

**BERKLEY CENTER**  
*for Religion, Peace & World Affairs*  
GEORGETOWN UNIVERSITY

## **Water and Faith**

Rights, Pragmatic Demands, and an Ethical Lens

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A collaboration with the World Faiths Development Dialogue supported by the Henry R. Luce Initiative on Religion and International Affairs

## About the Berkley Center for Religion, Peace & World Affairs

The Berkley Center for Religion, Peace, and World Affairs at Georgetown University, created within the Office of the President in 2006, is dedicated to the interdisciplinary study of religion, ethics, and public life. Through research, teaching, and service, the Center explores global challenges of democracy and human rights; economic and social development; international diplomacy; and interreligious understanding. Two premises guide the Center's work: that a deep examination of faith and values is critical to address these challenges, and that the open engagement of religious and cultural traditions with one another can promote peace.

## About the LUCE/SFS Program on Religion and International Affairs

Since 2006, the Berkley Center and the Edmund A. Walsh School of Foreign Service (SFS) have collaborated in the implementation of a generous grant from the Henry Luce Foundation's Initiative on Religion and International Affairs. The Luce/SFS Program on Religion and International Affairs supports research, teaching, and outreach in two program areas: Religion and U.S. Foreign Policy and Religion and Global Development. A major focus is engagement with public officials in the U.S. government and international organizations grappling with religion and world affairs. The Luce/SFS program was renewed in 2008 through the 2010–11 academic year.

## About the Edmund A. Walsh School of Foreign Service

Founded in 1919 to educate students and prepare them for leadership roles in international affairs, the School of Foreign Service conducts an undergraduate program for over 1,300 students and graduate programs at the Master's level for more than 700 students. Under the leadership of Dean Carol J. Lancaster, the School houses more than a dozen regional and functional programs that offer courses, conduct research, host events, and contribute to the intellectual development of the field of international affairs. In 2007, a survey of faculty published in Foreign Policy ranked Georgetown University as #1 in Master's degree programs in international relations.

## About the World Faiths Development Dialogue (WFDD)

The World Faiths Development Dialogue (WFDD) bridges between the worlds of faith and secular development. Established by James D. Wolfensohn, then President of the World Bank, and Lord Carey of Clifton, then Archbishop of Canterbury, WFDD responded to the opportunities and concerns of many faith leaders who saw untapped potential for partnerships. Based in Washington, D.C., WFDD supports dialogue, fosters communities of practice, and promotes understanding on religion and development, with formal relationships with the World Bank, Georgetown University, and many faith-inspired institutions.

## About the Report

This report reviews the roles that faith-inspired leaders, communities, and organizations play in worldwide efforts to assure universal access to clean water and sanitation. Water has a special resonance for faith communities, in part because it is an essential component of so many traditions and rituals. It is also a leading arena for international action to improve public health and wellbeing, and achieving minimal targets for water and sanitation is a key Millennium Development Goal (MDG). The report was prepared jointly by the Berkley Center at Georgetown University and the World Faiths Development Dialogue. It explores the widely varied, often inspiring work of faith-inspired actors around the world as it relates to water. It also focuses, though to a lesser degree, on the closely related but less prominent topic of sanitation. The report highlights what makes faith-inspired organizations distinctive in their work, drawing on their long histories and networks as well as their practical contemporary work and advocacy. The aim is to inform policymakers and practitioners about the “state of play” and suggest areas where action is both desirable and feasible, thus ways to bring faith more explicitly into water strategies. A further hope is to encourage collaboration to coordinate, replicate, and scale up current efforts. Finally it traces a future research agenda, including an annotated bibliography of select resources useful for future investigations.

The report’s principal authors are Katherine Marshall, Emily Rostkowski, and Esther Breger. Libby Bliss and Michael Bodakowski made significant contributions, and Hahna Fridirici and Claudia Zambra finalized the paper. Research was undertaken between September 2010 and November 2011 and involved desk research and interviews with practitioners. A draft of the report was the basis of a consultation held at the Berkley Center at Georgetown University on March 18, 2011. The authors gratefully acknowledge inputs from colleagues who commented on the draft report. This is one of a series of Berkley Center issue surveys made possible through the support of the Luce/SFS Program on Religion and International Affairs.

## Acronyms and abbreviations

CCN – Christian Council of Nigeria  
CRS – Catholic Relief Services  
CWS – Church World Service  
EWN – Ecumenical Water Network  
FSW – Faiths for Safe Water  
IFIs – International Financial Institutions  
INWRDAM - Inter-Islamic Network on Water Resources Development and Management  
IR - Islamic Relief  
IRC – International Rescue Committee  
MDGs – Millennium Development Goals  
MWA – Millennium Water Alliance  
UNCED – UN Conference on Environment and Development  
UNDP – UN Development Programme  
UNESCO – United Nations Educational, Scientific and Cultural Organization  
UNICEF – United Nations Children’s Fund  
UN-Water – UN agency with primary responsibility for water and sanitation  
WASH – Water, Sanitation, and Hygiene  
WCC – World Council of Churches  
WHO – World Health Organization  
WSSCC – Water Supply and Sanitation Collaborative Council

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# EXECUTIVE SUMMARY:

## FAITH DIMENSIONS OF WATER AND SANITATION

*Say, 'If the sea were ink for the Words of my Lord,  
the sea would be spent before the Words of my Lord are spent-15 Cf. Quran XVIII*

### Defining the problem and priorities

Water supply is central to virtually all development strategies, and water is closely linked to decent sanitation. WASH (Water, Sanitation, and Hygiene) figures prominently in the Millennium Development Goals (MDGs), which represent the closest approximation today to a global development strategy and covenant for common action. Water priorities and programs feature in the vision statements and pragmatic work plans of many development institutions, public and private, secular and faith-inspired. There is, however, a large disconnect between the compelling and straightforward calls to assure clean water and decent sanitation for all world citizens as a matter of rights and justice, and the realities of complex and often poorly harmonized policies and programs on the ground. This complexity of multiple sectors and actors are part of the story: water involves many, indeed virtually all sectors, prominently health, economic livelihoods, gender relations, food security, and climate change. Water is a first need in humanitarian relief as well as in long-term planning for any community, large or small. There is no simple key to achieving the vital objective of “water and sanitation for all.”

This review focuses on a largely neglected dimension of WASH strategies and programs: their links to faith<sup>1</sup> actors (leaders, institutions, congregations, and ideas). It is well known that faith-inspired groups of many kinds are active in addressing global water issues, with a special focus on poor communities, but their work and potential for greater contributions, in scale and quality, are not well understood. The impact thus suffers from limited learning from experience, poor coordination, and insufficient and inefficient funding. The “policy voice” of faith actors is not well reflected at the “policy tables.” The report explores these hypotheses and highlights ideas on research agendas and recommendations for further action.

### Practical approaches

We should focus on five dimensions of the complex faith world:

- (a) advocacy (global, national, local): pressing for the right to water, MDG execution, and experience with poverty reduction strategies. Important threads are water justice and compassion for those in need.
- (b) service delivery: programs that address water and sanitation from international, to national, to local levels.
- (c) community organization: engagement on a granular, grass-roots level
- (d) ethics: exploration of some specific ethical issues that complicate dialogue and programs, for example around water conflicts, privatization, and water charges
- (e) offering platforms for voices to be heard: using “voice” and shareholder power well to address policy choices and challenges

The centrality of water in many faiths is both a starting point for action and a point of engagement between the faith-inspired and secular development communities. Focusing on water offers the potential to find common ground on development issues. The challenge is to build on this potential. Options include ecumenical and interfaith bodies as well as individual denominations and local churches, mosques, and temples.

This review set out to harvest and present actual experience from faith-inspired practitioners. A common plea is for better sharing of best practices, as part of broader efforts to enhance knowledge and build stronger networks. The report includes a series of mini

“case studies,” acknowledging that they merely scratch the surface of global experience. Relevant questions include: How well is this experience known? What is the scope and caliber of evaluation of results? How far is coordination an issue within and among faith communities? What is the most effective and credible way to present such material so that it serves useful purposes?

### Some specific issues:

**Understanding and making operational the right to water:** The UN General Assembly recognized water as a human right in July 2011, with religious organizations among the advocates. Translating this into practice is the current challenge.

**Conflict prevention and resolution:** Dire forecasts predict that future wars will be fought over water; competition for water resources fuels many conflicts, from global to community levels. Tensions are complicated and exacerbated by climate change, both today and increasingly in the future. What specific actions, briefings, and/or lessons might be useful to broad audiences?

**Policy debates:** Tensions and conflicts that at times engage faith actors focus on specific policy issues like water privatization and commercialization. Examples of the links include such statements: “Those who consider water today to be a predominantly material good should not forget the religious meanings that believers, and Christianity above all, have developed from it, giving it great value as a precious immaterial good that always enriches human life on this earth” (Pope Benedict, 2008). Muslim participants at a 1998 UNESCO conference objected to a description of water as an economic good, arguing that it conflicted with the Qur’an’s description of water as a gift from God. Are there better ways to build on knowledge and perspectives from faith communities?

**Grassroots faith institutions in water management and hygiene promotion:** Improved infrastructure for water and sanitation involves behavior change; this is central to water agendas (focus on hygiene education and “sanitation marketing”). Examples include a program called WASH in Schools that educates for good hygiene, in order to mobilize children to become agents of change to improve water, sanitation, and hygiene practices in their families and communities. Similar education efforts may focus on churches, temples, and mosques, where people often learn new information and attitudes.

**Gender dimensions:** Inadequate access to water and sanitation hinder women’s education, health, and livelihoods. In Africa, women com-



Ethiopian Water Carrier

monly spend many hours carrying water to meet daily needs; an estimated one in five girls do not attend school in part because they must carry water. Inadequate and inaccessible toilets and bathrooms make menstrual hygiene difficult for women and can expose them to humiliating circumstances. The general lack of effective policing and insecurity can also make women vulnerable to rape and other forms of gender-based violence simply in seeking water. Those seeking gender equality in water-related decisions, at both the community and wider levels, should engage faith actors.

### Questions Moving Forward:

Why focus on water and faith, and how? What resources, networks, and studies exist, and what is missing?

What policy or practical barriers do advocates and practitioners face that might be addressed? What is to be learned from best practice and how?

Where is there room for increased interfaith engagement on both the community and international level?

What religiously-rooted cultural practices might present barriers to successful sanitation and hygiene, and how can religious institutions be engaged on those issues?

# THE SETTING

*A Muslim tradition holds that when asked what type of charity is best, Muhammad responded, "Water."*

Water is incontestably vital for life. It features centrally in international development strategies and work. From the earliest and most rudimentary plans for development to sophisticated social needs assessments, providing reliable clean water is a sine qua non. It is essential for peoples' health and well-being. It is also central for their livelihoods in sectors ranging from agriculture to health to industry.

