Implementing an Evolving Human Right
Through Water and Sanitation Policy

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With water and sanitation vital to the public’s health, there have been growing calls to accept water and sanitation as a human right and establish a rights-based framework for policy reform. Through the development of international law, policymakers have increasingly specified water and sanitation as independent human rights. In this political development of human rights for water and sanitation, the authors find that the evolution of rights-based water and sanitation policy has reached a milestone in the United Nations (UN) General Assembly’s 2010 Resolution on the Human Right to Water and Sanitation. By memorializing international consensus on the normative content of these interconnected rights and the corresponding obligations of national governments, states have provided political recognition for expanded efforts to realize human rights through water and sanitation policy. Examining the opportunities created by this UN Resolution, this article analyzes the implementation of the human right to water and sanitation through global water governance, national water policy, and water and sanitation outcomes. While obstacles remain at each step in the implementation of this right, the authors conclude that the UN Resolution could have lasting effects on public health through rights-based water and sanitation policy.

Keywords: human rights, global water governance, water and sanitation policy,
United Nations, human rights indicators

As human rights expand in scope and influence, water and sanitation—both instrumental to the realization of a wide range of human rights—have come to be seen as independent human rights. At the forefront of public health and human rights, the United Nations (UN) General Assembly’s 2010 Resolution on the Human Right to Water and Sanitation represents a watershed policy statement, articulating international political consensus on the scope and content of these interconnected rights. With international organizations, national governments, and nongovernmental advocates moving to secure implementation
of this Resolution, this article explores opportunities to implement human rights as a means to realize public health through rights-based water and sanitation policy. Examining the development of human rights to address the public health implications of water and sanitation, this article: describes the role of human rights as a normative framework for public policy, assesses the evolution of a human right to water under international law, and details the 2010 UN Resolution that has come to reshape a distinct human right to water and sanitation. From the seminal role of the UN Resolution, the authors analyze the implementation of this Resolution through global water governance, national water policy, and water and sanitation outcomes. Recognizing that obstacles remain at each step in the stream of implementation, the authors outline future research to examine the causal process by which human rights impact water and sanitation policy. With increased human rights specificity facilitating human rights accountability, this article concludes that such a revitalized rights-based agenda presents enhanced opportunities for water and sanitation policy, but that additional research will be necessary to overcome obstacles in translating human rights into measureable effects on the public’s health.

I. The Development of Human Rights for Water and Sanitation

Given the pressing public health implications of water and sanitation—with 884 million lacking access to improved drinking water and 2.6 billion lacking access to sanitation services, underlying a wide array of communicable and non-communicable health threats—global health governance has looked to human rights as a means to address these pervasive harms (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2010). Rather than viewing water and sanitation only as a basic
and pressing need, human rights implicate specific legal responsibilities to realize water and sanitation. Drawn normatively from human rights to health, development, and a standard of living, water and sanitation have come to be seen as independent human rights – transitioning from soft to hard law in the pursuit of international accountability for state obligations. Increasing in specificity through its normative development under international law, a composite human right to water and sanitation has found authoritative clarification through the political support of the UN General Assembly.

A. Human Rights in Public Policy

Human rights offer universal frameworks to advance justice for global health. Addressing threats to public health as “rights violations” offers international standards by which to frame government responsibilities and evaluate policies and outcomes under law, shifting the policy debate from political aspiration to legal accountability (Steiner et al., 2008). By empowering individuals to seek legal redress for rights violations rather than serving as passive recipients of government benevolence, international human rights law identifies individual rights-holders and their entitlements and corresponding duty-bearers and their obligations. With a state duty-bearer accepting resource-dependent obligations to realize individual rights “to the maximum of its available resources, with a view to achieving progressively the full realization of the rights” (United Nations, 1966), states have been pressed to progressively realize rights through national and international policy (Felner, 2009). As a framework for global health governance, international organizations have increasingly invoked a “rights-based approach” to health. Grounded in the right to health and rights to various underlying and interdependent determinants of health, this rights-based approach seeks
to frame the legal and policy environment, integrate core principles into programming, and facilitate accountability for evolving standards of human rights under international law (Alston & Robinson, 2005).

