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A Path to Clean Water

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The poet W.H. Auden remarked, “Thousands have lived without love, not one without water.” Having sufficient quantities of water is fundamental to life. Water is an engine of health, industry, energy, and agriculture. Use too much, and supplies dwindle. But quality dictates use as well. When contamination makes water undrinkable, unable to support aquatic life, and useless for agriculture and industry, quality—not quantity—drives sustainability.

There are two things that can be done to address chemical and microbial contamination (the two scourges of water quality): prevent the contamination in the first place or remove the contaminants through some method of treatment. What happens in communities, large and small, is somewhere in the middle. The management of human excreta is a powerful indicator of a community’s commitment to clean water.

One example of the sustainable management of excreta can be found on the Caribbean coast of Mexico. Since 1993, the Resource Institute for Low Entropy Systems (RILES)—a nonprofit concerned with clean water and sustainable sanitation—has built about 300 composting toilets on the Yucatán Peninsula. Aesthetically beautiful (beauty is a key component to their success), these composting toilets allow the practice of source separation, which keeps excreta out of water, making the practical management of excreta and the protection of water resources possible.

On the other side of Mexico, RILES has, since 2002, worked in Maruata, a village of 1,000 in the Pomaro indigenous community, in the state of Michoacán, Mexico. The community is at a transformational stage in its physical development, which profoundly affects not only human health and environmental integrity but also cultural identity, social relations, equity of power relationships, gender relationships, and the nature and scope of economic opportunity. Maruata is at a crossroads in the sense that different development choices lead the village down different paths—some good, some very bad. Choices made now will dictate the paths the community can—and will—take in the future.

RILES has worked with the community to protect and equitably distribute its drinking water and build hygienic water wells, and has helped put into operation a locally owned and operated icemaking facility. RILES has brought Mayan masons across the country from the Yucatán to teach Pomaro masons how to build composting toilets. Greywater gardeners (all women) have transformed a quarter of the backyards in Maruata into safe and hygienic water recycling systems, growing fruit trees and medicinal plants with household wash-water for irrigation.

The fact that half of the people in the world have no way to contain and recover the value of their excreta is indicative of government priorities that are politically and morally bankrupt. That the other half uses clean water to transport its excreta (and its industrial waste) reflects misconceptions about conventional sanitation systems and what they can and cannot do. Worldwide, under the current system, everyone suffers. But it doesn't have to be that way.