Over time, as human development has taken a more central place in development strategies, meeting the water needs of poor and excluded communities has assumed increasing prominence. So has sanitation, closely linked in practice to water, and equally tied to health. Thus the focus on water in the Millennium Development Goals (MDGs) defined in 2000 reflects the clear and deepening global consensus that action to ensure reliable clean water for all people and to improve sanitation ranks among the world's leading priorities. The right to water has rightly come to be seen as a core human right. Box 1 provides a summary picture of the related goals and challenges.

Water and sanitation is a vast topic, concerning every facet of life and communities in every part of the earth. In a practical sense, several different sectors are involved, as well as various intellectual traditions and disciplines. Challenges involved in supplying clean and reliable water to the city of Dhaka, Bangladesh may not be far removed from those presented for Tokyo, Japan or Washington, DC, but they

differ markedly from those that stand in the way of assuring reliable water supplies for a village in Niger or in Cambodia. There are technical, engineering, social, cultural, and organizational issues for both urban and rural water supply.

Central to these more technical issues in urban and rural communities is the issue of health. Contaminated water and poor sanitation frequently cause a range of waterborne diseases, which have profoundly negative impacts on the broader communities. As such, water and sanitation are intimately linked to health, with eminently practical dimensions as well as tight ties to basic human dignity.

Water is essential for daily human life, linked to drinking, cooking, and cleanliness, but it is equally essential for agriculture and industry. Rather different sectors are involved in irrigation, animal water supply, and industry. Often, however, they intersect, whether it is in managing water resources at a national or regional level, or in the technical and pricing decisions that determine allocation.

There are dire but credible forecasts that future wars will be fought over water: already competition over water resources fuels numerous conflicts, at the global to community level. These tensions are complicated and exacerbated by climate change, both currently and increasingly in the near future.

Water is deeply symbolic for many faith traditions, for rea-

### Box 1: Water Sanitation Facts

**Millennium Development Goals:** Most MDG targets involve water (for example health and reducing child and maternal mortality) but the specific water and sanitation measures are set in Target 7c: “Reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation.”

As of 2008 (UN Statistics):

2.6 billion people, or 39 percent of the world’s population, live without access to improved sanitation, the vast majority in Asia and sub-Saharan Africa.

In wealthier regions almost the entire population (99 percent) used improved facilities, as compared to 52 percent in developing regions.

At current rates of progress the world will miss the MDG sanitation target by almost 1 billion people. Even if the MDG target is met, some 1.7 billion people still will not have access to improved sanitation facilities. Rural/urban disparities are particularly pronounced in sub-Saharan Africa, the Caribbean, Southern Asia, and Oceania.

The proportion of the world’s population that practices open defecation has declined by more than one third, from 25 percent in 1990 to 17 percent in 2008. However, some 1.1 billion people still defecate in the open. There is open defecation in 81 percent of each of the following eleven countries: India, Indonesia, China, Ethiopia, Pakistan, Nigeria, Sudan, Nepal, Brazil, Niger, and Bangladesh. It is most widely practiced in rural Southern Asia and sub-Saharan Africa.

5.9 billion people, or 87 percent of the world’s population, and 84 percent of the population in poorer nations, have drinking water from safer, improved sources. At current trends the world will meet or even exceed the water MDG target.

3.8 billion people, or 57 percent of the world’s population, get their drinking water from a piped connection that provides running water in their homes or compound. Sub-Saharan Africa and Oceania are the areas lagging furthest behind; just 60 percent of the population in sub-Saharan Africa and 50 percent in Oceania use improved sources of drinking water.

In China, 89 percent of the population of 1.3 billion has access to drinking water from improved sources, up from 67 percent in 1990. In India, 88 percent of the population of 1.2 billion has access, as compared to 72 percent in 1990.

sons that go deep into beliefs, history, and rituals. Because water is so vital to survival, it takes on eminently practical aspects in religious practice and also poses a host of ethical and identity issues. Both the contemporary, practical needs and demands for water and sanitation and ideas about social justice are thus a central focus for many faith-inspired organizations and communities. With centuries of experience

around the world, they bring to contemporary debates a wealth of experience about water issues and ethics, especially in serving poor communities. Faith actors are thus powerful advocates for action towards meeting WASH needs.

Working to meet water and sanitation challenges offers an important bridge between secular and faith institutions and





This pump, installed by Islamic Relief in Agra Bagh village which was destroyed by the 2010 floods, is providing fresh water to the community

a productive area for partnership.

Religion is not involved in global water challenges via any single, obvious entry point. Rather, at each point and in each dimension, there are faith links; some are well known, but more, particularly those involving development programs, are not well explored. Starting with the priority for water advocacy and action, ethical imperatives can move faith communities as few other development issues can. Many congregations and groups are thus actively engaged in debates about priorities and approaches, for example on privatization or water pricing, and on equity dimensions. At the community level, faith leaders are often engaged in the practical issues around planning and allocation of water resources, especially in rural areas. And water often appears as a leading priority for programs among the vast array of faith-inspired organizations.

This report explores a range of topics that link faith and water, with a view to contributing to the global WASH agenda for action. Its starting hypothesis is that faith institutions bring an experience that is not fully known and engaged in global policy exchange, and that faith institutions could play larger and more creative roles in the coming challenges of meeting water and sanitation needs, especially of poor communities. The focus is on the poorest nations and communities, but, given the interconnected nature of water issues, other dimensions, from agricultural and industrial issues, to water as part of conflicts and conflict prevention, also enter into the discussion.

# PART 1.

## A MULTIFACETED PROBLEM: WATER AND SANITATION CHALLENGES

*Jesus answered, "Everyone who drinks this water will be thirsty again, but whoever drinks the water I give him will never thirst. Indeed, the water I give him will become in him a spring of water welling up to eternal life." John 4:14*

Although 70 percent of the Earth's surface is covered by water, very little is fit for human consumption<sup>2</sup>; most is salty or frozen. Unlike other resources like coal, oil, and natural gas, water is renewable; the quantity of fresh water remains constant at 12,500 cubic kilometers (3,000 cubic miles).<sup>3</sup> Given its finite quantity and unique properties, increased demand cannot be met with an overall increase in supply.

Agriculture and manufacturing industries are by far the largest water consumers, accounting together for 90 percent of all world water use. Population growth and rising living standards, including diets rich in water-intensive food and lifestyles that demand goods like cars, computers, and refrigerators, drive growth in both sectors. Statistics measuring domestic water use do not capture the large quantities of water used indirectly by individuals. Each day roughly 1,700 liters of fresh water per person are withdrawn from the earth.<sup>4</sup>

Access to water and water consumption varies significantly across the world. Rapid urbanization strains water supplies in many cities, and rural areas lack the infrastructure needed to assure safe, accessible, reliable water supplies in many poorer countries. An estimated 884 million people have no access to improved sources.

Water and sanitation are intimately linked. Some 2.6 billion people have no safe way to dispose of waste. Many defecate in

the open or use unimproved sanitation facilities, contaminating water sources.<sup>5</sup> Without piped water to wash hands, open-air defecation and those use of primitive latrines inevitably spread disease.<sup>6</sup>

Estimates are rough but some 3.3 million people, mostly children, die each year because of dirty water and poor human waste disposal facilities.<sup>7</sup>

### Millennium Development Goals

World leaders adopted the UN Millennium Declaration in September 2000 as a commitment to partnership to reduce extreme poverty and set time-bound targets for eight priority development goals. MDG 7 sets the target of halving the number of people around the world without access to improved water sources and sanitation facilities. At the current rate, the world will miss the MDG target for sanitation by 13 percentage points.<sup>8</sup> Countries are faring better in respect to access to potable water; the MDG target is likely to be exceeded. Even so, hundreds of millions of people still lack reliable access to improved drinking water sources. Although for monitoring purposes access to improved water sources has been equated with access to safe drinking water, the two are not synonymous; water from improved sources is not always safe to drink. The number of people without access to clean drinking water could, therefore, be much higher than is cur-

## Box 2: Definitions of Water and Sanitation Terms

World Health Organization (WHO) used the following guidelines to help define categories for water and sanitation sources and facilities:

### **Sanitation Ladder**

***Open defecation:*** Human feces are disposed of in fields, forests, bushes, open bodies of water, beaches, or other open spaces or are disposed of with solid waste.

***Unimproved sanitation facilities:*** These do not ensure hygienic separation of human excreta from human contact. Unimproved facilities include pit latrines without a slab or platform, hanging latrines, and bucket latrines.

***Shared sanitation facilities:*** Sanitation facilities of an otherwise acceptable type are often shared between two or more households. Only facilities that are not shared or are not public can be considered improved.

***Improved sanitation facilities:*** These ensure hygienic separation of human excreta from human contact. They include use of the following facilities: flush/pour flush to piped sewer system, septic tank, pit latrine; ventilated improved pit (VIP) latrine; pit latrine with slab; composting toilet.

### **Drinking-water Ladder**

***Unimproved drinking water sources:*** Unprotected dug well, unprotected spring, cart with small tank/drum, surface water (river, dam, lake, pond, stream, canal, irrigation channels), and bottled water.

***Other improved drinking water sources:*** Public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs or rainwater collection.

***Piped water on premises:*** Piped household water connection located inside the user's dwelling, plot, or yard.

rently reported.<sup>9</sup> Box 2 sets out some of the basic definitions used in discussing WASH.

To highlight the importance of raising awareness around water issues and to promote the MDGs related to water and sanitation, the UN declared 2005-2015 the Decade of "Water for Life." Launched on World Water Day, March 22, 2005, its stated objective is to "focus attention on action-oriented activities and policies that ensure the long-term sustainable management of water resources, in terms of both quantity and quality, and include measures to improve sanitation." The UN interagency mechanism responsible for coordinating the decade is UN-Water ([www.unwater.org](http://www.unwater.org)).<sup>10</sup>

### **Water and conflict**

A growing global population and rising demand for water have contributed to water shortages in many parts of the world. Densely populated areas experience local water shortages when rainfall falls behind the rate of extraction from rivers and underground aquifers. Water shortages also result from heavy

use of water for agriculture in arid zones or where rainfall is seasonal. In some regions, such as the Indo-Gangetic Plain in South Asia, North China, and the High Plains in North America, water for agriculture must be collected, stored, and redistributed. Other regions, such as North and West Africa, are drought prone; 300 million people on the continent live in a state of perpetual water scarcity.<sup>11</sup>

To meet the water needs of their people, industries, and agriculture, governments seek to control and utilize the surface water located within their borders. Almost 60 percent of the major rivers of the world are obstructed by dams. While these structures are a source of water for irrigation, use by the local population, in some cases for hydropower, can profoundly and irreversibly affect the environment. Because many countries rely on rivers that flow into their borders from other countries, water management is a growing source of conflict.<sup>12</sup>

### **Water as a human right**

Shortly after the ten-year anniversary of the Cochabamba



### Box 3: Water, Sanitation, and Poverty Reduction in Southeastern Bangladesh: Muslim Aid at work

Bangladesh has more fresh water resources than most countries in the world, but much of the population lacks access to safe drinking water. National statistics report that over nine million shallow tube wells bring water to the majority of the rural population; however, even in areas with accessible wells, the water is often contaminated and unsanitary. Bangladesh's low sanitation coverage of 33 percent contributes to serious health concerns, including a range of waterborne diseases. UNICEF indicates that over 30 percent of tube wells sunk in recent decades are contaminated with arsenic above the nationally recommended level, with links to heightened rates of disease and illness.