The codification of human rights became a formal basis for global governance in the aftermath of World War II, with rights related to health serving to prevent deprivations like those that had taken place during the Depression and the War that followed (Chapman & Russell, 2002). To provide a formal basis for assessing and adjudicating principles of justice (Donnelly, 2003), states worked under the auspices of the nascent UN General Assembly to enumerate and elaborate human rights under international law (Alston 1984), proclaiming on December 10, 1948 a Universal Declaration of Human Rights (UDHR) to create “a common standard of achievement for all peoples and all nations” (United Nations, 1948). Out of this nonbinding Declaration, states continued to negotiate in the ensuing years to develop specific legal obligations under two separate human rights covenants, enacting in 1966 the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). These three documents—the UDHR, ICCPR, and ICESCR, adopted by the UN General Assembly and referred to collectively as the “International Bill of Human Rights”—form the normative basis of the human rights system from which rights to water and sanitation would develop and evolve under international law.

**B. Evolution of Water as a Human Rights Concern**

In the politically-contentious evolution of human rights (United Nations, 2003), human rights to water and sanitation have developed dramatically under this human
rights system—transitioning from implicit responsibility, to explicit obligation, to independent right (Gupta et al., 2010).

Figure 1 – International Evolution of Human Rights to Water and Sanitation

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Intertwined with concern for public health, the right to water has long been linked to the right to health, sharing a common history and interdependent evolution, with a distinct right to water and sanitation now finding independent international consensus in the UN’s 2010 Resolution.

The evolution of international legal norms in defining access to water as a human right begins in 1948 with the UDHR’s proclamation that “[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family” (United Nations, 1948). Operationalized by the 1948 Constitution of the World Health Organization (World Health Organization, 1948), this right would be codified under international law in the 1966 ICESCR, elucidating a right to “the enjoyment of the highest attainable standard of physical and mental health” and developing correlative state obligations for the “prevention, treatment, and control of epidemic, endemic, occupational and other diseases” (United Nations, 1966). Given rising public awareness of the role of environmental determinants of health (McNeill 2010), leading to corresponding normative evolution in human rights for health in the late 1960s and early 1970s, international legal institutions moved to regulate impediments to water access (United Nations, 1972).
Flowing from national and international regulation to protect water resources, acknowledging the importance that water holds to nearly all aspects of life, a human right to water was recognized explicitly for the first time at the 1977 UN Water Conference in Mar del Plata. With delegates addressing issues of clean water supply and wastewater management, the Mar del Plata Action Plan proposed what would become the UN’s first International Drinking Water Supply and Sanitation Decade (1981-1990), concluding that “all peoples, whatever their stage of development and their social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs” (United Nations, 1977). While the proclamation of this collective right of “all peoples” would not be binding on states (Shelton, 2001), it began to build agreement around the incipient norms (for both access to and quality of water) that would come together in a human right under international law.

Over the next decade, the UN General Assembly would adopt a series of international human rights treaties and declarations to extend this explicit recognition of a right to water—alternately derived from human rights to an adequate standard of living, to development, and to the highest attainable standard of health—with:

- The 1979 Convention on the Elimination of All Forms of Discrimination Against Women promulgating a state obligation to “ensure to [rural] women the right…to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply” (United Nations, 1979);
- The 1986 Declaration on the Right to Development finding a “mass violation of human rights” where many in the developing world are prevented from accessing basic resources and prerequisites for development, “denied access to such
essentials as food, water, clothing, housing and medicine in adequate measure” (United Nations, 1986); and

- The 1989 Convention on the Rights of the Child linking health with water and sanitation to reinforce state obligations to “combat disease and malnutrition…through the provision of adequate nutritious food and clean drinking-water” and to ensure that individuals are “informed, have access to education and are supported in the basic knowledge of…hygiene and environmental sanitation” (United Nations, 1989).

