

GLOBAL HEALTH

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Young girls collecting water at a local spring in Kenya

Photo: PATH/Elizabeth Blanton

PATH II: Demonstrating Products in Rural Areas

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THE PROBLEM/SOLUTION SPACE

Globally, 884 million people lack access to a safe supply of water.¹ As a result, more than 3.5 million people die every year from water-related diseases.² Diarrhea, which is commonly caused by contaminated water, remains the second leading cause of death among children under five, accounting for nearly 20 percent of child deaths per year. It kills more young children than AIDS, malaria, and measles combined.³ Numerous organizations are focused on bringing household water treatment and safe storage (HWTS) solutions to middle- and low-income populations in developing countries. However, established approaches reach only a fraction of those in need.

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ABOUT PATH AND THE SAFE WATER PROJECT

PATH is a Seattle-based nonprofit organization committed to delivering high-impact, low-cost solutions to global health challenges. The organization's mission is to act as a catalyst for innovations with the potential to improve the health of vulnerable populations around the world.⁴

In late 2006, the PATH Safe Water Project received a \$17 million grant from the global development unit of the Bill and Melinda Gates Foundation. Its purpose was to evaluate how market-based approaches could help accelerate the widespread adoption and sustained use of HWTS products among the world's poor. Traditionally, this sector had been dominated by government and philanthropic solutions. Through a portfolio of field-based pilots, PATH intended to experiment with different commercial models for addressing this dire need.

Over the course of five years, PATH's multidisciplinary Safe Water Project team conducted more than 10 studies in India, Vietnam, Cambodia, and Kenya. One of the overarching objectives of the pilots was to employ a user-centered design approach to understand how safe water projects could be made more desirable—or aspirational—as well as better suited to the needs of the target customers. Another focus was on exploring the affordability of the products so they would be within reach of middle- and low-income consumers. The final objective was to evaluate ways to market, sell, and distribute safe water technologies so that target users in rural locations could more readily access them.

ONE CHALLENGE: DEMONSTRATING PRODUCTS IN RURAL AREAS

One of PATH's pilots tested a direct sales model in Kenya by making a durable safe water product—a ceramic water pot (CWP)—available through a basket of goods ap-

proach. This idea stemmed, in part, from previous tests where the Safe Water Project team observed that it would be helpful to have an established mechanism in place to support ongoing interactions between the sales person and his/her customers in order to encourage correct and consistent use of the safe water products over time. The basket of goods approach supported this objective because the sales people visited the same customers month after month.

To launch the effort, PATH partnered with the Safe Water and AIDS Project (SWAP) in Kenya. This group had an active basket of goods model for providing households in remote areas with access to low-cost, high-impact health

products such as sanitary pads, soap, condoms, and water treatment solutions.⁵ SWAP employed a network of local vendors to sell the products door-to-door or in village markets. In exchange, the vendors were paid a small commission on sales. While SWAP vendors already offered chlorine tablets and other water treatment products as part of the products they represented, consumer research in Africa suggested that users might prefer durable products over chlorine treatment for several reasons (e.g., ease of use, the absence of added chemicals, and better taste of the treated water).⁶

PATH chose Nairobi-based Chujio Ceramics as the manufacturing partner for this project. The Chujio CWP had previously only been distributed for free or at significantly

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reduced prices to households by NGOs. During the six-month pilot, Chujio would provide the CWPs to the pilot team at market wholesale rates, and then PATH would work with SWAP to test two different price points to assess commercial viability of the water filter in a low-income market.⁷ In addition, PATH coordinated with SWAP to offer a “layaway” plan at both price points to allow consumers to pay for the filter over a three-month period.

The SWAP vendors were enthusiastic to experiment with offering the CWP in their basket of goods. However, they quickly ran into a practical challenge. As Jeremy Farkas, the PATH MBA consultant on the project, explained, “Consumers really weren’t aware of CWPs, and they’re expensive. So most people wanted to see and touch the product. They wanted to taste the water and interact with the device. But it’s difficult to arm your entire sales staff with these products. That would be really expensive. And they’re fragile and bulky and hard to transport over rugged terrain.”⁸

PATH had anticipated this challenge to some extent, subsidizing the purchase of several specially-equipped bicycles for carrying the filters at the onset of the pilot. Unfortunately,

manufacturing problems with the bicycles prevented them from being useful.

Sales people who were unable to carry the product long distances by foot resorted to using the filter’s box (which included a product photo) as a demonstration tool. In order for sales to achieve any sort of scale, the SWAP vendors needed a more effective solution.



Photo: PATH

The Chujio CWP set up for demonstration

shown that when people or their family members get sick, that’s the time they’re most open to change. At that point, they’re looking for options. And what the staff at the doctor’s office tells them carries a lot of credibility.”

