MAKE WATER WORK

Water and sanitation, one of Rotary’s six areas of focus, is a local concern of global importance. To find out why meeting these basic needs continues to be a fundamental problem in developing countries, we talked to seven water experts. They gave us nine ways to alter our thinking – and change the world.

1. Examine our giving priorities. More children under age five die from diarrhea – often caused by pathogens in unsafe drinking water – than from AIDS, malaria, and measles combined. But you probably wouldn’t know it from looking at the most popular causes among celebrities. “HIV/AIDS and malaria get so much attention that people think those cause a lot more of the global burden of disease in kids, and that’s not true,” says Greg Allgood, director of the Children’s Safe Drinking Water Program at Procter & Gamble. And the money that is donated to water and sanitation efforts doesn’t always go where it’s needed. The 2010 UN-Water Global Assessment of Sanitation and Drinking-Water found that only 42 percent of water and sanitation aid benefits low-income countries, and only 16 percent supports basic systems that serve people without access to water.

2. Connect the dots. Putting water at the top of the global agenda begins to make sense when you look at how many areas of people’s lives this resource affects. For example, children who have persistent diarrhea because of waterborne pathogens will never be able to retain the nutrients in food until they have clean water. “The cost of food is tremendously more than the cost of providing clean water. If you start with clean water, you’ll need less money for food,” Allgood says. He adds that he’s seen “Lazarus-like effects” with HIV/AIDS patients in developing countries who have received clean water.

Improving access to water and sanitation also helps boost literacy rates among women and girls, who often do not receive an education because of the time they spend collecting water, or because of inadequate sanitation facilities at schools. Plus, cleaner water reduces the number of school absences due to diarrhea.
3. Appeal to the bottom line.
Every 20 seconds, a child dies of causes related to poor sanitation. While this statistic may make the moral argument for investing in water and sanitation, the economic argument is equally compelling: For every US$1 allocated to sanitation, as much as $9 is returned in increased economic development. Meeting the water and sanitation targets under the UN Millennium Development Goals would lead to economic benefits worth $38 billion annually for developing countries, through increased workforce productivity, decreased health care costs, and greater tourism. "When you talk to the government of Cambodia and say that poor sanitation is causing diarrhea, that's a problem for the minister of health. When you say the country is losing 7 percent of its GDP (gross domestic product) to poor sanitation, that's a conversation for the minister of finance, and all of a sudden the whole discourse changes," says Jae So, manager of the Water and Sanitation Program at the World Bank.

Water is equally important to the private sector. Industry alone accounts for about 20 percent of the fresh water used globally. "Many companies are realizing that water is a material issue to their business and are taking steps to protect the resource, both for their own operations and for the communities in which they work," says Monica Ellis, chief executive of the Global Water

| DISEASE PREVENTION AND TREATMENT |
| ECONOMIC AND COMMUNITY DEVELOPMENT |
| PEACE AND CONFLICT PREVENTION/RESOLUTION |
| BASIC EDUCATION AND LITERACY |
| WATER AND SANITATION |
| MATERNAL AND CHILD HEALTH |

**Estimated Annual Cost and Benefit**

of improving access to water and sanitation worldwide, in US$ billion

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<th>Cost</th>
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**Rotary's Areas of Focus**
Challenge, a coalition of organizations involved in the water sector (including the Water and Sanitation Rotarian Action Group). “It is both a workforce issue and a down payment on their social license to operate, particularly in emerging markets.”

4. **Put hygienic behavior first.** In urban areas throughout India and other developing countries, you’ll find public water systems – but those who can afford to avoid them usually do. “We always carry a bottle of water, knowing very well that millions of our people cannot buy water bottles,” says Kamal Kar, the Kolkata-based pioneer of Community-Led Total Sanitation (CLTS), a behavioral change method that aims to stop people from defecating in fields and empty buildings, and on the side of the road. “If you drink water from the railroad or hospital, it is contaminated with fecal matter. A large number of the samples will have coliform contamination. Water is not safe – it is a killer,” Kar says. Altering behavior takes a long time, so humanitarian groups need to stay engaged in the communities where they’re working, cautions Steve Werner, a member of the Rotary Club of Denver Southeast, Colo., USA, and a water consultant for international nonprofit organizations, who used to head Water for People. “In the end, it doesn’t matter how good your hand pump or filter is if you don’t have a system to keep it going. This is something that is extremely challenging for NGOs working in the field, because the institutional fix has to be done at the same time by everybody.”