In and around the southern city of Cox's Bazar, over 200,000 unregistered Rohingya refugees live in sprawling refugee camps without access to clean water or sanitation systems; the Rohingya are prohibited from receiving government and most international development assistance due to their unofficial status. In Mosheshkhali and Teknaf, Muslim Aid staffs implement WASH programs to address issues of poor sanitation, contaminated drinking water, and overall links to poverty alleviation at the community level in and around Cox's Bazar. Since 2009 (Mosheshkhali) and 2010 (Teknaf), Muslim Aid has installed 48 deep tube wells with the cooperation of the local Department of Public Health Engineering offices. The wells are drilled to a sufficient depth to avoid contaminants that are often present in shallow tube wells. One well installed on the Island of Mosheshkhali has served a secondary purpose to promote peaceful coexistence between the three major faith groups on the island; Muslim, Hindu, and Buddhist families from the surrounding villages jointly share and gather at the well, which is located in a Hindu village.

A second component of the WASH program is advocacy, spreading information on the importance of clean water and sanitation, particularly to youth. On International Hand Wash Day 2010, for example, Muslim Aid staff distributed soap and mugs to primary and secondary school students in and around the project areas. Muslim Aid program strategy links water and sanitation to the broader development indicators of health, education, gender, and economic development, and overall efforts towards achievement of the Millennium Development Goals.

Muslim Aid began its work in southern Bangladesh in 1991 after a cyclone devastated the area around Chittagong. Though Bangladesh is making considerable progress towards the MDGs, and national poverty rates are decreasing by two percent per year (Muslim Aid statistics), poverty indices in Muslim Aid's target regions in Cox's Bazar district are rising at a rate of three percent per year.

water wars, Bolivia introduced a UN resolution recognizing access to clean water and sanitation as a human right. Adopted by the UN General Assembly on July 28, 2010, the resolution calls on states and international organizations "to provide financial resources, build capacity and transfer technology, particularly to developing countries, in scaling up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all."<sup>16</sup> While there were no votes

against the document, 41 countries abstained, including the United States.

One example global unity that predates the UN General Assembly Resolution on the right to water is World Water Day. Annually each March 22nd, World Water Day focuses attention on the importance of protecting fresh water and using it sustainably. Established in 1993 by the UN General Assembly



#### Box 4: The Catholic Church in Bolivia's "Water Wars"

Religious groups have played important national roles in advocating for water rights and mediating disputes in various settings. Among the best known (though not always accurately described) is the Cochabamba water conflict. It involved faith themes and faith leaders.

Civil unrest broke out in Cochabamba, Bolivia in 2000, as a result of disputes around privatization of the municipal water supply. Aguas del Tunari, a private company, won a 40-year contract, with a value of US\$2.5 billion. Despite assurances to the contrary, water rates skyrocketed, and in a region where the minimum wage was less than \$100 a month, monthly water bills were as high as \$20. A civilian alliance, La Coordinadora de Defensa del Agua y de la Vida, was formed and millions marched in protest; a strike shut down all transportation. The government promised to adjust prices and protests mounted, with slogans like "Water is God's Gift and Not a Merchandise" and "Water is Life;" their message was that water was not something that could be sold.<sup>13</sup> Finally government officials agreed to meet with Coordinadora leaders in negotiations facilitated by Cochabamba's Catholic Archbishop, Tito Solari, but police arrested the Coordinadora leaders before the meeting could take place. Bishop Solari locked himself in his office, telling reporters that if representatives of Coordinadora were under arrest, so was he.<sup>14</sup> The Bishop continued to act as a liaison between Coordinadora and the government throughout the conflict: "The Archbishop played important roles during the Water War, because he was the person that sort of mediated with the government and the people...He was always on the side of the people."<sup>15</sup> The pivotal moment in the conflict came during the state of siege in April, as protestors crowded into the main plaza were scattered by the army with tear gas. A Bolivian army captain shot into a crowd of unarmed civilians, hitting a 17 year-old boy in the face, killing him. The contractor, Aguas del Tunari, left Bolivia.

The tragedy is that Cochabamba still faces water challenges.

at the urging of the 1992 UN Conference on Environment and Development (UNCED), it focuses each year on a specific aspect of water challenges. Recent topics include urban water, water quality, transboundary waters, sanitation, and water scarcity. While there is a host city for World Water Day each year, events are held around the world to commemorate the day, raise awareness around the issue of water, and educate the public on water issues.<sup>17</sup>

#### Crises and emergency relief

Urgent focus on water and sanitation is a critical priority after emergencies. Without effective and swift action, the effects of such disasters on communities can last far longer and run deeper than the initial challenges. Water sources can, for example, become contaminated as a result of flood-

ing or damaged infrastructure. Accumulated waste can create environments hospitable to rodents and flies, and mosquitoes breed in standing water, all of which are directly or indirectly responsible for the transmission of various diseases. Unless water and proper sanitation facilities are restored quickly, water-borne diseases like cholera, diarrhea, and typhoid can break out. The situation is especially acute when people are displaced from their homes; close quarters and inadequate facilities allow for the easy transmission of disease.<sup>18</sup> WHO observes that "the length of time that people spend in temporary settlements is an important determinant of the risk of disease transmission which might lead to major epidemics."<sup>19</sup> After an emergency, the top three priorities are to provide sufficient quantities of safe water, ensure basic sanitation arrangements, and encourage good hygiene behaviors.

### Box 5: Ethical Debates on Water: A Common Good, an Economic Good, or a Human Right?

The question of how to define the fundamental relationship between water and humans has stirred disagreements over both ethics and pragmatics at international conferences addressing the issue. The debates often spill over into discordant views of the roles of governments, institutions, and multinational corporations in solving the global water crisis. Should we understand ourselves as shared owners, each with inherent rights to water that should be respected, protected, and fulfilled by our governments? Or should we perceive ourselves as private consumers who must purchase rights to use water responsibly? Some argue that the right to water is implicit in rights to food and a life with dignity, while others contend its omission from the Universal Declaration of Human Rights creates a grey area that invites new thinking. These tensions have proven difficult to resolve because of their intensely personal nature: differences in opinion on pragmatic steps and approaches illuminate conflicting political and economic views, inter alia, while ethical disagreements expose complex and deeply personal, religious and non-religious beliefs about the environment, humanitarianism, and the sacredness of water.

For example, take the controversy that followed the International Conference on Water and Environment, held in Dublin in 1992, which achieved consensus around four guiding principles for recommended action. The fourth of these principles states that “water has economic value in all its competing uses, and should be recognized as an economic good.” Six years later, at the UNESCO Conference on World Water Resources, in June 1998, participants from Islamic nations objected to this economic understanding of water, which they felt conflicted with the Qur’an’s description of water as a divine gift. Like almost every other major religion, Islam accords water with holy and powerful significance, often as an integral part of religious ritual and theology. The Dublin Statement’s sanction of its pricing, like any other commodity, offended that perceived holiness, as well as its believed universal purpose. Muslims use water as a metaphor for Islamic law: *shari’a* translates to “path to the waterhole,” leading believers to God. Economic property in Islam also serves a community function; it is believed that humans are merely stewards of the world’s wealth and resources, all of which belong to God, and are thus responsible for using it properly and/or increasing it. The Arabic word for “wealth” signifies a relationship that optimally balances private and public interests. From this perspective, formal acquiescence to economic competition over water tips the balance, benefitting the private sector and richer countries without regard for its profit-seeking effect on the greater public.

Other religious and non-religious actors alike often reject the notion of water as an economic good because their beliefs about ethics, justice, and care for the poor and the environment may be at odds with the commonly resulting realities of increased privatization. These actors often contend that framing water as a common good cultivates civic responsibility and a sense of shared duty toward water, whereas perceiving water as an economic good fosters only consumerism and competition by those who can afford it. They attribute poor countries’ limited water supply to multinational corporations’ increased control of the resource, arguing that competition often forces poor countries to privatize by using aid money, which in turn benefits those corporations. As a result, costs are greatest in some of the poorest countries. A 2006 United Nations Human Development Programme (UNDP) report notes that people living in slums in Manila, Accra, and Barranquilla pay more money per cubic meter of water than those living in New York and London. Added to these costs in poor countries is the economic waste accumulated from healthcare costs and opportunity costs (of lost productivity and school days due to illness and time spent collecting water from remote locations). UNDP claims that each year sub-Saharan Africa loses about five percent of GDP due to water and

## Box 5: Ethical Debates on Water: A Common Good, an Economic Good, or a Human Right? (Cont'd)

sanitation-related issues, a sum that is often equal to and, in some years, greater than total aid to the region.

In response, defenders of the Dublin Statement argue that past failure to recognize water's economic value has led to the wastefulness that has skewed the distribution, and defend their shared concern for the poor by pointing to the Statement's recognition of the "basic right of all human beings to have access to clean water and sanitation at an affordable price." In their opinion, the only path to an efficient, equitable, and environmentally-conscious water ethic is an economic approach; past failures have been a result of misapplication of privatization. Likewise, other camps argue that privatization has a role to play, but regulations and public-private partnerships are needed as safeguards.

Still, human rights advocates claim that individual governments should be held responsible for protecting water access through intelligent management and conservation, and that state and international law, as well as civil society (faith-inspired organizations included), must hold states accountable. In November 2002, the United Nations Committee on Economic, Social, and Cultural Rights adopted General Comment No. 15, which explicitly classified water as a human right. This formal understanding of water as a human right, one they described as "indispensable for leading a life in human dignity," as well as "a prerequisite for the realization of other human rights," more richly defines the issues at hand. It states that all people have a right to "sufficient, safe, acceptable, and physically accessible and affordable water for personal and domestic uses," creating a more specific framework through which other organizations have carried the conversation and provided specific quantities and definitions. For example, WHO has defined "physically accessible" as within 1,000 meters of the home, or no longer than 30 minutes of collecting time, and in the vicinity of schools, workplaces, or health facilities. Others have applied "acceptable," for example, to mean both micro-organism-free water and culturally-appropriate and gender-sensitive, sanitation facilities. These specific qualifications do not create easier ways to address the crisis or prevent states from ignoring it, but many value a human rights framework because it clearly and specifically directs government action. Unlike the potentially negative repercussions of an economic approach and the vagueness of the "common good" descriptor, a rights-based approach is commonly perceived as a more ethical and effective way to address the water crisis.

### Issues of sustainability

Local districts are commonly responsible for providing water for their residents but often lack the expertise or funding necessary to deliver the service. The ease with which water can be drawn from underground aquifers varies dramatically by region. Geological know-how and heavy machinery are sometimes needed to make the resource available. Because of their training and capital, private entities are often looked to as the main providers, but without full community engagement the risks of poor maintenance are substantial, with many water projects falling into disrepair. Inappropriate technology is an all too common problem.<sup>20</sup> To combat these problems, sustainable technology and pur-

poseful efforts to engage local communities are high priorities in water programs today.