Physicians and other health workers were pleased to have the CWPs in their facilities. According to Farkas, “Doctors want to do the right thing for their patients. Many of them said, ‘It doesn’t help to give them medicine if they’re going to wash it down with dirty water.’ So they recognized the benefits of helping raise awareness about safe water. Plus, the filter was free to them. Not a single person refused it.”

In a small number of cases, the PATH team went back to a demonstration site and discovered that administrator of the center had moved the CWP to a location where the

THE SOLUTION: ESTABLISHING PUBLIC DEMONSTRATION CENTERS

After brainstorming a variety of ideas, the PATH team decided to set up a number of public demonstration centers in key villages within the target area. “We decided to seed the community with a couple hundred [CWPs],” Farkas explained. “We put them primarily in health clinics, hospitals, and doctors’ offices. A lot of research has

public could not access it (e.g., in a private office). “We’d tell them that wasn’t quite what we intended, and sometimes they’d ask for a second one to make available to the patients,” recalled Farkas. In hindsight, he recommended being careful and explicit about the instructions given to the centers.

Within a couple of weeks of initiating this program, PATH could see it was generating a lot of interest. However, the team initially hoped the staff at the demonstration centers would help promote the CWP and encourage people to follow up with a SWAP vendor for more information. “But that didn’t really play out the way that we hoped,” commented Farkas. “So people would use the filter, but they wouldn’t know anything about it. And they wouldn’t know where to get it.” In response, PATH began hanging posters at each site with the name and phone number of a SWAP sales vendor so that interested parties would know where to get more information. Reflecting on the project, Farkas

recommended a slightly different approach to make it even more attractive for customers with mobile phones to make contact with SWAP. “It’s relatively expensive for poor people in really rural areas to use their phones. But there’s something called ‘flashing’ that’s becoming very popular.” The idea behind flashing was that a mobile phone user would call a number on an advertisement and then quickly hang up. In the process, the organization receiving the call would log the caller’s number so that one of its representatives could call back. Under most mobile phone plans, the caller incurred the charges, so customers who “flashed” a business could express interest without getting billed much (if anything) for doing so. “If we were going to do this in the future, I would recommend having a sign that says, ‘To learn more about the filter or find out where you can buy one, flash us at this number,’” said Farkas. This approach would remove one more barrier that could potentially keep a prospective customer from making contact with SWAP.

In addition to preventing the sales people from having to carry the CWP from door to door or group meeting to group meeting, the public demonstration centers drove a spike in product awareness and sales. In fact, sales increased 70 percent in the month after these stations were established. Importantly, this approach could be easily replicated in other areas within and outside of Kenya. The concept could also potentially be expanded to include sales directly through the demonstration centers.

At the end of the pilot, quantitative and qualitative data indicated that the Chujio CWP was popular with and understood by users in the study area. Regions selling the CWP at the lower of the two prices sold roughly twice as many filters as regions offering the higher price. While the layaway plan was useful in making the product more accessible to some low-income consumers, it did not gain significant traction. Many SWAP vendors were unwilling to delay their commissions until the end of the layaway period. Collecting payments from customers in remote rural areas also proved to be challenging.

In combination, these results motivated SWAP, with PATH’s help, to identify a different manufacturing partner that would work with them to reduce the sales price of the CWP. As of mid-2012, SWAP was continuing to offer a durable water filter in its basket of goods. Using most effective marketing techniques discovered in the pilot, such as the demonstration centers, SWAP had sold hundreds of units since the pilot’s completion. ♦



Photo: PATH

Posters at each demonstration station helped promote the CWP

NOTES

- 1 “Progress on Drinking Water and Sanitation: Special Focus on Sanitation,” UNICEF and the World Health Organization, 2008, http://www.who.int/water_sanitation_health/monitoring/jmp2008/en/index.html (October 18, 2012).
- 2 “Safer Water, Better Health: Costs, Benefits, and Sustainability of Interventions to Protect and Promote Health,” World Health Organization, 2008, http://www.who.int/water_sanitation_health/publications/safer_water/en/ (October 18, 2012).
- 3 “Diarrhoea: Why Children Are Still Dying and What Can Be Done,” UNICEF and the World Health Organization, 2009, http://www.who.int/maternal_child_adolescent/documents/9789241598415/en/index.html (October 18, 2012).
- 4 About PATH, <http://www.path.org/about/index.php> (October 18, 2012).
- 5 “Basket of Goods Approach in Kenya,” PATH.org, <http://sites.path.org/water/hwts/markets/basket-of-goods-approach-in-kenya/> (June 25, 2012).
- 6 Ibid.
- 7 Ibid.
- 8 All quotations are from interviews conducted by the authors, unless otherwise cited.