Bringing clean water to Southeast Asia

To solve public health issues related to dirty water and poor sanitation, would you turn to private enterprise?

Government and private donors traditionally have led such efforts in developing countries including Cambodia, Laos and Vietnam, where health problems related to water and sanitation are critical. "Asia's Lower Mekong region ranks among the worst in the world in terms of disease, morbidity and premature death due to deficiencies in safe water, sanitation and hygiene," notes a 2011 newsletter from the U.S. Agency for International Development (USAID).

Thanks to a promising collaboration focused upon this region, private enterprise may offer the best way to tackle these health issues – and raise the region's overall standard of living.

"The beauty is that there is no subsidy, no outside donor support," says Mark Sobsey, PhD, principal investigator for WaterSHED, a joint project of USAID, the UNC Gillings School of Global Public Health and the UNC Kenan-Flagler Business School. "This



Dr. Mark Sobsey presents information about his work in Cambodia to members of the UNC Chancellor's Innovation Circle.



is a self-sustaining business proposition that benefits not only public health but the economy. A lot of people view these challenges strictly as a poverty cycle. We think it should turn into a productivity and development cycle."

Sobsey is Kenan Distinguished Professor of environmental sciences and engineering in the public health school.

Thanks to an \$8.5 million USAID grant, WaterSHED facilitates the production, marketing and sales of proven water purification, sanitation and hygiene products to consumers. The organization conducts consumer research, helps design better products, recruits businesses and entrepreneurs, and helps establish consumer financing to buy products.



WaterSHED co-founder Tom Outlaw, MBA (left), provides a USAID staff member with a tour of the hydrologic water filter factory, located on the outskirts of Phnom Penh, Cambodia.

USAID is working with ... the private sector to open a ceramic water filter factory in Cambodia. With ceramic filters, people no longer need to boil water to make it safe to drink, so they don't need to burn as much wood or charcoal, which in turn reduces greenhouse gases.

U.S. Secretary of State Hillary Clinton, on World Water Day,
 March 22, 2011, in reference to WaterSHED

It also partners with a wide range of groups and individuals, from public officials and entrepreneurs in Southeast Asia to nongovernmental organizations, foundations and other aid groups.

The project began in 2007 as one of the School's first Gillings Innovation Labs, developing into WaterSHED in 2009. Since then, the organization estimates 250,000 to 300,000 lives have been improved through the use of ceramic water purification filters (more than 250,000 people) and latrines (more than 50,000).

Tom Outlaw, MBA, WaterSHED's chief of party in Southeast Asia until March 2011, envisioned the project while he was a master's student at UNC's business school a few years ago. Intrigued by the ceramic filter's simplicity, the former USAID employee recalls, "I realized that if we could sell locally made water filters, using local materials and local labor, we'd have a great social enterprise business model."

Now, WaterSHED is proving it.

- Susan Shackelford