### Global dimensions of water challenges: the sad story of the Aral Sea

Located on the border between Uzbekistan and Kazakhstan, the Aral Sea has been used and enjoyed by humans for millennia. Once the world's fourth largest lake, it has lost 90 percent of its size in half a century as a result of unsustainable irrigation. Recalling his shock after a visit to the region in early 2010, UN Secretary General Ban Ki-Moon described it as "clearly one of the worst environmental disasters of the world."<sup>21</sup>

Situated in the deserts of Central Asia, the Aral Sea made the land of this arid region fertile through irrigation. Under the Soviet Union, traditional agricultural practices were abandoned as a result of collectivization. The Soviets chose cotton as the chief crop because of its export potential. By the 1950s, irrigated agriculture in Central Asia had expanded and the Kara Kum Canal was opened, diverting water from one of the Aral Sea's main sources to Turkmenistan. Water levels in the Aral Sea began to fall from the 1960s as consumption steadily increased.

The results have been devastating to both the environment and the people of Central Asia. With reduction in the sea's size, salinity has risen dramatically. The once thriving fishing industry has been decimated. By the 1970s, the annual fish catch had been reduced by 75 percent, and by the 1980s, there were no commercially useful fish left. Coastal lands converted to agricultural fields increased the number of chemicals and pesticides that washed into the Aral Sea. Over-irrigation led to a buildup of salt that will eventually render the soil unusable.<sup>22</sup>

Secondary effects of the lake's decline are beginning to be felt. The climate has changed significantly, with hotter summers and

cooler winters. The length of the growing season has been reduced, causing some farmers to switch from cotton to rice. The change to rice, which requires more water, has exacerbated the situation. The exposed, dry sea bed has created a host of health problems for local residents as well as those as far away as Pakistan and the Arctic. The Aral Sea Foundation estimates that 43 million tons of sediment, including salts and pesticides, has been carried away by the wind. The area is experiencing increased respiratory illness and a bulge in cases of throat cancer.<sup>23</sup> The UN Secretary General pledged UN support calling "all the leaders... to sit down together and try to find the solutions."<sup>24</sup>

The Aral Sea's current state, and disagreements stemming from it on issues like water rights and usage, offer insights into future potential conflicts or disagreements stemming from water scarcity and access to limited resources. For example, Uzbek officials have raised concerns that dam projects in Tajikistan will limit the water flow to their country, while impoverished Tajikistan sees hydropower as a source of revenue and a worthy pursuit.<sup>25</sup> If a compromise is not reached and actions are not taken to replenish the Aral Sea, the UN Environment Program estimates that it will disappear by 2020.<sup>26</sup>

#### Box 6: Climate change aggravates scarcity in the Andes

Peru is currently a leading exporter of specialty crops like asparagus, and farmers are hopeful that the nation will become a breadbasket like Brazil or Argentina. To fuel agricultural growth, the Ica region has been transformed from a barren strip of land at the northern end of the world's driest desert to the center of Peru's export agriculture industry. Ica's main sources of fresh water are an underground aquifer and Andean glaciers, but rising water demand for agriculture is draining the aquifer more quickly than it can be replenished. Serious water shortages that already plague the region are expected to increase as climate change accelerates melting of glaciers.<sup>27</sup>

Anxiety around water is mounting. During a technical visit to Peru in 2010, a World Bank employee was targeted by gunmen after he spotted hidden wells illicitly tapping underground water. Tensions are growing between the agricultural industry and Quechua-speaking farmers. Reacting to the worsening water shortage, agro-business has begun to explore highland wetlands as a potential source of water for their crops. Indigenous farmers believe that the plan to channel runoff could destroy land where their llamas and alpacas graze.<sup>28</sup> Federico Vaccari, a former USAID administrative officer, predicts that Ica's aquifer will dry up within a decade. He says, "Fifty years ago, people here killed for water, and unless we do something that is where we are headed... Our development could be the cause of our downfall."<sup>29</sup>



## PART 2.

# FAITH AND WATER

*“By means of water, we give life to everything.”*  
*Quran, 21:30*

Faith-inspired institutions, drawing above all on the common call to care for the poor, are involved with water issues at every level, from global advocacy to local implementation. Faith-inspired institutions and religious leaders play important roles in securing water rights for those without access, mediating conflicts around water, mobilizing religious adherents to support water projects financially, and overseeing basic construction and management of physical infrastructure. Box 7 presents a collection of religious reflections and mission statements from faith inspired institutions active at this intersection that illuminate leaders' and organizations' motivation and inspiration for action on water issues.

The ritual importance of water and its sacred quality are common threads woven through the world's major religious traditions. Washing before prayer is an essential practice in both Islam and Judaism. In Christianity, Jesus is referred to as the source of the living water and baptism is recognized as a pivotal moment in the lives of believers. Besides performing a cleansing ritual each morning, Hindus consider all rivers to be sacred and believe that by bathing in the Ganges people's sins are washed away.<sup>30</sup> Uses and symbolism of water vary by religious tradition, but two central themes are constants. First, water cleanses. It has the ability to wash away impurities and is often used as a mode of purification. It is believed that through contact with water a person can be cleansed both externally and internally and prepared to enter into worship. Second, water is seen as the source and sustaining force of life. Without it, nothing can come into being or continue to survive.<sup>31</sup>

Faith-inspired groups are thus drawn to water advocacy and action.

A prominent example is the Ecumenical Water Network (EWN) that brings together Christian organizations and churches to increase people's access to water around the world. The network's largest member, the World Council of Churches (WCC), has been a leader in fighting injustice in water access and distribution (see Box 8). The Catholic Church has also played significant roles in water negotiations and advocacy. For example, the Archbishop of Cochabamba, Bolivia, helped in 2000 to facilitate discussions with Aguas de Tunari, the international firm that had purchased the city's water supply, after protests erupted due to price hikes (Box 4). The Inter-Islamic Network on Water Resources Development and Management (INWRDAM) works with the public-sector on water-related research, development, and cooperation programs, seeking to mobilize religious leaders to include water education in religious discourse (Box 9).

### **A global initiative: The Ecumenical Water Network and the World Council of Churches**

The Ecumenical Water Network (EWN) launched in early 2005 as an international network of churches and Christian organizations committed to engaging and raising awareness in churches and in the broader international community of the urgent water crisis. Based on an understanding of water as a gift of God and a fundamental human right, the EWN advocates for the preservation, efficient and effective management, and equitable distribution of water. Since 2007, EWN has worked from the Geneva offices of one of its participant organizations, the World Council of Churches (WCC); WCC assists the EWN Secretariat by helping

### Box 7: WCC Statements on “Water for Life”<sup>34</sup>

“1. Water is a symbol of life. The Bible affirms water as the cradle of life, an expression of God’s grace in perpetuity for the whole of creation (Gen. 2:5ff). It is a basic condition for all life on Earth (Gen. 1:2ff.) and is to be preserved and shared for the benefit of all creatures and the wider creation. Water is the source of health and well-being and requires responsible action from us human beings, as partners and priests of Creation (Rom. 8:19 ff., Rev. 22). As churches, we are called to participate in the mission of God to bring about a new creation where life in abundance is assured to all (John 10:10; Amos 5:24). It is therefore right to speak out and to act when the life-giving water is pervasively and systematically under threat.

“2. Access to fresh water supplies is becoming an urgent matter across the planet. The survival of 1.2 billion people is currently in jeopardy due to lack of adequate water and sanitation. Unequal access to water causes conflicts between and among people, communities, regions and nations. Biodiversity is also threatened by the depletion and pollution of fresh water resources or through impacts of large dams, large scale mining and hot cultures (irrigation) whose construction often involves the forced displacement of people and disruption of the ecosystem. The integrity and balance of the ecosystem is crucial for the access to water. Forests build an indispensable part in the ecosystem of water and must be protected. The crisis is aggravated by climate change and further deepened by strong economic interests. Water is increasingly treated as a commercial good, subject to market conditions.

“3. Scarcity of water is also a growing source of conflict. Agreements concerning international watercourses and river basins need to be more concrete, setting out measures to enforce treaties made and incorporating detailed conflict resolution mechanisms in case disputes erupt.

“4. Both locally and internationally there are positive and creative responses to raise the profile of Christian witness to water issues.

“5. Churches in Brazil and in Switzerland, for instance, have made a Joint Ecumenical Declaration on Water as a Human Right and a Common Public Good - by itself an excellent example for ecumenical cooperation. The Ecumenical Patriarch Bartholomew states that water can never be regarded or treated as private property or become the means or end of individual interests. He underlines that indifference towards the vitality of water constitutes both a blasphemy to God the Creator and a crime against humanity. Churches in various countries and their specialized ministries have joined together in the Ecumenical Water Network in working for the provision of fresh water and adequate sanitation and advocating for the right to water. Access to water is indeed a basic human right. The United Nations has called for an International Decade for Action, Water for Life, 2005 to 2015.

“6. It is essential for churches and Christian agencies to work together and to seek cooperation with other partners, including other faith traditions and NGOs, and particularly those organizations that work with vulnerable and marginalized populations who hold similar ethical convictions. It is necessary to engage in debate and action on water policies, including dialogue with governments and multilateral or corporate institutions. This is essential to promote the significance of the right to water and to point to alternative ways of living, which are more respectful of ecological processes and more sustainable in the longer term.

“The Resolution of the WCC Ninth Assembly, meeting in Porto Alegre, Brazil, 14-23 February, 2006: adopts the statement on Water for Life and calls on the churches and ecumenical partners to work together with the aim to:  
a) promote awareness of and take all necessary measures for preservation and protection of water resources against

### Box 7: WCC Statements on “Water for Life” (Cont’d)

over-consumption and pollution as an integral part of the right to life;

- b) undertake advocacy efforts for development of legal instruments and mechanisms that guarantee the implementation of the right to water as a fundamental human right at the local, national, regional and international levels;
- c) foster cooperation of churches and ecumenical partners on water concerns through participation in the Ecumenical Water Network;
- d) support community-based initiatives whose objectives are to enable local people to exercise responsible control, manage and regulate water resources and prevent the exploitation for commercial purposes;
- e) urge governments and international aid agencies to give priority to and allocate adequate funds and other resources for programmes designed to provide access to and make water available to local communities and also promote development of proper sanitation systems and projects, taking into account the needs of people with disabilities to have access to this clean water and sanitation service;
- f) monitor disputes and agreements related to water resources and river basins to ensure that such agreements contain detailed, concrete and unambiguous provisions for conflict resolution;
- g) contribute to the International Decade for Action, Water for Life, 2005-2015, by exploring and highlighting the ethical and spiritual dimension of water crisis.”

to facilitate cooperation and common action among the partner churches and organizations (Box 8).<sup>32</sup>

In 2006, the WCC Assembly’s adopted the statement on “Water for Life” (Box 7), calling on churches and ecumenical partners to work together on several fronts. First, they committed themselves to fight over-consumption and pollution, and to take all possible steps to preserve and protect water sources. Second, they promised to advocate for instruments and mechanisms that guarantee water as a fundamental human right at local, national, regional, and international levels. Third, they agreed to urge governments and international aid agencies to give priority and allocate funds to water and sanitation systems. They also committed themselves to monitor disputes and agreements related to water resources to ensure that these do not escalate into conflict. Lastly, they agreed to explore and highlight the ethical and spiritual dimension of the water crisis.<sup>33</sup>

#### Interfaith partnerships

A necessity for all, water has proven to be an issue around which interfaith partnerships are promisingly fruitful, since it rallies different faith communities around a common humanity. Several such partnerships are briefly described below.