Although nongovernmental advocates continued to proclaim water as a human right into the 1990s (ICWE, 1992), states would move away from this rights-based approach to water and sanitation policy (Gleick, 1998), with governments agreeing at the 1992 Earth Summit that “in developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems. Beyond these requirements, however, water users should be charged appropriately” (United Nations, 1992). With progress on access to water interwoven with debates on private sector provision of drinking water, issues of affordable access to water were revisited anew by the 2000 Millennium Declaration, which resolved “to halve the proportion of people who are unable to reach or to afford safe drinking water” (United Nations, 2000). Based upon 1990 baseline levels, the accompanying Millennium Development Goals (MDGs) would explicitly join water and sanitation for the first time, setting targets to “halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.” Given the exacerbation of dwindling water supplies (due to demographic shifts), the limitations on national water policies (due to poor management),
and the conflicts surrounding privatizing water systems (due to neoliberal constraints), advocates at the national, regional, and international levels turned their focus to a human right to water as a means to reframe water as a public good and a government responsibility (Bluemel, 2005).

Returning these commitments to the international legal obligations of human rights institutions, the UN Committee on Economic, Social and Cultural Rights (CESCR)—authorized by the ICESCR to interpret state obligations and review state reports—sought to codify an independent human right to water. Through its fifteenth General Comment on the ICESCR, the CESCR defined the scope and content of a human right to water, holding that “the human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights” (CESCR 2002, ¶1). Building upon the water and sanitation targets in the MDGs, commitments long criticized for neglecting rights-based approaches to equity in development (Alston 2005), General Comment 15 delineates the core obligations of a right to water, proscribes violations of those obligations, and outlines a policy roadmap for states to progressively realize access to water. Where water is not mentioned in the original text of the ICESCR, the CESCR would interpret it into the ICESCR based upon existing provisions, finding in General Comment 15 that a right to water is normatively situated under the umbrella of the human right to a standard of living (ICESCR, art. 11) and the human right to health (ICESCR, art. 12). Reasoning that “…an adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements,” the CESCR (2002) concluded that:
The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses (¶2).

Framed by overarching obligations to respect (not interfere), protect (from third party interference), and fulfill (take positive steps to facilitate, promote, and provide for) the right to water, General Comment 15 articulates discrete state obligations:

- to “ensure access to the minimum essential amount of water that is sufficient and safe for personal and domestic uses to prevent diseases” and
- “to take measures to prevent, treat, and control diseases linked to water, in particular ensuring access to adequate sanitation” (Ibid., ¶37).

By evoking this right as a means to realize public health, General Comment 15 outlines a series of government responsibilities for national water strategies and plans of action, structuring state accountability for water policy.

Following the adoption of General Comment 15, with the UN General Assembly committing to an International Decade for Action ‘Water for Life’ (2005-2015) and incorporating the right to water in the 2007 Convention on the Rights of Persons with Disabilities, the UN Economic and Social Council (ECOSOC) directed the UN High Commissioner for Human Rights to report on the scope and content of human rights obligations related to equitable access to safe drinking water and sanitation, drawing from the MDGs in joining water and sanitation as interconnected rights-based responsibilities (Weiss, 2007). From the recommendations of the High Commissioner for Human Rights (2007), which concluded that the time had come to circumscribe access to safe drinking water and sanitation as a distinct human right, the Human Rights Council (2008) created
the position of Independent Expert on human rights obligations related to access to safe drinking water and sanitation. Appointing Catarina de Albuquerque as the first Independent Expert to the Human Rights Council, her first report in July 2009 recommended that the UN declare water and sanitation as an independent human right.

