

# In Our Lifetime

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Deconstructing the Global  
Water Crisis & Securing  
Safe Water for All

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What makes the desert beautiful  
is that somewhere it hides a well.  
—ANTOINE DE SAINT-EXUPERY

## We envision the day when everyone in the world can take a safe drink of water. It will be in our lifetime. This is how we can do it.

### INTRODUCTION: We Are More Alike Than We Are Different

Here, we are lucky.

The taps in our homes open easily to offer clean water to quench a dry throat or make a cup of tea, to wash dishes or clothing, to water a lawn, or drench a sweaty child on a hot summer day. We greet each day clean and refreshed. For most people living in the United States today, stories of older relatives who pumped water or trudged to an outhouse are dusted off for family gatherings like well-loved artifacts. See how far we've come? Here, at the top of the consumer pyramid, our lives are easy in ways that have become utterly invisible to us, the heroic solutions to our water problems of yester-century neither remembered nor celebrated.

The contrast, for the nearly one billion people who don't have affordable access to clean water, is stark. They walk miles, wait for hours, and pay extortion prices for this fundamental need. There is no rest: everyday someone, usually a woman or a girl, has to secure water for her family. There is no way to predict from day to day how long it will take, how much it will cost, how clean the water will be, or how dangerous the journey. She may have to fight with other people. She may have to use a dirty cloth to filter out the manure from the cow she elbowed out of the way to fill the jug. The money she set aside for school, books and shoes goes instead to a loan shark that provided the cash she needed to buy water from the local vendor when the price spiked.

Water.org has a simple yet daunting mission—we want everyone in the world to be able to take a safe drink of water in our lifetime.

But she may wonder how the next slum over got a public water tap, or why the well that was promised by the NGO she'd never heard of didn't arrive. And she may catch the occasional glimpse of a bootleg American movie, with scenes of swimming pools and endless green lawns and wonder why her "global water crisis" looks so different from everyone else's.

This stark reality has inspired noble and necessary philanthropic efforts to help stop the real suffering. There are conferences, master plans, frameworks, legislation, new institutions, and even more resolved resolutions. Money is raised. Wells are dug, ribbons are cut. But even after decades of charity, subsidies, multi-lateral aid and investments on the part of developing country governments and outside NGOs, the system remains inefficient, and largely misses the goal of providing relief for those at the base of the economic pyramid (BOP) in their daily need to secure water. The intentions are good, but the relief is not trickling down. And the "system" that has calcified around the water crisis relies on outdated tools and thinking that is often more likely to keep people in poverty rather than lift them up. To the outside observer, it all seems insane.

Water.org has a simple yet daunting mission—we want everyone in the world to be able to take a safe drink of water in our lifetime. But our belief that we can achieve that tremendous goal is rooted in two decades of experience understanding the insanity of the water issue, and contributes to discerning what works and what does not. And we define success differently than the traditional good-hearted donor, who tends to scour the top line for signs their investment was fruitful.

Pursuing metrics based on people reached or project sustainability, while helpful, does not reflect progress towards changing the fundamental constraints of the charity-driven approach, which sees one billion potential "beneficiaries." Instead, we think about the one billion people who are living and dying for water access a bit differently—as customers with financial power, rights, responsibilities, and energy to design their own futures. We measure success by the ongoing experience of the poorest people who have been enabled to join a modern water system already in progress, while paying a fair

price, and being encouraged to hold legitimate vendors and local governments accountable for the quality of the service they have purchased. Through the simple dignity of becoming a paying water customer, the previously unwashed poor are transformed into an economic and political force to be reckoned with. Just like we, the lucky ones. Our WaterCredit initiative alone has created 330,000 new water customers.

And now it's time to do more.

Water.org has launched the New Ventures Fund to allow us to discover, pilot and scale the next game-changing solutions. We believe the only way we will get line of sight on our vision of safe water for all is by fundamentally changing the system. We've embraced a style of thinking that we call orthogonal—in which we identify and tap forces that appear unrelated or irrelevant to help solve a problem in an unexpected way. It is an inspirational touchstone that helps lead us away from the traditional philanthropic business model that has long emphasized donor satisfaction over recipient needs, and inject fresh thinking into a sector that has been slow to take advantage of new technologies or innovations in finance and cultural developments. But there is no reason to point fingers or assign blame. There will always be a need for pure charity to serve the needs of the ultra poor who require subsidies. But for millions more, the introduction of simple, well-designed products and services that speak to their specific needs can make all the difference in their world and ours.