**The Millennium Water Alliance** (MWA) is comprised of U.S.

based, humanitarian and faith-based non-governmental organizations that work to assist poor communities to gain access to safe water and sanitation. It describes its role as facilitating cooperation in order to build consensus on appropriate WASH policies and effective, sustainable solutions. Besides offering a forum for sharing resources and exchanging information, the MWA works to establish an overarching system to measure and evaluate the impact of water and sanitation projects. MWA also affirms that in speaking together with one voice, NGOs can be more effective in advocating for funding and policies desirable to achieve their objectives. Members include CARE, Catholic Relief Services, Food for the Hungry, Lifewater International, Living Water International, WaterAid, Water for People, Water.org, and World Vision.<sup>36</sup>

**Religious Working Group on Water** brings together a broad range of faith-inspired organizations, institutions, communities, and agencies with the purpose of calling on U.S. policy makers and intergovernmental institutions “to ensure universal, sustainable access to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use.”<sup>37</sup> The group is organized around the idea that water is a gift from God, and, therefore, the resource should be preserved and shared for the benefit of all people and wider creation. The Group calls for U.S. Government action in four vital areas: (a) increase Development Assistance Account funding for clean drinking water and sanitation (but without undermining the capacity of developing

### Box 8: WCC, “Seeking government partnership for water justice”<sup>35</sup>

Efforts to build capacity of member churches and to collaborate with other organizations to petition government for clean and safe water for communities in need is an important way in which the WCC resolution has been pursued. The following is one example of a WCC member’s efforts to partner more closely with the government to ensure better sustainability and water access outcomes.

Rev. Canon Dr. Ezekiel Olusegun Babatunde, a Nigerian participant in the WCC EWN process, joined a three-day gathering of church officials, faith-inspired organizations, and international water experts in Nairobi, Kenya to work towards stronger partnerships and strategies for clean water access. A theologian from Immanuel College of Theology and director of the Institute of Church and Society of the Christian Council of Nigeria (CCN), Rev. Babatunde noted that scepticism and mistrust are present realities in the Nigerian communities in which he works, with some community members fearing that the CCN seeks to exploit, rather than help them. The only way to uproot these rumors and misperceptions, he stated, is through tangible improvements in conditions as a result of the CCN’s work. All the same, CCN efforts face two primary obstacles: first, financial woes make it difficult to provide entire communities with access to safe and clean water, and second, building capacity to maintain water projects remains a significant dilemma. In response, the CCN has sought out local governments to collaborate and advocate for water programs, in order to provide the financial and technical resources needed to sustain effective water and sanitation initiatives. CCN also runs advocacy programs and ground-level awareness campaigns to illuminate why access to clean water is vital to well-being, in the hopes of dispelling community fears about church involvement in the process. The EWN conference and its general involvement in Nigeria, reported Rev. Babatunde, have benefitted his work with the CCN significantly. Their initiatives and knowledge-sharing mechanisms enable actors at the nexus of faith and development, like Rev. Babatunde, to understand sanitation and water access from a human rights perspective. In turn, church leaders have the knowledge to inform their communities on the issues and to encourage action. Thus they can better appeal to the government to establish justice, restore rights, and provide access to water.

country governments and local communities to manage water resources) and be affordable and sustainable; (b) the U.S. Government should ensure that International Financial Institutions (IFIs) like the World Bank prioritize water access to the most impoverished people and communities and that IFIs respect the right of countries to democratically determine their own water policies (i.e. not impose water privatization conditionality); (c) the U.S. government should oppose “irresponsible and unjust practices of extractive industries that drain scarce water resources for profit and pollute clean water sources”<sup>38</sup> and support the right of peoples to control their natural resources and protect their environment; and (d) support the human right to water.

Faiths for Safe Water (FSW) is an interfaith water initiative whose formation was announced in conjunction with World Water Day 2010. Comprised of faith leaders from diverse religious back-

grounds, FSW sees the coalition as an opportunity to make WASH a leading faith and policy priority and holds that faith leaders have important leadership roles in their communities and can effectively disseminate information and provide resources to clergy and congregations around the world. FSW aims to make people aware of their faith’s WASH efforts and to view acceptance of WASH practices as an act of their faith. For those in poorer nations, this would include changing behaviors around water, sanitation, and hygiene. FSW’s primary goals are education and advocacy.

“It’s the world’s religions that can and must make ‘WASH’ a household word and bring much-needed support to this central problem -- and keystone solution -- to health, nutrition, poverty, gender equality, even peace. Religious water is never neutral and passive and no longer can we be. It has powers and capacities to transform this world, annihilate sins, and create holiness. And so



## Box 9: INWRDAM and greywater in Jordan<sup>52</sup>

Dr. Murad Jabay Bino, Executive Director of INWRDAM, recognizes the powerful role that religion plays in the everyday life of Muslims and sees Islam as an opportunity to promote social change. His organization promotes the use of kits that treat greywater from domestic sources for use in household gardens. According to INWRDAM, every day more than 250 liters of wastewater is disposed of into sewage cesspits. By reusing the water, people can have higher crop yields without consuming more water.

To achieve greater acceptance of the greywater kits, INWRDAM's approach has been to encourage rural families to accept water recovery and handling as tied to their Islamic beliefs. In many rural households, people are already accustomed to redirecting water from kitchen sinks outside so that food remains do not mix with human waste. Because food is seen as a source of life, Muslims consider it as sacred and believe it should be respected. By linking the use of greywater to this established practice, people have been receptive to the kits because they complement their religious practice.

do we. We possess some of the most powerful collective voices in the world, we have development work in place around the world -- and together we can give life to hundreds of millions of people throughout the world. The place to start is here at home: through policy advocacy, fundraising in our congregations to increase our development work, engage service learning projects through youth groups where kids help kids just like themselves around the world, and by educating and supporting faith leaders in developing countries who can influence everything from prioritizing WASH policy to changing hygiene behavior."—Faiths for Safe Water Sermon, World Water Day 2011.

### Faith-linked peacebuilding and water development

Building off the concept of water as a common element and right, and as a common central component of the major faith communities, examples of faith-inspired peacebuilding initiatives have been developed around water as a shared resource. Examples can be found in organizations representing all major faith traditions. WASH programs instituted by Muslim Aid in Bangladesh, for example, have promoted peaceful coexistence around shared water resources between Hindu, Buddhist, and Muslim communities (See Box 3).

A notable example from the Catholic tradition is Catholic Relief Services (CRS). CRS has developed a distinctive approach to deal with situations considered ripe for water-related conflict. Rather than addressing peacebuilding solely through a separate program, CRS has incorporated peacebuilding activities into the different stages of their water and sanitation projects. While CRS ac-

knowledges that water can be a potential source of conflict, the organization believes that water can provide opportunities for bridge-building in even the most difficult circumstances. Water management can provide a platform for peaceful dialogue between two states even if they are fighting over other issues. Through developing lines of communication and forging avenues of cooperation around water, a water peacemaking strategy can have positive effects that reach far beyond this single issue.<sup>39</sup>

In the publication *Water and Conflict*, CRS outlines six main factors that contribute to escalated risk of conflicts in water basins:

- High population density (>100/sq. km)
- Low per capita GDP (< \$765/person- 1998 World Bank lowest income country definition)
- Overall unfriendly relations
- Politically active minority groups that may lead to internationalization of the conflict
- Proposed large dams or other water development projects
- No or only limited freshwater treaties<sup>40</sup>

The likelihood of conflict increases significantly when two factors come into play:

- Rapid change in the basin's physical setting (e.g. a dam) or political setting (e.g. break up of a nation into small states national rivers then becoming international)
- Existing institutions are unable to manage the change in the transboundary river's geopolitical setting (e.g. no treaty or comprehensive agreement about each nation's right and responsibilities to the river)<sup>41</sup>

## Box 10: WASH in Schools

WASH in Schools, a collaborative project launched in 2008 by a broad alliance of faith-inspired organizations, NGOs, corporations, foundations, and schools, exemplifies a blend of advocacy and action. WASH in Schools developed out of the recognition that without proper hygiene and sanitation facilities, schools can become breeding grounds for pathogens and, because of safety and privacy concerns, may unintentionally bar girls from receiving an education. This joint UNICEF/WSSCC (Water Supply and Sanitation Collaborative Council) initiative was first introduced by the Council at the Bonn International Conference on Freshwater and followed by national launches in South Africa, Kenya, Uganda, the Philippines, Madagascar, Senegal, among others. The program strives to build safe, healthy learning environments by mobilizing resources to achieve WASH objectives; engaging those who set policies at the global, national, sub-national and local levels; involving stakeholders in cooperative plans that will sustain WASH in Schools; monitoring programs to ensure accountability and evaluating progress; and collecting and distributing reliable information to help decision-makers make informed choices.<sup>53</sup>

WASH in Schools aims first to provide access to clean water for drinking and washing to every child. Children lose about 272 million school days due to diarrhea, and nearly a third of all school-aged children in developing countries are infected with intestinal worms.<sup>54</sup> Besides affecting children's school performance, these illnesses commonly lead to malnutrition and can stunt children's growth. Access to clean water alone is not enough; healthy school environments can only be achieved when there is also an emphasis on safe waste disposal. Therefore, establishing sanitation facilities is a second objective. A third is to provide separate facilities for girls and boys to ensure both dignity and safety. Without gender-specific sanitation facilities to maintain privacy, young women can often be reluctant to continue their schooling, particularly after puberty. Finally, education for good hygiene is vital. WASH in Schools mobilizes children to become agents of change for improving water, sanitation, and hygiene practices in their families and communities.<sup>55</sup> The program can be seen as an investment in the future because healthy habits developed early can lead to a lifetime of reduced disease and prepares children to pass on this knowledge to subsequent generations when they become parents.<sup>56</sup>

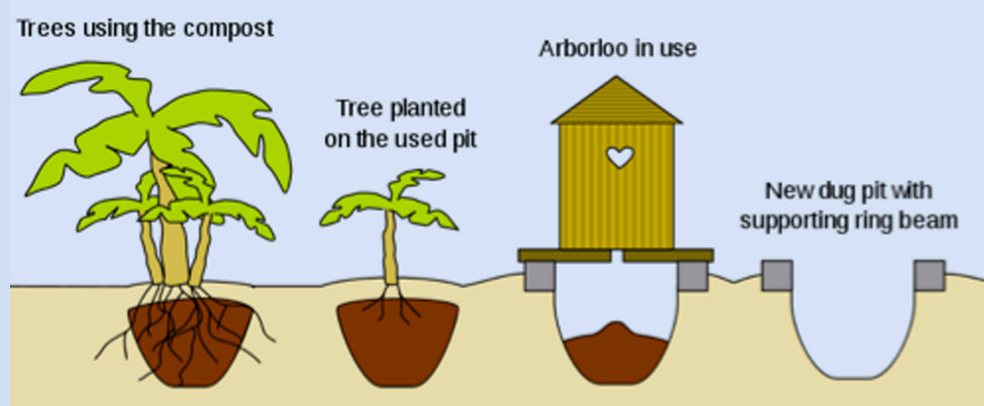
Faith communities play significant roles in WASH in Schools. They offer ways to link spiritual learning with learning on water, sanitation, hygiene, and the environment. The IRC International Water and Sanitation Centre reports that "good sanitation and hygiene habits and the protection of environment are values common to all faiths... Materials on designs, strategies, approaches and results are widely available... what remains is their adjustment and use in faith-based education and the development of school water, sanitation, and hygiene education programmes as part of the education systems of individual faiths."<sup>57</sup> Because many schools around the world are supported by faith communities, they are positioned to integrate water and sanitation into their curricula, making links with religious learning when appropriate.