**C. UN Resolution on the Human Right to Water and Sanitation**

One year later, the UN General Assembly took up this recommendation, declaring safe and clean drinking water and sanitation to be a human right under international law. Under its July 2010 Resolution—“The Human Right to Water and Sanitation,” adopted by a vote of 122 – 0, with 41 abstentions—the General Assembly explicitly joined water and sanitation as a singular, composite human right – an independent right that would necessitate international obligations to realize water and sanitation for the most vulnerable. Introduced by the Bolivian representative, Pablo Solón—whose prefatory remarks catalogued the dynamic nature of human rights, the evolution of rights-based norms, and the health harms stemming from a lack of water and sanitation—the approved resolution:

1. **Recognizes** the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights;

2. **Calls upon** States and international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all (United Nations, 2010).
With this Resolution developed and sponsored by a small group of developing states, it quickly raised the objections of excluded state representatives from developed countries, who found the effort to “take a short-cut around the serious work of formulating, articulating and upholding universal rights” in the UN’s Human Rights Council prior to advancing to the entire UN General Assembly (Sammis, 2010). Despite these procedural objections—compounded by substantive concerns that the Resolution did not fully reflect the current state of international legal negotiations (leading sponsoring states to replace the word ‘declares’ with ‘recognizes’ in an effort to achieve consensus for paragraph 1)—states opted to abstain from this vote rather than vote in opposition to a politically popular consensus (Crook, 2010). Although commentators have discussed a wide range of substantive concerns underlying state abstentions, from issues of water commodification to international obligation (Pardy, 2011), abstaining states raised only procedural concerns in their public objections (General Assembly Official Records, 2010), reflecting the political resonance of rights-based discourses and raising the political costs of denying the existence of a human right to water and sanitation (de Albuquerque, 2011a). Affirming the substance of this General Assembly Resolution, the UN’s Human Rights Council resolved in September 2010 that the human right to water and sanitation was legally binding on state governments under established human rights, tempering the expansive international obligations declared by the General Assembly while reiterating the “primary responsibility” of national governments for safe drinking water and sanitation (UN Human Rights Council, 2010a).

In building from the evolving formal and informal standards that preceded it and encouraging the work of the UN Independent Expert to substantiate this right in the years
to come, the UN General Assembly Resolution is the culmination of advocates’ past efforts and a fountainhead for future efforts. This Resolution has formally declared the establishment of an independent right to water and sanitation, supporting the reasoning of General Comment 15 and evidencing a state obligation that many now consider to bind all nations under customary international law (Bates, 2010). Despite arguments that more established human rights (e.g., the right to health) would be more effective in realizing water and sanitation (Gavouneli, 2011), a complementary approach endorsed by the Human Rights Council (2010b), few continue to doubt the normative legitimacy of this new right, with the UN Resolution now creating an imperative to implement the right to water and sanitation through water policy.

Transitioning from human rights development to rights-based policy implementation, Independent Expert de Albuquerque—warning that the MDGs are insufficient to create accountability for efforts to make water available, acceptable, accessible (reliable, affordable, and sustainable) and of safe quality—has argued that “we have an even greater responsibility to concentrate all our efforts in the implementation and full realization of this essential right” (2010). With de Albuquerque thereafter repositioned from Independent Expert to Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, renewing her mandate and giving her authority to engage directly with governments and other stakeholders, she has taken up issues of accountability for implementing the UN Resolution (OHCHR, 2011).

II. The Implementation of the Human Right to Water and Sanitation

The political recognition of the right to water and sanitation by the UN represents a milestone in the development of international law, memorializing international
consensus on the substantive content of an independent human right to water and sanitation and the corresponding obligations of governments to respect, protect, and fulfill the right. Where the right to water and sanitation was thought to be divisive in global governance, unenforceable under national policy, and unaccountable for health outcomes, the UN Resolution has alleviated many of these concerns, providing governmental authority to what had previously been the recommendation of scholars and advocates. Examining the impact of the UN Resolution on the implementation of the human right to water and sanitation, this analysis looks to the cascading influence of the UN Resolution on global water governance, national water policy, and water and sanitation outcomes.

