

The Sanitation Gap: A Challenge We All Face



John Kayser/Water for People

Children celebrate the availability of clean water in Buena Vista, Honduras.

When we stop to wash our hands and glance in the mirror before returning to work, we seldom pause to think, “What would life be like if we didn’t have toilets?”

It would be tough, no doubt, but we wouldn’t be alone. According to the

[World Health Organization](#), 2.4 billion people lack access to basic sanitation and face, daily, the mortal threat posed by a host of waterborne diseases.

“We’re losing 5,000 children a day, who are dying from water- and sanitation-related diseases that are entirely preventable,” said John Kayser, communications and marketing director with [Water For People](#), a not-for-profit organization committed to providing clean water, sanitation and hygiene to all the world’s citizens.

Kayser said, for want of proper sanitation, “Women are spending their entire day sourcing water — spending five or six hours walking to distant water sources, then hauling water home. It prevents them from doing anything else.”

Making matters worse, he said, the water they bring back is often unfit for drinking, “so they end up spending what little money they have buying medicine, and when waterborne illnesses strike, they can spread quickly through an entire community.”

“It’s ruining all kinds of development,” Kayser said.

In India, he added, the lack of sanitation facilities causes girls to drop out of school when they reach puberty. “They have no privacy; they can’t deal with their hygienic needs.” With an unfinished education, he said, they lack the skills needed to compete in the job market. “It all just escalates into economic disaster.” Kayser believes sanitation is central to development. “Until the sanitation problem is solved, nothing else can happen.”

Finding the Hidden Opportunity

Eva Haden, of the Geneva-based [World Business Council for Sustainable Development](#), believes multinational corporations have an important role to play in solving the sanitation crisis. But, she said, “It’s a real challenge for most multinational companies

who don't work in the water sector to see how the sanitation issue affects their bottom line directly.”

That's where the [Global Water Tool](#) can help, according to Haden. A computer software package developed by the WBCSD and released in August 2007, the Global Water Tool employs geographic information system mapping to enable companies to assess their water footprint in regions remote from their base of operations. By accessing this tool, for free on the Web, businesses can evaluate their water-related externalities along their entire supply chains and uncover the hidden price they're paying for inadequate sanitation.

To use this tool, Haden said, companies can enter their sites, or those of their suppliers, into the program. The program then maps these sites against external water data, including information on sanitation coverage, provided by the [WHO/UNICEF Joint Monitoring Program](#).

Haden believes the information the companies acquire using this tool can be persuasive. “If a company has 100 sites, and perhaps 40 of them are located in areas with inadequate sanitation, that would have a significant impact on their business,” she said. “That alone is reason enough to make a positive contribution.”

So far, Hayden added, about 700 people have accessed the tool, and she estimates that at least 100 of those visitors represented business interests.

Bjorn Von Euler, communications director for ITT Corporation, and Nicolas Apostolidis, of the Australian consulting firm GHD, said each of their companies have used the Global Water Tool and have joined the WHO and WBCSD in “[The Sanitation Challenge](#),” an effort designed to dramatically reduce inadequate sanitation worldwide.

Both companies provide consulting and engineering services for waterworks projects on the metropolitan scale. For von Euler, the motivation for taking on the challenge was more than just the metrics: “It's an opportunity for us to work with our employees, to do the right thing. Employees are looking for workplaces where the company is actually concerned and participates.” But, he added, “It represents a business opportunity as well.

“We are a global company, and being global means you're going to work in countries where they have severe problems with both water and sanitation. In the global scope, water is something that we share together. You can't be local anymore.”

In China, for instance, von Euler said about 300 million people are “walking towards the coasts and the mega cities.

“That's the equivalent of the entire U.S. population on the move. There's no way, with current technology, that in the next 15 or 20 years you can provide sanitation and safe water for all those people.” Furthermore, he said, this migration phenomenon is

worldwide, and “we need to get engaged to find new and better ways of dealing with these problems. Otherwise, we will all have them.”

Small Jobs, Big Payoffs

According to Apostolidis, the United Nations, in its [Millennium Development Goals](#), calls for a 50 percent reduction in the number of people without access to sanitation by 2035. The U.N. projects achieving this would cost \$38 billion over 10 years.

Apostolidis, who leads the Sanitation Challenge for the WBCSD, sets his goals higher. He believes universal sanitation coverage can be achieved for about \$350 billion over the same period of time. “That’s only about 0.03 percent of global GDP (gross domestic product),” he pointed out. “That’s 6 cents per day per person only counting the G7 countries (Canada, the U.S., France, Germany, Italy, Japan, and the U.K.).”

If even that sounds expensive, Apostolidis said, the payoff is phenomenal. “Studies done by the U.N. show that for every dollar invested for improved sanitation you get approximately \$10 return on the investment.”

Apostolidis sees no reason it can’t be done: “Unlike AIDS and other diseases where we don’t actually have a cure, we already have a cure for this — we don’t need to do any more research to find it.”

And the cure is not necessarily a round of massive public works projects that overwhelm local finances and technical capabilities, which, Apostolidis said, “has held back the broader implementation of sanitation in the past.” He said that beyond the cost factor of conventional centralized solutions, things like flush toilets may not be practical where water is already in short supply. “But you can get pretty reasonable improvement by employing neighborhood-level decentralized solutions, and there’s a whole host of those.”

He added, “Our companies are looking at very simple low technology that can achieve significant improvement for roughly \$50 to \$100 a head.”

For its part, von Euler said, ITT has begun work with universities in China to develop systems “that are very close to mobile treatment for small villages and peri-urban areas.”

Local Partnership

Nevertheless, according to Apostolidis, it is essential to get community involvement from the start. “Once the communities understand the benefits of sanitation and hygiene,” he said, “the projects work exceptionally well.” And because “decentralized solutions are operated at the village level, local residents have an incentive to be involved.”

In many places in rural Africa, pit latrines are customary, but Kayser said that they, lacking maintenance, are often “so disgusting that villagers prefer to defecate in the open.”

With help from Water For People, villagers in the Chikwawa and Rumpfi districts of Malawi are upgrading to composting toilets and installing water points at the local schoolhouses. Participating households will be able to sell the compost to farmers or use it on their own crops as fertilizer.

“It works out great,” said Kayser. “Because the [soils in Malawi are so poor](#), it creates this incredible sustainable cycle.”

Von Euler, who contributes to Water For People as a board member, said, “Doing the right thing will help business going forward.”

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