Of all the different things that keep people in this kind of death spiral of extreme poverty, **water just seemed so huge. And it doesn't have to be.**

—MATT DAMON, WATER.ORG CO-FOUNDER

The New Ventures Fund will support a portfolio of innovations—experimental in nature—creating things like mobile apps, financing mechanisms, citizen engagement tools, and things we haven't thought of yet, to help solve specific BOP customer challenges that we identify, all designed to the variability of each market segment. (Because the "global" water crisis is not a crisis in the same way, in all places, for all people.) We expect it to be iterative. We will be able to take invaluable learnings from prototypes into next generation products, and collect real data on how BOP customers think, live,



organize, and work. We expect to be surprised by what is invented. Traditional ROI metrics—health outcomes, school days gained, etc.—remain worthy pulse points for communities and charitable activity. But for this next wave of innovation, we are embracing a new set of ROIs that factor in market forces to measure catalytic impact, with the specific goal of measuring growing consumer heft—for example, the amount of social or commercial capital that has been leveraged, and whether the philanthropic cost per person reached is diminishing. Though clean water for everyone is the clear goal, we have a secondary one as well: we'd like to put ourselves out of business. And by seeding a marketplace with a soul, we plan to do just that. Within our lifetime.

### **THE OPPORTUNITY AHEAD: Familiar Chokepoints & Orthogonal Forces**

Water.org's experience working on the ground with people who face the water crisis daily has revealed the sector's biggest obstacles as 1) a series of market failures and 2) an overall lack of accountability on the part of governments and utilities. These chokepoints yield a highly dysfunctional system that deters the very civic, social, and commercial capital investments that are needed to jumpstart widespread progress. Without intervention, the sector will continue to limp along with sporadic infusions of international aid, charity,

and investments on the part of governments and the development banks.

By systematically attacking the twin chokepoints of market failures and accountability, Water.org seeks to start a ripple effect that will drive system change and realize our vision for a world in which everyone can meet their basic water needs. The chokepoints we've identified are not new. What is new, however, are models of financing and advancements in technology that have fostered a democratization of information and capital, with the potential to change the rules of the entire game.

Moreover, seemingly unrelated (orthogonal) forces also have the potential to inspire innovation that can attract the needed capital and spur greater accountability. Other sectors have begun to apply new approaches, and Water.org seeks to learn from and leverage their experiences. New perspectives and trends have informed this analysis and proposed solutions, and hold great promise for accelerating the pace of progress.

### **Market Failures & New Financing Models**

New models of financing are encouraging NGOs and donors to get smarter about how they use capital, seeking efficiencies which have eluded us for decades. This is driven at least in part by the proliferation of "catalytic" philanthropy by individuals and foundations. This philanthropic capital is distinguishable from traditional charity by the expectations of "investors" to see how their dollars are seeding market development so that one day, their philanthropy will no longer be needed to sustain impact. Approaches like microfinance are good examples of this in action. With strategic grant investments (typically made years earlier), microfinance institutions have been able to grow, thereby making capital available to those living in poverty, opening up entirely new markets to previously marginalized individuals. Similarly, pooling grant capital into advanced market commitments has successfully jumpstarted markets—notably for vaccines against pneumococcal disease—and reassured private-sector investors and industry of the return on their investment.

Water.org knew that many people could and would pay for water, and drew on proven microfinance approaches to provide a proxy for precise market segmentation, and to develop the concept of debt financing for household water and sanitation solutions. Sensing an opportunity for powerful synergy with existing microfinance institutions (MFIs), we pioneered WaterCredit, a model in which MFIs expand their services to include loans targeted to meet clients' water and sanitation needs (ranging from rain-harvesting tanks to initial utility connections). Through WaterCredit, Water.org uses funds from our donors to leverage commercial capital