A. Global Water Governance

In adopting a human right to water and sanitation in global governance, international organizations now have an expanded normative framework by which to structure rights-based water and sanitation policy. These institutions of global water governance—coordinating the availability, accessibility, and sustainability of high-quality sources of water—can provide a basis by which global norms are set and consensus is built, thereby guiding national water policies. Yet as global governance has become increasingly fragmented, with international organizations in the UN system forced to compete for scarce resources and attention in a crowded global health policy landscape (leading at times to redundancy and ineffectiveness (Szlezák et al., 2010)), cooperation across multiple actors and organizations becomes necessary to build partnerships to realize shared rights-based goals.

Founded upon a rich history of inter-organizational water governance efforts—
from the 1977 action plan of Mar del Plata, to the 1992 environmental agenda of the Dublin Statement, to the 2000 global consensus of the MDGs—cooperation across existing institutions can provide a structural basis for implementing the human right to water and sanitation. Such an approach to global governance through multilevel partnerships has created a structure for coordination to address water and sanitation, employing the human right to water and sanitation to frame a post-MDG approach to global water policy (de Albuquerque, 2011b). Similar to international conferences like the World Water Forums and regional sanitation conferences, which seek to translate scientific knowledge into programmatic recommendations (Pahl-Wost & Gupta, 2008), the human rights approach can build upon the MDG for water and sanitation in identifying rights-based concerns (e.g., equity) in global water policy (de Albuquerque, 2010).

As such, the right to water and sanitation offers a normative basis for global coordination and cooperation, with General Comment 15 giving credence to the responsibilities of these multisectoral actors:

United Nations agencies and other international organizations concerned with water, such as WHO, FAO, UNICEF, UNEP, UN-Habitat, ILO, UNDP, the International Fund for Agricultural Development (IFAD), as well as international organizations concerned with trade such as the World Trade Organization (WTO), should cooperate effectively with States parties, building on their respective expertise, in relation to the implementation of the right to water at the national level. The international financial institutions, notably the International Monetary Fund and the
World Bank, should take into account the right to water in their lending policies, credit agreements, structural adjustment programmes and other development projects…so that the enjoyment of the right to water is promoted (CESCR, 2002).

Despite these calls for cooperation in a rights-based approach to global water governance, many of these organizations have not often sought to implement human rights in their water and sanitation programming and partnerships (Russell, 2010). Where such avoidance of the rights-based approach stems from a reluctance of international organizations to engage discourses perceived to be “political” (Huang, 2008), the UN Resolution has provided political justification to engage human rights debates and reach across organizations for water and sanitation. Harmonizing shared norms through global partnerships, the Resolution calls specifically on “international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all” (United Nations, 2010).

Among UN agencies, WHO has the institutional authority and public health legitimacy to take a leadership role in such partnerships across international organizations, drawing on its constitutional mandate to implement a rights-based approach to health: “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition” (World Health Organization, 1948). With WHO’s Constitution defining health positively to include “a state of complete physical,
mental, and social well-being and not merely the absence of disease or infirmity” (Ibid.), WHO has long explored multisectoral partnerships for water and sanitation systems through, among other things:

• World Health Assembly support for an integrated WHO strategy for water, sanitation, and health, with states requesting that WHO strengthen collaboration with all relevant UN-Water members and partners to promote access to safe drinking-water, sanitation and hygiene services (World Health Assembly, 2011);

• Advocacy to support the inclusion of water and sanitation under WHO frameworks for primary health care (World Health Organization, 1978) and UN frameworks for human rights (Hunt & Backman, 2008);

• The establishment of a Water, Sanitation, Hygiene and Health Unit, which has elaborated water and sanitation guidelines for national policy, provided technical support to low- and middle-income countries, and supported international water and sanitation conferences (Bartram & Gordon, 2008); and


Through these efforts, WHO has sought to operationalize human rights for water and sanitation (World Health Organization, 2003), in accordance with the UN’s cross-cutting commitment to “mainstream” human rights in all programs, policies, and activities (Annan, 1997), recognizing “the utility of key human rights principles as guides for
development programming” (World Health Organization, 2005). With the UN Resolution providing a political basis for cooperation, WHO has an opportunity to expand its global health partnerships to implement the international legal standards of the right to water and sanitation through global water governance.

