



PATH AND THE SAFE WATER PROJECT: IMPROVING ACCESS TO SAFE WATER THROUGH INNOVATIVE SALES AND DISTRIBUTION MODELS

Getting the right products to the right customers at the right time is a challenge for any company. But in the global health field—where customers are often poor, uneducated, and/or geographically disbursed, and the mechanisms and infrastructure to reach them are severely under-developed—it can represent an insurmountable barrier. Far too many good ideas have stalled on their way to market because of the company's inability to overcome sales and distribution hurdles, leaving their intended audience without important solutions to pressing health problems.

In 2006, the PATH Safe Water Project was awarded a \$17 million grant from the Bill and Melinda Gates Foundation to evaluate how market-based approaches could help accelerate the widespread adoption and sustained use of household water treatment and safe storage (HWTS) products by middle- and low-income populations. One of the team's primary objectives was to investigate sales and distribution challenges in this space. By conducting a portfolio of field-based pilots, the team hoped to test different models for improving customer access to these safe water products in an effort to identify scalable, sustainable, and replicable solutions.

Over several years, the Safe Water Project team tried reaching poor, rural customers through door-to-door salespeople on bicycles, a sales force of part-time students, sales through government health station workers, group sales through partnerships with microfinance institutions, a retail sales model, and by including safe water products in a "basket of goods" approach. Although specific results varied across the pilots, which spanned India, Vietnam, Cambodia, and Kenya, they collectively gave rise to series of important sales and distribution insights.

Lyn Denend and Professor Stefanos Zenios of the Stanford GSB and Tim Elliott of PATH prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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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.

In late 2006, PATH launched its Safe Water Project to help address the fact that established HWTS efforts were reaching only a fraction of those in need. The purpose of the effort was to evaluate the extent to which market-based approaches could help accelerate the widespread adoption and sustained use of HWTS products by low-income populations over time.¹

PATH's technology solutions group, which had a history of using market-based approaches to develop and disseminate new health innovations, would spearhead the effort under the leadership of Glenn Austin, head of PATH's Water, Indoor-Air Quality, Sanitation, and Hygiene group. Austin formed a team of engineers, behavioral scientists, and commercialization experts to collaborate on the project. The engineers and behavioral scientists would work together on user-centered design to make sure that safe water projects were desirable—or aspirational—as well as suited to the needs of the target customers. In addition, the project's engineers would interact with the commercialization experts on the affordability of the products so they would be within reach of this market segment. Finally, the commercialization team would need to figure out how to market, sell, and distribute safe water technologies so that middle- and low-income users could access them.

The Safe Water Project team defined a portfolio of pilots to test different approaches at the intersection of design, access, and affordability. Although the three concepts were tested concurrently within the pilots, PATH uncovered distinct lessons in each focus area. This paper focuses on access and the insights the team gleaned about sales and distribution.

(See **OIT- 106** for additional background information about PATH, the Safe Water Project, and the organization's approach to piloting. **OIT-107** addresses the team's learnings in the area of user-centered design. **OIT-109** provides additional information about the affordability of safe water products.)

INDIA

Mobile Sales Model

The story of PATH's sales and distribution pilots begins in India. As Greg Zwisler, senior commercialization associate, described, "India was the initial focus country of the whole Safe Water Project. It was definitely a favorite from the donor officer [at the Bill and Melinda Gates Foundation]. But it made a lot of sense, because here was this big economic success story, which also had the world's largest absolute number of diarrheal deaths—so it presented itself naturally."

After conducting an extensive literature review and on-the-ground analysis of existing sales and distribution approaches for safe water products in India, the team was ready to conduct its initial pilot. In partnership with MART, an emerging market consulting firm, PATH would test the

effectiveness of hiring eight local entrepreneurs in Uttar Pradesh to serve as a mobile sales and marketing force for a chlorine-based water purification product called Aquatabs (see **Figure 1**).² Medentech, the Ireland-based manufacturer of Aquatabs, was seeking to expand its product sales in rural India and welcomed the opportunity to garner insights from the project.

Figure 1
A Bicycle Entrepreneur from the Uttar Pradesh Pilot



Source: PATH.

The Safe Water Project team's fundamental hypothesis for the pilot was that direct sales by bicycle entrepreneurs combined with supplemental marketing campaigns would teach consumers about water treatment, stimulate initial trials of Aquatabs as a water treatment method, and eventually convert a portion of households to regular users.³ They hoped that over the 12-month test period the salespeople would be able to simultaneously educate potential customers about the need for water treatment, convince them to try Aquatabs as a reliable solution, and then follow up to ensure correct and continued product use.

India Mobile Sales Pilot Details and Results

When added to water, Aquatabs water purification tablets dissolved to release a measured dose of hypochlorous acid that is recognized as a safe and effective water disinfectant. The tablet size for this pilot was designed to treat 10 liters of water (the most common container size in the region) and was sold in a box containing three 10-tablet strips, enough for one month. The price started at 0.50 Indian Rupees (INR)—about \$0.02 USD—per tablet and increased to INR 1.00 per tablet in the last four months of the pilot to increase margins.

The eight salespeople were hired by MART, with PATH underwriting their salaries. Each salesman covered a wide territory of 20 to 30 villages in Pratapgarh, Uttar Pradesh (population 410,000), initially reaching two villages per day by bicycle. Soliciting assistance from local leaders, entrepreneurs were expected to sell the tablets at village weekly markets (haats), retail kiosks (kirana shops), households, and to community groups. Bicycle entrepreneurs were