# BILL& MELINDA GATES foundation

## Poverty

# **Innovations in Sanitation Come in All Shapes and Sizes**

#### Brian Arbogast December 01, 2013

For many, the name Bill Gates is synonymous with high-tech. They figure if Bill Gates is involved in a project, it must involve complex advanced technology, in which case it's probably expensive.

But the fact is that the Bill & Melinda Gates Foundation doesn't look for the flashiest solutions, it looks for the ones likely to **make the biggest impact** on the most people possible.

Those of us focused on <u>Water, Sanitation & Hygiene</u> know that we've got our work cut out for us. With 2.5 billion people lacking access to adequate toilets and another 2.1 billion of the urban poor using sanitation services in which waste is disposed of poorly and ends up contaminating their communities, the **need for solutions** is huge.

So when someone says they can build a plastic toilet pan for just \$1.50 to keep latrines more hygienic, <u>we</u> <u>listen</u>. And when someone else comes up with a way to charge cell phones with urine, <u>we listen to that too</u>.

<u>American Standard</u>'s SaTo toilet pan is a simple plastic device that fits into latrines. When water is poured in, a trapdoor at the bottom shuts before all the water flows through, sealing the edges. This contraption not only keeps out flying insects that spread diseases like cholera, it also **makes the latrine smell better** for users. In fact, Popular Science just picked the SaTo as one of the <u>"Best of What's New" products of 2013</u>.

A very different innovation is being driven by a group of British scientists who've found a way to produce enough electricity to charge a cell phone by using a microbial fuel cell that runs on urine. While this might seem a bit absurd, the reality is that many people in developing countries have limited access to electricity and struggle to charge phones that have become important in their lives. Therefore, **a solution that addresses both human waste management and the need for electricity** is worth looking at.

When it comes to sanitation solutions, **the question shouldn't be whether to go high-tech or low-tech**. The question should be what is going to do the most for people in need.

A few weeks ago, the first winner was announced for the Sarphati Sanitation Award, which recognizes

outstanding contributions to global sanitation and public health through entrepreneurship. It went to <u>Sanergy</u>, which has developed **a novel business model** based on building and servicing clean, modular toilets in the slums of Nairobi.

Sanergy franchises its facilities to local entrepreneurs who earn money through fees or membership plans. Every day, Sanergy collects the waste, takes it to a processing plant, and converts it into organic fertilizer and other products. **It's a model that creates much-needed jobs and profits**, while also reducing the incidence of deadly diarrhea and disease.

Another finalist for the Sarphati prize was <u>iDE Cambodia</u>, which also works to bring safe latrines to more people. By providing one-stop shopping and simplified construction at a better price, they are offering households in rural Cambodia access to "<u>Easy Latrines</u>," which provide a healthier environment and a greatly **improved quality of life**.

**Innovation comes in all shapes and sizes**, particularly in the area of Water, Sanitation & Hygiene. Sometimes it's about designing new products, other times it's about creating a new business model. The key to achieving impact will be to **listen to the needs and desires of consumers**, who are ultimately the ones who will embrace, use, and sustain safe sanitation.

To learn more about our Water, Sanitation & Hygiene strategy, visit <u>here</u>.

## Details

- Category **Poverty**
- Topics <u>Water, Sanitation, & Hygiene</u>
- Country Cambodia, United Kingdom, Kenya
- Tags <u>American Standard</u>, <u>Cholera</u>, <u>Diarrhea</u>, <u>Entrepreneurship</u>, <u>iDE Cambodia</u>, <u>Popular Science</u>, <u>Sanergy</u>, <u>Sarphati Sanitation Award</u>, <u>Toilets</u>

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