Coming together under WHO’s coordinating authority, global water governance necessitates multisectoral partnerships reflective of the underlying determinants of health realized through water and sanitation, creating an imperative for interagency cooperation – across the UN and among global institutions. Through such collaborative efforts, these partnerships can enable information sharing between stakeholders, reduce redundancies in programs, establish best practices, and facilitate negotiation processes (Moon et al., 2010). Efforts are already underway by various institutions—whether public, private, or civil society—to legitimize and motivate their activities in accordance with the human right to water and sanitation (Russell, 2010). Partnering with traditional human rights institutions and individuals (such as the Office of the UN High Commissioner for Human Rights and the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation), these global actors can collaborate with states to catalyze the development of sustainable institutions for global health, mainstreaming human rights in global water governance and implementing global efforts through national water policy.

**B. National Water Policy**

As global governance is translated into national policy, this new rights-based agenda has laid the groundwork over which a rapidly expanding implementation movement can be established at the intersection of human rights and water and sanitation policy. National water policy serves as the principal means of realizing the human right
to water and sanitation (Staddon et al., 2012), elevating human rights from international principle to national practice. As the UN Resolution provides states with consistent definitions, standards, and obligations, these normative frameworks can structure national law, facilitate judicial enforcement, and advance political advocacy to ensure human rights implementation through national water policy.

With many national regulatory frameworks for water and sanitation dissociated from international human rights frameworks (Cullen, 2011), implementation of the right to water and sanitation is supported most directly through incorporation into national law – whether enshrined in a national constitution, drafted into implementing legislation, or extrapolated from other rights (Smets, 2006). In accordance with such rights-based implementation, the right to water and sanitation has been proclaimed under a wide array of modern constitutions—including those of South Africa, Kenya, and Ecuador—and such constitutional amendments are expanding in the wake of the UN Resolution (Jeffords, 2011). Beyond constitutional law, states have sought to realize the right to water and sanitation through codification of its obligations in national legislation (Bourquain, 2008), evidenced by the extensive development of rights-based laws since the adoption of the UN Resolution (United Nations Food and Agriculture Organization & World Health Organization, 2012). Among states that have long upheld water rights in national law, these states have sought to interpret water and sanitation obligations from other rights already protected by the nation’s law, as seen where India has derived a right to water from its constitutional right to life (Chowdhury et al., 2011). With the UN Resolution now providing a universal framework for national policy, states can now meet
their obligations through more explicit rights-based legal reforms, tied closely to the specific norms of the human right to water and sanitation.

Interpreting the human right to water and sanitation through judicial enforcement, litigation has the potential to play a crucial role in advancing human rights in national policy, pressing governments to continuously reexamine efforts to realize water and sanitation (Harvard Law Review, 2007). With each state obligated under international law to “progressively realize” this right “to the maximum of its available resources,” such a resource-dependent obligation leaves room for interpretation in implementing the right to water and sanitation through limited national resources (OCHR, 2011). Driving the state forward in its progressive realization of rights, litigation can empower individuals to raise human rights claims, seek impartial adjudication, and demand rights-based remedies, with courts often standing as a last resort in advancing the health interests of vulnerable populations (Meier et al., in press). Through national courts or before supra-national tribunals, individual legal claims allow individuals to contest government policy for the progressive realization of water and sanitation and thereby clarify the human right, enforce government obligations, and provide remedies for violations (Yamin & Gloppen, 2011). For example, based upon South Africa’s constitutional codification of a right of access to sufficient water, the South African Constitutional Court has found a state obligation to provide water management through healthy conditions for housing (South African Constitutional Court, 2000) while striking down individual claims to a minimum level of free water for basic hygiene and consumption needs (South African Constitutional Court, 2009) – allowing for the progressive realization of water policy through “reasonable” limitations in national budgeting and planning (Danchin, 2010).
With many water-based claims currently advanced indirectly—under the human rights implicated by water and sanitation policy (as seen in obligations interpreted from rights to life and health in India, rights to the environment in Argentina, and rights to a standard of living in the European human rights system)—direct action under an independent right to water and sanitation has the potential to more precisely confront the harm and provide the remedy (Bluemel, 2004). Supported by international NGOs, the Centre on Housing Rights and Evictions (COHRE) has led the way in public interest litigation to support individuals and communities whose water and sanitation rights have been violated (Roaf et al., 2005). As these claims continue to resonate with transnational social movements, buttressed by the political support of the UN Resolution, it is likely that successful legal precedents under the right to water and sanitation will diffuse across a wide range of water advocates and judicial forums, translated into government reforms in water policy.