CRS thus sees water development going well beyond simply the "tubes and tanks" of the physical infrastructure. Social infrastructure must be built from the ground up that is capable of handling water-related conflicts and that increases the long-term sustainability of water projects. The organization argues that development practitioners must understand the water-related conflict dynamics and risks in the communities where they serve. By incorporating water development into a peacebuilding paradigm,

organizations are better able to facilitate conflict transformation and violence prevention.<sup>42</sup>

Peacebuilding can be improved by focusing efforts on four main areas: (a) addressing the root cause; (b) building relationships; (c) developing institutions; and (d) using appropriate technology and development approaches. Rather than treating the water projects as ends in themselves, they must be viewed "as means toward re-

## Box 11: The Arborloo: creativity at work



Catholic Relief Services (Ethiopia) and its partners began exploring ecological sanitation in 2004. They conducted trials of different types of latrines in rural households and schools. Of all the latrines tested, the Arborloo has proven the most popular.

The Arborloo is a simple pit latrine that costs between USD

\$5-\$8 and typically utilizes local materials. It is made by digging a pit, lining the bottom with dry leaves, and placing a concrete slab over the opening. A simple structure is added above for privacy. After each use, a mixture of ash and soil is poured down the latrine to encourage composting and to reduce odors and insect breeding. After a year, the privacy structure and concrete slab are removed, and the pit is covered with good topsoil. A fruit tree seedling is planted, and as its roots grow downward, it absorbs rich nutrients and produces a healthy, productive tree. In some areas, the appeal of harnessing human excreta for fertilizer has been so strong that farmers construct smaller pits which are filled in just four months so that they can plant trees more quickly.

Because of its low cost and accessibility, the Arborloo offers a practical option for households with limited resources. Its revolutionary approach encourages users to view human excreta as a resource rather than a waste to be discarded or avoided. Part of its success can be attributed to the “positive association” it creates with sanitation.<sup>58</sup> The Arborloo works well because of its simple design and because it addresses past obstacles to sanitation.

ducing poverty, meeting basic human needs, and increasing human security.”<sup>43</sup> Parties that have been historically in conflict should be encouraged to come together and resolve their differences as a precondition to working together on mutually beneficial water development projects.<sup>44</sup> Because water is important to everyone, it can be a starting point for cooperation. Institutions that are strengthened and partnerships that are made through creating water governance structures can lead to greater accountability and transparency across sectors.<sup>45</sup> Lastly, when the appropriate technology is used and people’s livelihoods improve as a result, conflict is reduced.<sup>46</sup>

### Water in Islam

Water and cleanliness are fundamental teachings of Islam. The Qur’an teaches that all life has come forth from water. “We made from water every living thing (21:30).”<sup>47</sup> Water has existed since before the creation of the heavens and the earth. “And it is He

who created the heavens and the earth in six days, and his Throne was upon the waters (11:7).”<sup>48</sup> Water is an essential part of purification rituals that Muslims perform before prayer. Prayers carried out in an impure state are considered invalid. Therefore, five times a day, before prayer, water is needed. The Prophet is recorded in one of the Hadiths as having said “Cleanliness is half of faith.”<sup>49</sup>

Water access has also been deemed as important because of the example set by the Prophet Muhammad. When the Prophet entered Medina after the hijra (the flight from Mecca), he found only one well from which Muslims could obtain drinking water. His companions purchased it and made it waqf, or a charitable endowment, so that all could enjoy the resource. When he was asked what type of sadaqah, or charity, was best, the Prophet responded, “Water.”<sup>50</sup> Religious teachings can have an impact on the focus of faith-inspired organizations, determining where they choose to allocate their resources and priorities. In light of

# TOWARDS CONCLUSIONS: A CONTINUING RESEARCH AGENDA

*‘...Whatever sin is found in me, whatever wrong I may have done, if I have lied or falsely sworn, Waters remove it far from me...’ (Rg Veda).*

*The LORD will guide you continually...and you shall be like a watered garden,  
like a spring of water, whose waters never fail. “  
Isaiah 58:11*

With the vast terrain that water issues raise, it is unsurprising that this report raises more questions than it answers. It suggests above all a need for continuing reflection, network building, coordination, and research. Among the questions raised are the following:

Why focus on water and faith, and how? Is water an appropriate unifying theme that can serve to encourage partnerships and effective advocacy? Or is it too broad to allow a meaningful reflection on how religious bodies can engage more effectively? The large number of international bodies engaged on water leadership is a telling testimony to the complexity of the challenge. Where can faith-inspired organizations be most effective: working as global advocates or focusing on local communities and issues?

What resources, networks, and studies exist, and what is missing? Assembling information about faith-linked water programs proved more challenging than expected and the work of highlighting ongoing work and best practice has barely begun. Is a fuller study, accompanied by a series of practitioner interviews, desirable?

There are significant gaps in knowledge about on-the-ground and advocacy work of several faith traditions, notably Hindu, Buddhist, Sikh, and Pentecostal Christians.

What policy or practical barriers do advocates and practitioners face that might be addressed? How far do fractious debates about privatization, water charges, and water ownership deflect energies and efforts to address water challenges?

Is there room for increased interfaith engagement on both the community and international level? Water and sanitation lend themselves well to interfaith efforts, at many levels and in forms ranging from humanitarian assistance to long-term development. What actions could facilitate the partnership process?

What religiously-rooted cultural practices might present barriers to successful sanitation and hygiene, and how can religious institutions be engaged on those issues? In contrast to many other development issues, the common ground seems greater for water and sanitation. Problems tend to be practical, grounded in local imperatives and subject to technical solutions.



# SELECTED STATEMENTS ON FAITH AND WATER

## **Pontifical Council for Justice and Peace- March 16-23, 2003**

Water is a primary building block of life... The Bible opens precisely with the image of the divine spirit hovering over the water at the creation of the universe. In the accounts of creation contained in the first two chapters of the Bible, it is from the midst of the waters that dry land is made to appear, while living reptiles and rich life forms are made to swarm the waters. It is also water that moistens the earth for other forms of life to appear.... The management of water and sanitation must address the needs of all, and particularly of persons living in poverty. Inadequate access to safe drinking water affects the well being of over one billion persons and more than twice that number have no adequate sanitation. This all too often is the cause of disease, unnecessary suffering, conflicts, poverty and even death. -- from A Contribution of the Delegation of the Holy See on the Occasion of the Third World Water Forum (Kyoto, 16th-23rd March 2003) by the Pontifical Council for Justice and Peace

## **Water: An Essential Good Given by God to Maintain Life- July 5, 2008**

Benedict XVI's message to Cardinal Renato Raffaele Martino, representative of the Holy See for the "Day of the Holy See" at the International Expo of Saragossa (Spain)

"We have to be aware that, regrettably, water - an essential and indispensable good that the Lord has given us to maintain and develop life -, because of incursions and pressures from various social factors, is today considered a good that must be especially protected through clear national and international policies and used according to sensible criteria of solidarity and responsibility.

The use of water - which is seen as a universal and inalienable right - is related to the growing and urgent needs of those living in poverty, keeping in mind that the 'limited access to drinkable water affects the wellbeing of an enormous number of people and is frequently the cause of illness, suffering, conflict, poverty, and also death'."

"Those who consider water today to be a predominantly material good should not forget the religious meanings that believers, and Christianity above all, have developed from it, giving it great value as a precious immaterial good that always enriches human life on this earth. How can we not recall in this circumstance the suggestive message that comes to us from Sacred Scripture, which treats water as a symbol of purification and life? The full recovery of this spiritual dimension is ensured and presupposed for a proper approach to the ethical, political, and economic problems that affect the complex management of water on the part of all concerned, as well as in the national and international spheres."

## **Tearfund: Five roles for local churches**

Tearfund has identified five key roles that the local church or church-based organizations can play in their communities to help improve hygiene and sanitation practices: Messenger, Demonstrator, Implementer, Guardian, and Advocate. In 2010, Tearfund commissioned a report to produce practical guidelines on how these local institutions can organize, plan, and run projects in their communities.

As a Messenger, the role of the church is to communicate messages about improved sanitation and hygiene. Churches have

specific assets and resources that make it particularly well-suited for the role of messenger. Because communities regularly meet together in churches, they already have a space where they can readily and easily disseminate information about safe sanitation practices as well as gather the information necessary to construct projects that are effective and relevant.

In the role of Demonstrator, the local church can offer individuals and communities the opportunity to see and experience a well-kept toilet or hand-washing facility. Because churches typically have a space where they meet as a congregation, their buildings may easily be used to host demonstration projects. Existing financial resources to fund the latrine and volunteer labor to build it also make churches good institutions to fill this role. Because of their respected social position, church leaders are able to set examples of good sanitation practice and mobilize their local communities to adopt them.

The most widely ascribed role of church leaders is that of the Implementer, which involves identifying the most vulnerable and at-risk in their communities to be program beneficiaries. Because of their knowledge of stakeholders and established relationships at the community level, religious leaders can identify useful partners for the program. In addition, due to their long-term commitment and track record of success, church leaders can use the trust that they have built to facilitate real change in their communities. With this trust comes accountability; unlike foreign NGOs, churches are tied to the communities that they serve and must live with failed implementation when it occurs. Since they can less easily walk away, they rely more on good consultation and true participation as community members will likely hold leaders responsible.

The fourth role that churches can play in sanitation and hygiene projects is the Guardian. Because of their long-term presence, churches are naturally equipped to follow up and maintain project interventions. Some of the activities that churches have taken up include training beneficiaries how to maintain and repair water tanks and systems in addition to forming monitoring groups to make home visits. Some of the qualities that make local churches especially effective in this role are not only their lasting presence in the community but also the high commitment of their staff; the size of the staff is generally small and the turnover relatively low. Churches also have a network of volunteers at their disposal who are able to mobilize communities at the grassroots level. Some have identified, however, the waning

spirit of volunteerism as a growing challenge. Time is an especially valuable resource for people living in poverty and in times of hardship, volunteering can be costly. Another problem that churches have encountered is the inability to secure the long-term funding necessary to support the activities of this role.

