Hurricanes, Health, and Safe Water

Posted on *October 10, 2016* by <u>SAROS/EcoH2O Innovations, LLC.</u> by Sherri Walker

For many of us, turning on the faucet for a drink of water or a shower is just a routine part of an average day. Usually we don't have to think twice about the source of our water, how clean it is, or if we'll have enough for our daily drinking or cleaning needs. But millions of people around the world don't know how clean their water is, let alone if they'll have enough water to survive. [photo c/o reference.com]



One in 9 people across the globe don't have access to clean water, and in these water-scarce areas women and girls spend hours each day collecting water for their families to survive. When natural disasters hit, such as Haiti earlier this month, one of the first needs is safe water. But "water scarcity is not just a water availability problem." Communities that only have access to unsafe, unclean water are in as critical of circumstances as areas that have no water access at all.

In many developing countries, people are forced to drink <u>low quality water from contaminated sources</u>, such as local streams. In fact <u>2.6 billion people</u> worldwide [one in three people] lack proper sanitation, which often leads to the spread of water-borne diseases like cholera and typhoid. The results are traumatic. In fact, <u>every week</u>, <u>30,000 deaths</u> across the globe are attributed to unsafe water. Diarrhea alone is a cause of 842,000 deaths annually in areas where medicine and clean water are unavailable to treat the disease. Studies show that <u>88% of these diarrheal deaths are due to unsafe water</u> and <u>90% of deaths from diarrhea are children under the age of 5</u>. When these same areas are hit with disasters like earthquakes or hurricanes, these health-related statistics are multiplied. Cholera, for example, has recently become an imminent threat in post-hurricane flooded areas of Haiti after the impact of Hurricane Matthew. [photo c/o storiesofworld.com]

Though these facts are impactful, many of us live continents away from seeing the effects of a lack of safe water. But those who witness the visual evidence of water scarcity are forever changed. The UN Deputy Secretary General Jan Eliasson says seeing "the body bags of people who had died overnight from water disease" on one visit to Somalia in 1992 left him angry and on a mission to ensure that all people have access to clean water. "I decided, then



and there, to never stop fighting for the fundamental right for all to water and sanitation." Jennifer Braun, Executive Director of International Midwife Assistance, says she understands that it is hard for people in developed countries like the United States to imagine the impact water scarcity has on communities in need. "When one of our children [in America] gets sick, we take them to the Emergency Room

where they get medication and they get better. In countries like Haiti and Uganda lacking safe water, children often die when they get sick. We see it all the time."

Providing safe water to these areas can be the difference between life and death. Braun says access to clean water "allows children to grow up, go to school, to have a future. To live a healthy life." In fact, studies show providing safe water to areas in need can <u>reduce death by 21%</u>. [photo c/o haitiresorts.com]

Many individuals and companies are working to build solutions to safe water issues, but some of these inventions face unexpected obstacles. Some devices are too expensive and some break down or are built in areas that cannot sustain them. Sometimes efforts have proven to be ineffective for so long that local residents give up on hoping for clean water. Delivering improvements without supplying adequate training, or evaluating execution for these new processes essentially "wastes money and threatens the health of people living in these areas."



Braun states that this has been her experience in Uganda, Haiti, and Afghanistan where she's witnessed many innovations in clean water devices and filters prove to be ineffective as developers don't take the time to fully implement the new processes. "It's hard to change culture," she explains. "Often [innovators] come along, dump a gift – money or new technology – and then they leave. This approach doesn't work. It just creates trash and bad feelings. Residents see it as, 'Foreigners are deciding what we need, dumping it on us.'" Collaboration, education, and building long-term relationships with local communities seem to be requirements to any success story for improving safe water access.



The Colorado Haiti Project [CHP] aims to accomplish these requirements through the relationships they've built in Haiti over the past 27 years. Local residents have learned to trust their presence and partnership. Additionally, CHP members have gained insights into the Haitian culture and connections with the people in order to understand potential obstacles that may deter progress and development. Braun explains that the personal investment of local residents is a key to overcoming these obstacles. "The local people have to want the assistance and they need to be active participants in the project. They can have mentors but the success hinges on the community; the people who live there, take care of [the innovation], and manage the water." [photo c/o pictagram.com and coloradohaitiproject.com]

CHP is currently working to partner with <u>SAROS [Swell Actuated Reverse Osmosis System]</u> to provide safe water from seawater through an environmentally friendly wave-powered pump system. CHP hopes that by contributing collaborative relationships, insights into potential obstacles, and educational assistance they can help ensure a successful

implementation of the innovative water solution for communities such as Petit Trou de Nippes, Haiti.

With insights gained from past failures, innovators can work to improve implementation processes in order to increase the possibility of cultures adopting new clean water solutions. By collaborating with local communities and organizations already integrated in areas facing water scarcity, social entrepreneurs can progress towards fulfilling their goals of providing safe water to areas in need.

Sherri Walker is a Communication Specialist and Blogger for SAROS/Eco-H2O Innovations, LLC.