Complementing these formal means of realizing water and sanitation through national policy, the human rights standards of the UN Resolution can be employed informally to advance national discourses through political advocacy, wherein mechanisms of “naming and shaming” continue to be employed as a means of enforcement for human rights obligations (Roth, 2004). In this effort, the human right to water and sanitation speaks to the affordability of water use and infrastructures for water treatment (Moss et al., 2003). With water widely accepted as both an economic good and a social good, national policy becomes necessary to invest in sustainable water infrastructures (Winpenny, 2003). Given expanding private sector involvement in the water sector, policy efforts are underway to assure mechanisms for the affordable supply of water to all individuals, especially the most vulnerable (Prasad, 2007). Moving away
from discussions on what kind of ownership and management is the most appropriate, debates on the relative merits of public or private involvement in the water sector have given way to discourses on the conditions under which water services can be provided safely, sufficiently, affordably, and sustainably in accordance with human rights standards (Bakker, 2007). By providing policy guidance for infrastructure sustainability, investor confidence, and affordable access, the UN Resolution can frame political advocacy for the water sector (Rouse, 2007). With NGOs employing rights-based standards in their political advocacy, they have begun to combine their advocacy efforts under the UN Resolution as a means of holding states responsible for human rights (The Rights to Water and Sanitation, 2011). As seen through the work of WaterAid and the Freshwater Action Network, NGOs are now working closely with the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation to pursue the implementation of the human right to water and sanitation in national policies and programming, developing advocacy guides to advance future rights-based policy reforms.

**C. Water and Sanitation Outcomes**

These global and national policy efforts have created a basis by which implementation of the right to water and sanitation can frame water and sanitation infrastructures to promote the public’s health, but for this right to take hold, there must be mechanisms in place to ensure state accountability for realizing rights through water and sanitation outcomes. While there currently exist mechanisms of international monitoring for the right to water and sanitation, as seen most prominently in state periodic reporting to the CESCR, states previously have not reported water and sanitation information to international treaty bodies in accordance with human rights frameworks (Roaf et al.,
2005). Analogously, while there currently exist public health benchmarks for reporting water and sanitation data (Bartram, Fewtrell & Stenström, 2001), these non-binding goals have not been linked to human rights norms, limiting state accountability for their realization (Salman & McInerney-Lankford, 2004). As the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation advances an effort to achieve accountability for rights-based policy implementation, human rights indicators are increasingly seen to be critical to operationalizing the human right to water and sanitation – providing precision in state reporting and structuring state reports around comparable data (de Albuquerque, 2011b). With a specific mandate to address the MDGs, the Special Rapporteur has argued that these goals are insufficient to realize equity through water policy, seeking to reform the water and sanitation targets of the MDGs to be more responsive to rights-based concerns (de Albuquerque, 2010). Similar to the process of developing the MDG for water and sanitation, the creation of rights-based targets, benchmarks, and timelines can facilitate the translation of the human right to water and sanitation into measurable indicators (Fukuda-Parr et al., 2009). With indicators able to structure accountability for human rights, guide national water policy, frame international monitoring processes, and catalyze civil society (Conca, 2005), the UN Resolution is supporting efforts to develop indicators for the human right to water and sanitation and employ those indicators in state human rights reports.