Lastly, Tearfund specifies the role of Advocate for church leaders. Often at the national level, water receives much more attention than sanitation issues. Because of their influence both locally and nationally, churches are well-positioned to communicate the needs and concerns of the poor to government leaders. Some of the tools that have been used by local churches include national prayer campaigns, distributing campaign material by Christian student groups, and collecting testimonies of the sanitation projects to use in campaigns. Tearfund reports Church groups, however, have faced opposition from the authorities and have not been fully respected. There are also drawbacks to serving as an advocate. If religious groups are too critical of the government, it could potentially damage their working relationship with them. However, if their interactions are marked by encouragement, collaboration, and capacity-building, positive outcomes are more likely.

### **Lutheran World Relief**

LWR describes their approach to water and sanitation as rooted in their accompaniment of local partners. They cooperate with organizations on the ground to improve people's livelihoods and health through shaping water and sanitation strategies to fit the local context. Rather than divorcing drinking water and sanitation from projects focused on water for agriculture and watershed management, LWR views them as interactive components of a cohesive water policy. One significant LWR focus is on community ownership; mechanisms must be put into place that ensure the sustainability of water and sanitation systems. These include organizing water or sanitation committees, establishing irrigation schedules, training community members in maintenance and repair, and helping to improve internal governance.

The Salvation Army World Service Office, "Food/Water Sanitation"

The Salvation Army Malawi and The Salvation Army World Service Office have teamed up on a USAID funded project called I-LIFE (Improving Livelihoods Through Increasing Food Security). The goal is not only to feed those in need, but also





Rissho Ko-Sekei Center, Buddhist Garden, Japan

to help them feed themselves through improved irrigation techniques. One of the poorest districts in the country, Phalombe, has benefited by the introduction of the treadle pump. Operated much like a stair-stepper, the treadle pump is used by community members to pump water from a local river to nearby fields. The goal of a communal garden planted with a variety of food crops has been achieved.

### **Church World Service (CWS)**

CWS's "Water for All" program focuses on developing safe and sufficient water sources, improving sanitation conditions, and educating on good hygiene practices. CWS also works to provide food security through efficient irrigation and water management, and supports ongoing peace efforts through responsible water resource governance. CWS argues that water is a resource to be shared by all and lobbies against policies that encourage what they see as inappropriate privatization and commercialization of services. Mary Obiero, coordinator for CWS's East Africa Water for All/Water for Life programs, said after the World Water Week Symposium in Stockholm in September 2010, that

she is gaining "a deeper awareness of the need for aid agencies like CWS to be increasingly engaged with existing networks... There are so many actors today working on many aspects of water resources. We don't need to re-create the wheel. We all need to share technologies that are already working."<sup>59</sup>

### **Water Missions International**

Water Missions International strives to bring better health, greater dignity, wider educational opportunities, higher productivity, and income generation to the communities it serves through its "safe water solutions." The organization reports that community development, such as sustainability, health and hygiene training, have been made priorities. Their website also states that WMI works with local people to ensure that projects are culturally and technologically appropriate. Another component of WMI is the development and implementation of a ministry plan to present the "Living Water" message. To date, Water Missions International has provided water to communities in 40 countries, and currently has resident staff working in Indonesia, Malawi, Kenya, Uganda, Mexico, Haiti, and Honduras.

# REFERENCES AND BACKGROUND INFORMATION

**National Geographic. *A Special Issue: Water- Our Thirsty World*. Barbara Kingsolver, “Fresh Water,” p. 44-49**

National Geographic focused an issue on the challenges of water. Various articles address different dimensions. Kingsolver highlights the impact of climate change as a factor shifting weather patterns, landscapes, and human and animal habitats. Civilization has long believed in the Earth’s infinite generosity. While, given the theory of the conservation of mass, the same amount of water exists on the Earth today as millions of years ago, that water can be made unusable. Water tables are plummeting in the world’s most populous regions. People must recognize the value of water, educate the masses, and seek ways to protect this vital resource.

**Cathy Newman, “Sacred Waters,” p. 82**

Water has a central place in many of the religions of the world. Most see it as a creative force from which all life was sprung. Equally, they recognize its destructive power; many cultures contain a story of a cataclysmic flood that destroys civilization. Water is used in many religious ritualistic practices. The dead are washed, and the living are sprinkled, dunked, and doused with water so that blessings may wash over them.

**Tina Rosenberg, “The Burden of Thirst,” p. 96-107**

This tells the story of an Ethiopian woman’s daily struggle

to provide her family with enough water. With improved access to clean water, women can use their time for other activities like growing more food, raising more animals, or even starting a small business. They spend less time and fewer resources to care for loved ones who are sick with waterborne illnesses. Girls can go to school because they no longer must help to fetch the water or stay behind to care for younger siblings. In the past, aid agencies have failed to deliver sustainable technology to villages and many water systems have fallen into disrepair. Technologies employed must be proven to last.

**The Water Page, “Water in Religion” <http://www.africanwater.org/religion.htm>**

A former World Bank staff member (Len Abrams) runs a helpful website that includes a section presenting an introduction to the beliefs of major religions concerning water.

J. Adams, J. Simms, Y. Chartier, J. Bartram, “Water Sanitation and Hygiene Standards for Schools in Low-cost Settings” UNICEF and WHO, 2009. [http://www.who.int/water\\_sanitation\\_health/publications/wsh\\_standards\\_school/en/index.html](http://www.who.int/water_sanitation_health/publications/wsh_standards_school/en/index.html)

Chapters 2 and 4 are particularly useful. Provides rationale for the importance of adequate water supply, sanitation and hygiene in schools and gives technical guidelines for setting standards for water and hygiene standards at the national level.



The Economist, *For want of a drink: A Special Report on Water*, 22 May 2010, p. 3-18.

### **“For want of a drink”**

Outlines the current situation in respect to water. Demand on water sources has increased over the past several decades partly because of the green revolution and because of global increases in population. Due to water's unequal distribution around the globe, many of the areas with the highest populations have some of the lowest amounts of available water. However, it is generally not domestic use that consumes the largest proportion of water, but industry. In order to survive, humans need a minimum of 2 liters of water per day. Because of its essential nature, it has come to be seen by many as a human right. A second consequence of its vital role is that water is seen as sacred or mystical. Humans throughout history have had to live by water or organized around access to it.

### **“Enough is not Enough”**

The problems of water turn not just on scarcity but also quality. Water must also be clean if it is to improve poor health. Clean water is crucial for children who have diarrhea. Without piped water to wash hands, people become inevitable carriers of disease. The poor health of a population has a direct effect on the wealth of a state. Diarrheal infections cost some developing countries between 4-5 percent of their GDP annually. While there is resistance in communities to the adoption of latrines, when people invest some of their own money in sanitation projects, they are more likely to use them. Article goes on to explore technologies in place for improved sanitation and drinking water.

### **International Organizations/NGOs**

#### **World Health Organization and UNICEF, “Progress on Sanitation and Drinking-Water: 2010 Update.”**

Paper acts as a survey of the current status of water and sanitation projects around the world. While at the current rate, the MDG goal for improved water sources will be surpassed, the MGD goal for sanitation will fall short. Disparities between rural and urban areas are striking; rural populations lag significantly behind in both improved drinking and sani-

tation sources. The responsibility of water collection falls disproportionately on women and children. Also notes the considerable barriers that exist to measuring the quality of water around the world effectively.

#### **United Nations Development Programme “Human Development Report 2006: Beyond scarcity- power, poverty, and the global water crisis.”**

The world is in the midst of a water crisis whose root causes are poverty, inequality and unequal power relationships, as well as water management policies that exacerbate scarcity. While each country is different, there are some common themes associated with the problem: water and sanitation are not treated as political priorities, the poor pay some of the highest prices for water, and the global community has failed to prioritize water and sanitation as it organizes around the MDGs. Unsurprisingly, those who are suffering the most are also the ones who lack the political voice needed to assert their right to water. Global warming is speeding up and intensifying the water crisis. More extreme weather patterns and melting glaciers threaten already stressed water supplies. As the competition for water increases, those who are most likely to lose are those who already have the weakest rights: small farmers and women. Because the same water source is often shared across borders in the form of rivers, lakes, and aquifers, in the future, there are likely to be more conflicts resulting over the use of this resource.

#### **UN Water, “Gender, Water, and Sanitation: A Policy Brief” <http://www.unwater.org/TFgender.html>**

This Policy Brief was developed by the Inter-Agency Task Force on Gender and Water and focuses on the role of women in the management of household water supply. Despite their central role, women have largely been overlooked in efforts to improve the management of water and to extend access to safe drinking water and adequate sanitation. While improved water access and sanitation do advance gender equality, it appears that by showing clearly how involving women can result in projects that are more effective and also has an impact on project funding. Studies show that projects that are designed and run with the full participation of women are more sustainable and effective than those that are not.

**UNICEF “Raising Clean Hands: Advancing Learning, Health, and Participation through WASH in Schools”-[http://www.unicef.org/media/files/raisingcleanhands\\_2010.pdf](http://www.unicef.org/media/files/raisingcleanhands_2010.pdf)**

WASH in Schools is an initiative to bring water, sanitation and hygiene education to schools around the world. Providing access to these resources remains a challenge in developing countries. In the communities surveyed, less than half of primary schools have access to safe water and just over a third have access to adequate sanitation. The five key messages of the proposal are that: children’s health improves; attendance and cognitive development increases; students become the agents of change in their communities; gender equality is promoted; and the program is achievable. Report also explores WASH partnership with faith-related schooling.

**World Health Organization, Healthy villages: A guide for communities and community health workers, [http://books.google.com/books?id=yAZo2iCsCnwC&printsec=frontcover&source=gbg\\_summary\\_r&cad=0#v=onepage&q&f=false](http://books.google.com/books?id=yAZo2iCsCnwC&printsec=frontcover&source=gbg_summary_r&cad=0#v=onepage&q&f=false)**

Chapters 3 and 4 of this guide address the need for access to sources of safe drinking water and sanitation facilities. They provide an overview of the technologies available and offer suggestions as to which may be appropriate in particular circumstances. Environmental impacts, such as those from water for agricultural use and wastewater reuse are also discussed.

**WaterAid “Gender aspects of water and sanitation” [http://www.wateraid.org/documents/plugin\\_documents/microsoft\\_word\\_gender\\_aspects.pdf](http://www.wateraid.org/documents/plugin_documents/microsoft_word_gender_aspects.pdf)**

Women are the most affected by a lack of sanitation and potable water. The burden of fetching water falls largely on their shoulders; women can spend upwards of 5 hours a day carrying water. While development organizations, in particular DFID, have tackled gender disparities in primary and secondary education, they have not adequately reflected on the role of water in preventing girls from attending school. Any departmental strategy that hopes to improve women’s livelihoods, education, and health must involve making

progress in water supply and sanitation.