5. **Balance technological and institutional fixes.** Water is a local issue. Some places have too much, some not enough. Some water is polluted by chemicals, some by fecal matter. “A lot of donors, including Rotarians, become enamored of a certain technology – sanitation technology, bio-sand technology, more sophisticated UV technology,” Werner says. “But technology is only one piece of the puzzle. Training, capacity building, sustainable funding, and local governance are just as important if programs are to be sustainable.” Clarissa Brocklehurst, former chief of water, sanitation, and hygiene for UNICEF, adds: “In the end, it doesn’t matter how good your hand pump or filter is if you don’t have a system to keep it going. This is something that is extremely challenging for NGOs working in the field, because the institutional fix has to be done at the same time by everybody.”

6. **Work systematically.** Perhaps the greatest obstacle to improving access to water and sanitation is ensuring sustainability, which requires working with a number of entities, including governments. “It’s going to be those governments that will invest most of the money and bring about most of the change, and keep things going over the long term,” Brocklehurst says. NGOs, corporations, and donors also need to collaborate if they’re going to find sustainable answers to persistent problems. “Too often in the development sector, efforts are unnecessarily duplicated, or even conflicting,” Ellis says. Public-private partnerships can help. “By coordinating initiatives, each actor can build on the achievements of others and create exponential progress toward universal coverage of water, sanitation, and hygiene.”
7. **Use demand to drive choices.** Consider two statistics: Of the world’s 7 billion people, 2.6 billion (37 percent) don’t have access to basic sanitation facilities, and 1.4 billion (20 percent) live on less than $1.25 a day. So, when impoverished families receive a $300 toilet from a nonprofit group, it becomes their most valuable possession. “When your costliest asset otherwise is a couple of goats, your free latrine becomes your prayer room or your son’s study room, and open defecation continues,” Kar says. His CLTS method changes that dynamic by helping people understand that they are eating and drinking waste; once they learn that, they want to solve the problem. The initiative to change comes from within the community.

8. **Engage local governments.** No matter how much money international donors pour into water and sanitation, solutions won’t be sustainable without support from local and national governments. But governments frequently neglect these issues – particularly sanitation. “Sanitation often sits within the health ministry in a lot of countries in sub-Saharan Africa,” Brocklehurst says.
“Health ministries tend to be staffed with people interested in the medical, curative side of health. Sanitation doesn’t lend itself to those kinds of approaches.”

Even in countries that do focus on water and sanitation, the sector is often underfunded. In Kenya, for instance, the Water Act of 2002 dramatically reformed water management. But many of the agencies that were established to implement the changes can’t move forward because of a lack of funding, says Edward Kairu, a member of the Rotary Club of Nairobi and executive director of Maji na Ufanisi (Water and Development), a nongovernmental organization. “Up to now, there have been low allocations to the water sector compared with agriculture and defense, which have huge budgets,” Kairu says. “If we had more resources allocated to water and sanitation, we would need a lot less funding for health, for example, because so many diseases are water related.”

**Demand more.** The share of development aid allocated to water and sanitation has declined over the past decade, according to a 2010 UN report. To reverse this trend, people need to demand that their governments channel more money into this sector. That’s where the experts say Rotarians fit in. “I would love to see Rotary replicate the advocacy effort learned from polio and get governments to focus more on this issue,” Werner says. Adds Ellis: “We need more champions for the cause at the local and national levels in both developing and developed countries. Rotarians have the know-how and skills to apply to the task, and their nonfinancial contributions can be as valuable as or greater than the financial ones.”

– DIANA SCHOBERG
Commitments for water and sanitation aid

In 2008, the Organisation for Economic Co-operation and Development reported global commitments of more than US$7.4 billion to water and sanitation causes. The World Health Organization estimates that many low-income countries, such as Bangladesh, Cambodia, and Ghana, require an average annual investment of more than $5 per person if they are to meet the water and sanitation targets under the UN Millennium Development Goals. This map shows the average annual per capita commitment of international donor agencies between 2006 and 2008.
Sustainability is critical to a successful water project. Ron Denham, chair of the Water and Sanitation Rotarian Action Group, says the nonprofit world is becoming more aware of that fact. Ensuring sustainability involves securing local support for the effort and making sure the community can keep it going, he explains. To build a better water project, Denham recommends these strategies:

1. **Conduct a local needs assessment.** The community plays a vital role in identifying the problem and the type of project that can solve it.

2. **Find international partner clubs.** Other clubs can help with funding and provide expertise. Search for a partner club at www.startwithwater.org.

3. **Identify the most appropriate technology.** Again, the community should be involved, because the decision will affect how much it will have to pay to sustain the project.

4. **Provide for ongoing maintenance.** Preserving water quality requires the proper use of equipment. Conduct training and collect fees to cover operations.

– ARNOLD R. GRAHL