	Number Sold
Latrine & solar lamp	89
Latrine, solar lamp, & water filter	75
Latrine & water filter	31

TABLE 3: HHI Consumer Loans Overview

<b>Total loan amount disbursed</b>	INR₹3,056,980 (US\$46,252)
<b>Number of approved loans</b>	235
<b>Loan amount range</b>	INR₹2,000 – 20,000 (US\$32-319)
<b>Interest rate</b>	14% reducing

Consumers appreciated that 14% was below market rate—typical microfinance institution interest rates in India are roughly 24%. Initially, the women entrepreneurs (Sakhis) made a few cash sales for latrines alone. However, once loans were made available for two or more products, the vast majority of sales (89%) were for product bundles. This suggests that loans are important for increasing access to consumer health products and that bundled sales (promoting two or more health products) are feasible with adequate training, sales practice, and supportive supervision.

Simplifying the loan process and building Sakhis' capacity in taking ownership of customer documentation led to a steady decrease in consumer loan drop-out rates from 60% in the initial stages of the pilot to 10% to 20% at endline. Loan review time significantly reduced from 45 days to 25 days, leading to cost savings for SSK, improved consumer confidence in the loan process, and quicker delivery of products to consumers.

#### SAKHIS SIGNIFICANTLY INCREASE THEIR EARNINGS

A total of 34 Sakhis were trained as HHI sales agents. Their average income before the pilot was about US\$16 per month. Half of the Sakhis (17) made zero or few HHI sales. Half of the Sakhis (17) remained involved in HHI sales for the duration of the pilot and their income increased by an average of 128% to US\$37. The top seven sellers, “Super Sakhis,” made 80% of the total product sales during the pilot and increased their income by 377% to US\$77. Several key characteristics became evident across the Super Sakhis: taking pride in working for community health, not being ashamed of being associated with sanitation, being willing to learn new skills, and being willing to proactively go “out” for direct sales as opposed to passive retail sales.

Sakhis reported that their involvement in the HHI project resulted in several other benefits that were not related to income. These included an increased sense of confidence, expanded skills and capacity, and the ability to better support their families. Their families granted them greater economic and social freedom, which was empowering.

#### EARLY RESULTS TRENDING TOWARD COMMERCIAL VIABILITY AND SUSTAINABILITY

To sustain and grow the HHI model, private-sector partners need to be able to cover their operating costs and achieve a profitable return (Table 4). With 2% loan capital (subsidized), 14% per annum interest, and Sakhis taking on some of the loan officer role, SSK was able to surpass the breakeven point during the eight-month pilot. SURE, the distribution partner, recouped 88% of their operating costs from sales. The difference could be made up by grant support, but that puts access at risk if donors do not continue to subsidize the model. Operational streamlining could also reduce costs significantly with the potential for full cost recovery.

TABLE 4. Cost recovery for implementing partners.

SSK (with subsidized 2% cost of loan capital, 14% per annum interest, and reduced operating cost due to Sakhi involvement)	109% actual
SURE (did not recoup 100% of operational cost)	88% actual
SURE (with grant support for channel supervisors' salary, one-time marketing and training costs OR operational streamlining, could approach breakeven)	95% projected
SURE (with higher product prices, SURE could fully break even or earn a profit)	100% or higher projected

#### VARSHA'S STORY

Varsha became a top seller of HHI products once she overcame a variety of barriers. Initially, she had serious doubts about trying to sell HHI products, especially latrines, which cost much more than any of her other products (\$200) and was embarrassing to talk about. Her in-laws complained that the HHI training took her away from home and she had nothing to show for it. Her field supervisor encouraged the family to be patient, and her husband supported her joining the project, even though it took time away from her being at home and working as a tailor.



Varsha shows the HHI sales flipbook to women in her village.  
Photo credit: Sakhi Samudaya Kosh (SSK)

After Varsha started earning a 10% margin on the sale of latrines, filters, stoves, and lamps, she became bolder. She described to PATH a sales pitch that she made at a community gathering of 1,500 people. As she spoke, her voice became stronger. She started laughing at her own story and positively beamed. Over six months, Varsha earned US\$630, which is six times what a Sakhi normally earns.

