Global Citizen Water Initiative

Introduction
The Global Citizen Water Initiative (Citizen Water) aims to empower communities worldwide to access healthy drinking water. It incorporates simple, inexpensive water quality test kits; clear, multi-lingual and multi-media instructions; and open source spatial mapping. This unique blend of community empowerment and global information exchange enables people—regardless of location, economic class or scientific training—to participate in improving drinking water quality in their communities.

Problems Addressed
1. Diarrhea and illness due to waterborne pathogens
2. Waterborne epidemics such as cholera, typhoid, and arsenic poisoning
3. Incompatibilities between water parameters and implemented treatment methods
4. Insufficient community access to local water quality information
5. Insufficient community access to desired treatment and supply options
6. Insufficient understanding of the parameters affecting water quality on a local level
7. Insufficient knowledge among researchers and regulators about contaminant distributions.

Prior Art
Water testing field equipment exists for research purposes. Due to price, complexity, and lack of local distribution networks, this equipment is inaccessible to low-income communities in developing nations. Prior water quality interactive maps are limited to water access and ecological health.

Teaching
Citizen Water partners with local NGOs and universities to provide in-person, written, illustrated, and video instructions to interested communities.

Testing
The Global Citizen Water Initiative makes compact, rugged, and easy-to-use water test kits available to low-income, non-technical individuals in developing nations for only $1.50 per water source tested. Village teams in China, Ghana, and the Dominican Republic are already collecting water quality data in conjunction with Citizen Water.

Test Kits
- Turbidity, pH
- E. coli/coliiform
- Arsenic, Fluoride...

Mapping
Citizen Water’s water quality mapping database helps link communities with appropriate treatment options and provides an information tool for optimizing engineering and regulatory interventions.

Implementation

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Quotes
The biggest problem is the diarrhea. It is very bad with the children. My husband’s sister also got blood in her diarrhea and died from it. — Lumo Tser, Quma Village

I am so happy to learn of Citizen Water. This is really useful for me. Every time we almost spent approximately $100 USD for testing the water. Thank you very much. — CaiHua Dorji, Zhengga Village

Acknowledgements
Many thanks to: Lhamotso & the villagers of XiaHuLuo, Pagmotso & the villagers of Mairi; Renqin & the villagers of Quma, Lerjiater & the villagers of Awuju and Xiakeba, CaiHua Dorji & the villagers of Zhengga, Shem Women’s Group, Prof. Shamo Thar (Development Department, QNU), Prof. Susan Murcott (MIT), Vincent Casey (Water Aid), Christiaan Adams (Google.org)

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