### **Faith-Inspired Organizations**

#### **Catholic Relief Services/USAID, “Best Practices in Water and Sanitation”**

Document provides overview of technologies for water supply, sanitation, and water quality and treatment. In addition it outlines CRS hygiene promotion and education programs and offers guidelines/strategies for a Multi-Year Assistance Program. Two innovative technologies highlighted and particularly worth discussing are PlayPumps and ArborLoo.

Catholic Relief Services Fact Sheets for Innovations in Water and Sanitation: Help for people living with HIV, The ArborLoo Latrine, Integrating water & agriculture <http://www.crsprogramquality.org/2009/11/water-sanitation-innovations/>

Facts sheets found on the CRS website provide information about different aspects of the organization’s water and sanitation strategy. Each discusses a topic and CRS’s policies and strategies.

Integrating water & agriculture: Water and agriculture have traditionally been viewed as two different areas within development but they are increasingly interdependent. Due to global climate change and desertification around the world, agriculture is becoming more reliant on irrigation. Also, agricultural runoff is contributing to decreased water quality.

Help for people living with HIV: A healthy environment is essential for maintaining the quality of life for those living with HIV and AIDS. WHO estimates that 85-90 percent of diarrheal illness in developing countries can be attributed to unsafe drinking water and poor sanitation. Infections can hasten the progression of HIV/AIDS, and infections are shown to be higher among those who lack proper sanitation and access to clean water. Unfortunately, places where rates of HIV/AIDS infection are highest are also those regions that lack these services.

The Arborloo latrine: The Arborloo is a simple latrine which costs between \$5-\$8 and sees human waste as a resource to

be utilized. It consists of a shallow pit, concrete slab, and simple privacy structure. After six months, the slab and privacy structure are removed, the pit is covered in top soil and a fruit-bearing tree or other crop is planted.

**Catholic Relief Services, “Water and Conflict: Incorporating Peacebuilding into water development,” USCCB 2009.**

Water has the potential to bring people together, but due to its finite nature and because it faces increasing demand, it also can become a source of conflict. The expressed purpose of the document is two-fold: to provide a conceptual framework for the major issues and the dynamics of water and peacebuilding and to provide practical guidance and tools for action. Of particular interest is how CRS roots the peacebuilding principles for program design not just in the UN Human Right to Water or International Humanitarian Law, but also in CRS values and Catholic social teaching.

**The Salvation Army World Service Office, “Food/Water Sanitation” <http://www.sawso.org/programs/documents/foodwater.pdf>**

SAVSO seeks to improve the welfare of people in developing countries by providing access to reliable irrigation so that they are able to grow their own food. The treadle pump, a manual device operated much like a stair climber, is a key technology that SAVSO introduces into communities. Treadle pumps are portable, which allows for irrigation in multiple locations, and they empower community members to manage their farming effectively.

**Lutheran World Relief, “Source of Life: Lutheran World Relief’s Work to Ensure Clean, Sustainable Water” [http://www.lwr.org/ourwork/docs/water\\_12-10-09\\_web.pdf](http://www.lwr.org/ourwork/docs/water_12-10-09_web.pdf)**

LWR’s approach to water and sanitation is rooted in their accompaniment of local organizations. They work through partners on the ground to improve people’s livelihoods and health by providing technologies that increase people’s access to water and sanitation. Report provides overview of LWR’s work in the areas of water for agriculture, water for consumption, and watershed management. One significant

LWR focus is on community ownership; mechanisms must be put into place that ensure the sustainability of water and sanitation systems. These include organizing water or sanitation committees, establishing irrigation schedules, training community members in maintenance and repair, and helping to improve internal governance.

**Islamic Relief, “Translating Faith into Development” <http://www.islamic-relief.com/indepth/downloads/Translating%20faith%20into%20development.pdf>**

Paper explores if/how Islam might advocate how the poor and needy are to be helped, and what this might mean for Muslim faith-based organizations like Islamic Relief Worldwide. Qur’anic verses supporting care for the poor are discussed along with how they tie into the traditional focus of Muslim charities. On page 6, water and cleanliness in Islamic teachings are specifically cited.

**Water Missions International, “The Global Water Crisis,” <http://www.watermissions.org/>**

Water Missions International’s safe water solutions bring benefits in health, dignity, education, productivity, and income generation. WMI strives to provide water to the world’s most marginalized and forgotten people in order to save lives, improve quality of life and break the cycle of poverty. WMI has been engaging increasingly with local people to ensure that projects are culturally and technologically appropriate. Community Development, such as sustainability, health and hygiene training have been made a priority. Another important component of WMI is the development and implementation of a ministry plan to present the “Living Water” message.

**Church World Service, “Water for All” [http://www.churchworldservice.org/site/PageServer?pagename=action\\_what\\_water\\_main](http://www.churchworldservice.org/site/PageServer?pagename=action_what_water_main)**

Church World Service supports communities in obtaining and managing their own potable water supplies and watershed sources, and regards water as a resource that should be shared by all. The organization is against policies such as trade roles that encourage inappropriate privatization and commercialization of services. CWS programs encourage water

for better health through providing safe and sufficient water, improving sanitation conditions, and educating on good hygiene practices. CWS also concentrates water efforts on food security through efficient irrigation and water management and supports ongoing peace efforts through responsible water resource governance.

**World Vision, “Water, sanitation, hygiene.”** <http://www.worldvision.org/content.nsf/learn/ways-we-help-wsh>

World Vision is a Christian organization that is active in nearly 100 countries around the world to address the causes of poverty and to respond when disaster strikes. Over the past 25 years, World Vision has helped 19 million people in Africa, Asia, and Latin America gain access to safe drinking water. The organization’s water programming is combined with sanitation and hygiene in a WASH initiative, which aims to not only provide drinking water but also improved sanitation facilities and hygiene education.

#### **Faith and Water**

**Kat Glass, “Faith groups campaign for clean water,”** *National Catholic Reporter*, 22 June 2007

A collation of religious groups seeks to educate Americans about the number of people around the world who do not have readily accessible safe drinking water. Growing, too, is the perception that faith compels people to action; the environment is part of God’s creation and humans have the responsibility to maintain and protect it.

**Francesca De Chatel, “Drops of Faith: Water in Islam”** [http://www.islamonline.net/servlet/Satellite?c=Article\\_C&pagename=Zone-English-Living\\_Shariah/LSELayout&cid=1159951461509](http://www.islamonline.net/servlet/Satellite?c=Article_C&pagename=Zone-English-Living_Shariah/LSELayout&cid=1159951461509)

Article provides excellent overview of the teachings about water in Islam. Discusses the role of ritual ablution as part of prayer, the unity of body and spirit, emphasis on thriftiness with water, and water in Shari’ah, Islamic Law. Water is seen as a gift from God and one of the three things that every Muslim is entitled to (the others being grass and fire). Two important precepts that guide the rights of water are shafa,

the right of thirst, and shirb, the right of irrigation. Article also describes instances where water is not a gift, but a violent punishment.

**Annemarieke Mooijam and Chistine Sijbesma. “Faith in Water: Water supply, sanitation and hygiene facilities and related education in faith-based schools.”** *International Water and Sanitation Center (IRC) Conference Paper*. 5-7 July 2009.

Water and faith are intimately linked; water is a source of inspiration, a means of destruction, and a symbol of ritual purification. The spiritual connections between faith and waste are less evident, but when found, are typically negative in connotation. Believers are advised to stay away from wastes to avoid becoming impure. One interesting example cited is that Brahmins must defecate beyond the distance of an arrow shot from their home and never in a temple enclosure, at the borders of a river, pond or spring, or in a public place. With many schools being faith-related globally, there are unique opportunities and benefits from linking spiritual learning with teachings on water, sanitation, hygiene and the environment.

**Cheryl McDonald, “The Church’s role in sanitation and hygiene: Guidelines and tools.”** (Tearfund, 2010) <http://tilz.tearfund.org/webdocs/Tilz/Topics/watsan/Church%20and%20WASH.pdf>

This report was commissioned by Tearfund to provide practical guidelines as to how local churches and church-based partners could program and successfully run sanitation projects based on the five role models of Messenger, Demonstrator, Implementer, Guardian, and Advocate. The report found that the church has unique qualities that prepare it to take on the activities associated with all of these roles. In particular, its central position and respected voice enable it to be most effective as a messenger, demonstrator, and implementer. While the original intent of the report had been to suggest tools that would be useful to practitioners in each of the roles, during the course of the report it became clear that the tools did not fit clearly into individual roles. There was the desire to learn about more general tools, such as Community-Led Total Sanitation (CLTS).

**Faith in Water: Conference Papers-Sarum College,**



## Salisbury, UK July 5-7, 2009

Collection of papers written by religious leaders and organizations on the topic of water for a conference in 2009. Provides a useful overview of the work of faith-inspired organizations to provide people with access to water.

### Other Resources

#### **Vandana Shiva, *Water Wars: Privatization, Pollution, and Profit* (2002)**

Shiva discusses the privatization of water, mining, and damming, and their effect on the notion of communal water rights. She delves into the spiritual and traditional role that water has played in communities throughout the world and warns of the dangers of privatization to livelihoods and culture.

#### **Steven Solomon, *Water: The Epic Struggle for Wealth, Power, and Civilization* (2010)**

Solomon explores the link between water and power throughout history. The book provides an overview of the current water landscape around the world and argues that as water becomes scarcer, the ability of countries to access and harness water resources will be an important factor in determining prosperity and influence.

#### **Maggie Black and Jannet King, *The Atlas of Water, Second Edition: Mapping the World's Most Critical Resource* (2009)**

Provides a great introduction to the issue of water in the world today using charts, graphics, and maps. Discusses issues concerning access to water, pollution, climate change, agriculture, industry, and water management.

### Websites

UN Water: [www.unwater.org](http://www.unwater.org)

World Water Day: <http://www.unwater.org/worldwaterday/>

UNICEF Water, Sanitation, and Hygiene: <http://www.unicef.org/wash/>

Religious Working Group on Water: <http://www.lwr.org/advocacy/water/statement/index.asp>

Millennium Water Alliance: <http://www.mwawater.org/>

Ecumenical Water Network: <http://www.oikoumene.org/en/activities/ewn-home.html>

# FOOTNOTES

1. The terms “faith” and “religion” are both used in the report, largely depending on use by the subject involved. We understand faith as a broader concept than religion; the latter term carries a more organizational connotation but use of both terms (as well as spiritual) varies widely. We prefer the term faith-inspired as opposed to faith-based organizations, because the former is more inclusive.
2. CIA World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html#Geo>.
3. Maggie Black and Jannet King, *The Atlas of Water* (Los Angeles: University of California Press, 2009), 22.
4. *Ibid.*, 24.
5. Tina Rosenberg, “The Burden of Thirst,” *National Geographic* (April 2010): 102.
6. *The Economist*, “Enough is not Enough,” *The Economist Special Report: Water* (22 May 2010): 6.
7. Rosenberg, 102.
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