## KEY LESSONS

- Although consumers and Sakhis initially resisted the idea of purchasing more than one product at a time, 89% of sales were for product bundles.
- Bundling also increased Sakhi income through higher product volume being sold. These sales carry the potential of future sales of replacement parts.
- The HHI model stimulates demand for and increases access to latrines in rural areas where open defecation is commonly practiced.
- Most HHI product sales were to SEC R3 households, suggesting that the model is appropriate for poor households and achieves the goal of increasing access to health products for healthier homes.
- With support from Sakhis, SSK achieved full cost recovery. However, to expand the model, subsidized loan capital is needed at least for an introductory offer of below commercial rates of interest.
- Sakhi capacity-building is essential. Sales results improve dramatically with supportive supervision, regular monitoring of sales results, and peer-learning at cluster meetings. This is evidenced from the Sakhi closing rate, which was 22% initially and rose to 84% at project close. These investments dramatically increase Sakhi income and economic empowerment of rural women entrepreneurs.

## FUTURE DIRECTIONS

- Scaling up the HHI model in India, if additional low-cost loan capital can be secured.
- Leveraging public-sector initiatives on clean energy, latrine subsidies, and promoting banking to help more families afford HHI products.
- Adding product options, such as bundling of menstrual hygiene products into latrine loans.
- Launching HHI in Honduras with Global Brigades and Inter-American Development Bank support.

## HHI PROGRAM EXPANSION

Based on these promising results, PATH is actively looking to expand the HHI model, both in terms of product offerings and geographies. PATH plans to expand to Africa, South America, and other parts of Asia as we identify strong implementation partners and donor support. HHI is a consumer product delivery platform that extends supply channels for health products to enhance the health of women and children, making products more accessible and affordable.

## POTENTIAL FOR SIGNIFICANT SCALE: CAMBODIA

The pilot results from Maharashtra were so promising after a short eight months of implementation that we contacted our former partners in Cambodia to learn about the progress of direct sales and consumer financing pilot projects for water filters or latrines. The HHI model builds upon these earlier projects, which offered loans for single products.

In 2011, PATH partnered with VisionFund and Hydrologic to increase adoption of ceramic water filters. In nine months, VisionFund issued 4,000 water filter loans with 100% repayment and acquired thousands of new credit-worthy customers. VisionFund went on to offer loans for latrines (in partnership with iDE and PATH). Based on a randomized controlled trial that was conducted on the financing model, families were four times more likely to buy latrines when VisionFund offered financing than when latrines were sold for cash.<sup>iii</sup>

As of June 2015, VisionFund Cambodia has dispersed over US\$3.6 million in loans for 53,834 water filters and 24,792 latrines.<sup>iv</sup> These figures demonstrate the catalytic nature of PATH's market-based approaches, which underpin the HHI model.

## REFERENCES

<sup>i</sup>UNICEF. *Committing to Child Survival: A Promise Renewed. Progress Report 2014*. New York: UNICEF; 2014. Available at: [http://files.unicef.org/publications/files/APR\\_2014\\_web\\_15Sept14.pdf](http://files.unicef.org/publications/files/APR_2014_web_15Sept14.pdf).

<sup>ii</sup>WHO/UNICEF. *Ending Preventable Child Deaths from Pneumonia and Diarrhoea: The Integrated Global Action Plan for Prevention and Control of Pneumonia and Diarrhoea (GAPPD)*. Geneva: WHO/UNICEF; 2013. Available at: [http://www.who.int/maternal\\_child\\_adolescent/documents/global\\_action\\_plan\\_pneumonia\\_diarrhoea/en](http://www.who.int/maternal_child_adolescent/documents/global_action_plan_pneumonia_diarrhoea/en).

<sup>iii</sup>IDinsight. *Understanding Willingness to Pay for Sanitary Latrines in Rural Cambodia: Findings from Four Field Experiments of iDE Cambodia's Sanitation Marketing Program*. San Francisco: IDinsight; 2013. Available at: <http://www.ideorg.org/OurStory/Publications/iDE%20Final%20Report%20without%20sunk%20cost%20analysis%20Oct%2030%202013.pdf>.

<sup>iv</sup>Vision Fund, World Vision. Cambodia WASH microfinance: scale and impact. Presented at: Global Health Innovation Conference, March 2015; Bangkok, Thailand.



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