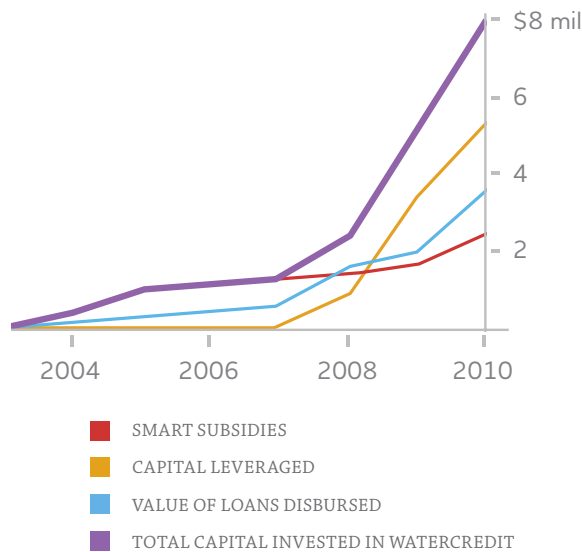


If we can combine the power of catalytic philanthropy with the power of orthogonal thinking, **we have the potential to put this crisis behind us.** And do it in our lifetime.

—GARY WHITE, WATER.ORG CO-FOUNDER

to fund MFI loan portfolios—substituting a market approach for straight charity. As people repay these loans over time, WaterCredit effectively “recycles” that capital by leveraging still more loans with that same initial investment. Taking into consideration repayment and re-disbursement rates, a WaterCredit loan fund can reach five to ten times as many people as a traditional grant over a ten year period. WaterCredit is on track to reach one million people by 2014 and has the potential to scale even faster as more groups emulate the model. Our WaterCredit.org learning platform enables them to do just that.

## WATERCREDIT INVESTMENT



Millions of current and potential WaterCredit clients desire a household connection to the water grid, yet utilities have not typically recognized this untapped market. In response to this disconnect, we are expanding WaterCredit to demonstrate to utilities, through market research and pilot initiatives, that people in poor urban and peri-urban communities have the ability and willingness to pay for water services. We aim to take the advanced market commitment model and effectively guarantee a customer base for utilities and a reduced risk for private investors.

In order to bring safe water to every citizen of the world, we need more and better capital on a scale only available from commercial markets. The only way to attract that capital is with economic efficiency. When poorly targeted, supply-driven solutions like the charitable model for mitigating the water crisis tend to fuel inefficiency and stymie efficiencies inherent to a demand-driven market. We know that people in developing countries are not uniformly poor and that there’s money to be spent; shifting to a demand-driven model is a clear way to better serve more customers and to ensure that there is enough charity available for the absolute poor who desperately need a direct subsidy.

## Accountability & Technology

Transparency is a precursor for accountability, and better accountability can help address inequities and inefficiencies in water’s many delivery systems, improving services and bolstering investor confidence. Currently, billions of dollars are spent annually on water infrastructure and services, yet approximately half of this is lost due to fraud, mismanagement, and carelessness. Advances in information and communication technology (ICT) could improve accountability and empower poor individuals and communities.

Mobile and web technologies are now widely accessible to some of the poorest people in the world. These technologies are uniquely suited to increase accountability because they can enable almost real-time investment tracking, information dissemination to even the most marginalized populations, and participation from many previously disenfranchised groups. Many development sectors are already using GPS, SMS, and social media to raise funds, report to donors, and



increase awareness. These technologies can also directly benefit clients, for example, by alerting mothers to the schedule for a mobile immunization clinic, or informing fishermen of market prices so they can receive a fair wholesale price for their catch.

Water.org, in collaboration with its partners, sees opportunities to push out information such as water investments earmarked for underserved communities in rural, urban, or peri-urban areas and the status of those initiatives. Access to this kind of information is an important first step towards enabling citizens to hold their leaders accountable. Mobile technology also can deliver real-time access to the locations, status, and prices of water supplies from public taps, tanker trucks, and water kiosks. These seemingly simple interventions could prevent price gouging by unscrupulous vendors, save individuals weeks of lost productivity each year spent scavenging for water, and empower communities to hold their leaders and service providers accountable for improvements that are never completed or funds that seep through cracks in the system.

Tapping into emerging forces will allow Water.org to design initiatives that draw on technology to allow the poor to begin to leverage their power as customers and citizens. We believe there are ways to help people find their voice in demanding better water services in much the same way the Arab Spring helped people find their political voice.

### ***“Crowd-sourcing” Ideas and Creating a Space for Innovation***

To take advantage of opportunities such as microfinance and mobile technology—and to discover new opportunities—we’re challenging ourselves and the sector at large to look beyond our traditional boundaries and invite in new thinkers and ideas.

System-changing solutions like those we propose and envision for the future of water require that we reach past our assumptions, past what we perceive to be best practices, and even past the parameters of the water or development sector. Water.org seeks to help create this paradigm shift—an ecosystem in which people from seemingly unrelated sectors can collectively convene, generate new ideas, foster fledgling ideas, and reassess and hone those that have the greatest potential to drive system change. To make sure these ideas have life beyond a flip chart or white paper, Water.org intends to foster a “liquid network” of thinkers and doers from a wide range of sectors and industries through a variety of convenings and platforms starting later this year. We wholeheartedly welcome individuals and organizations that would like to share sponsorship and leadership of these events, now or in the future. We don’t envision a working group or an entity to codify best practices or define sustainability, but rather a space to identify and explore orthogonal forces, to capitalize on emerging ideas, and to re-inspire each other and our shared vision.

As an initial step in this direction, Water.org, in partnership with the Clinton Global Initiative and the Hult International Business School, issued a global challenge to generate game-changing ideas to benefit those at the base of the pyramid who lack safe water and sanitation. Hundreds of business school students representing more than 130 different countries—many of which struggle with the very water crisis we’ve examined in this paper—generated solutions to help alleviate the crisis. Thirty panels of judges in five regional competitions (Shanghai, Dubai, London, Boston, and San Francisco) narrowed the field to five teams that competed at the global final, hosted by Water.org, Hult, and President Bill Clinton, in the spring of 2011. Water.org is now mining these ideas with the goal of piloting new initiatives that the water sector may never have conceived of without outside inspiration.



## **We have to reform our systems.**

But morally the first priority should be to get the world's poor to a position of sustainable life. That's what Water.org is about, and it is a profoundly important thing.

—PRESIDENT BILL CLINTON, HULT  
INTERNATIONAL BUSINESS SCHOOL  
FINAL COMPETITION, APRIL 28, 2011, NYC

### **A Call to Action**

Water.org shares the goal of ensuring that everyone in the world has sustainable and affordable access to safe water, and we believe that fundamental system change is the only way to make this happen—change driven by the intrinsic power of the poor as customers and citizens. We must use innovative financing models and technology to address the twin chokepoints of market efficiency and accountability in order to correct the flawed system that has limited large-scale and lasting solutions to the water crisis. While we take a long-term view in this regard, we do not discount the role of subsidized interventions, when properly targeted or interim solutions like private sector vendors, when scrupulous, until utilities can be expanded to poor neighborhoods. We can assume that the world in which we operate will always require some level of subsidy for the absolute poor, but we believe that innovations in financing can more effectively direct those subsidies to the people who need them most.

Water.org doesn't presume to hold all the answers and we fully expect to refine and recalibrate our approaches drawing on the ideas and experiences of others, but we also are acutely aware that there's no time to waste. A water shortage is in the offing for the US and other developed countries, but it has already reached crisis proportions for more vulnerable communities in the developing world. As the global outlook grows more serious, the world's poor will see their situation deteriorate even more rapidly than those living in industrialized countries.

To accelerate the pace of progress, Water.org has launched its New Ventures Fund. The Fund is a philanthropic pool of capital generated by venture-minded philanthropists and problem solvers eager to team with Water.org to search for and launch the next round of big ideas that will change the face of this crisis for those that live it every day. The money raised will fund the "Idea Lab" at Water.org, supporting teams and partners to generate new ideas, develop hypotheses, pilot, monitor, and take solutions to scale—all of which takes entrepreneurship, patience and a tolerance for risk. When the potential payback has the opportunity to impact millions of lives, how can we afford not to take the risk? In essence, Water.org seeks to adopt a venture capital model, encouraging innovation and orthogonal thinking with discipline to invest in those approaches that have the biggest potential ROI.

Along with financial commitments to the New Ventures Fund, those that join Water.org in its pursuit of solving this crisis in our lifetime are asked to lend their voices as advocates on behalf of those we wish to serve. Building on the growing awareness of the global water crisis, we seek to create a movement which mobilizes leaders, resources, and transformative innovation.

We call on water and sanitation experts and novices alike; on leaders in technology, economics, and civil society; innovative philanthropists; and engineers, writers, and thinkers. Join us in spurring innovation, catalyzing capital, and driving transparency and accountability. By unleashing the power of the poor we will ensure that everyone in the world can take a safe drink of water in our lifetime.



For specific questions about how you can support Water.org, send an email to [info@water.org](mailto:info@water.org).

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