In developing indicators to assess the progressive realization of the human right to water and sanitation, these indicators can be employed to induce accountability for state obligations to engage water policy to the maximum of their available resources and gradually improve equitable results in water- and sanitation-related health outcomes,
focusing limited national resources in accordance with human rights principles (de Albuquerque, 2011b). To assure monitoring of the progressive realization of rights in water policy, gauging incremental assessments of state compliance, the CESCR first advocated the development of indicators in national water strategies or plans of action, finding that:

right to water indicators should be identified in the national water strategies or plans of action. The indicators should be designed to monitor, at the national and international levels, the State party’s obligations . . . [and] should address the different components of adequate water (such as sufficiency, safety and acceptability, affordability and physical accessibility), be disaggregated by the prohibited grounds of discrimination, and cover all persons residing in the State party’s territorial jurisdiction or under their control (CESCR, 2002, ¶ 53).

Framing policy measurements through a normative lens, the human rights practice community has embraced indicators as part of a larger drive for scientific assessment and monitoring of state obligations for the realization of human rights, especially economic, social, and cultural rights (Rosga & Satterthwaite, 2009). With indicators integral to the success of global environmental and global health frameworks (Chasek et al., 2006), the water and sanitation community has begun to look to the development of indicators as a means to hold governments accountable for realizing the right to water and sanitation (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2011).

Laying the groundwork for global water governance through international rights-based monitoring, the Special Rapporteur on the Human Right to Safe Drinking Water
and Sanitation has begun a process to identify specific indicators reflective of the realization of the human right (de Albuquerque, 2010). To rectify weaknesses in accountability for state obligations to realize water and sanitation, the Special Rapporteur has sought to justify a rights-based approach to indicators, stating that such indicators would more accurately illustrate progress based on the availability, safety, acceptability, accessibility (reliability, affordability, and sustainability), and quality of water and sanitation. Engaging interdisciplinary collaborations to consider social scientific inquiry for human rights accountability, scholars, practitioners, and advocates have sought to identify indicators that are relevant for global and national levels, adapting global measures to national contexts and disaggregating national data to reflect sub-national inequities (de Albuquerque, 2011b).

Developed under the auspices of the UN Resolution, such an indicator development project seeks to create universally applicable rights-based indicators for the use of the CESCR (and other treaty monitoring bodies) in evaluating state compliance with the right to water and sanitation (Ibid.). Specific to monitoring progress in water and sanitation outcomes, where detailed cross-national data sets already exist, water professionals and policymakers have sought to utilize existing public health and development data but to examine these data through the state obligations of the right to water and sanitation and to assess them through the UN’s human rights institutions (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2011). In this indicator development project, the Special Rapporteur stresses that the UN Resolution has given political legitimacy to efforts to incorporate human rights indicators in the global development agenda, endowing these efforts with legal obligations, moral
character, clear roles in international relations, and powerful legal frameworks for practitioners working in water and sanitation policy (de Albuquerque, 2011b). Creating a post-MDG framework for global water justice (with indicators for water and sanitation scheduled to be addressed at the September 2013 meeting of the UN General Assembly), such rights-based indicators would take measure of government efforts to implement the human right to water and sanitation as a means to public health.

III. Obstacles to Implementation of the Human Rights

While the UN Resolution has provided unprecedented opportunities to realize equitable access to safe water and sanitation, policymakers will face a series of obstacles—through global water governance, national water policy, and water and sanitation outcomes—in implementing the human right to water and sanitation. Despite avenues for implementation, realization of the right to water and sanitation may be hampered by lack of political will; financial constraints; limited access to infrastructure; administrative constraints in implementation, coordination, and monitoring of rights based policies; insufficient technical capacity to ensure water and sanitation polices are followed; incomplete information on undocumented populations without access; and challenges of water scarcity compounded by global climate change. With these obstacles potentially impacting water and sanitation outcomes as global, national, and local actors seek to implement the rights-based consensus of the UN Resolution, it is vital that scholars conceptualize and examine the causal process by which human rights impact water policy for the public’s health.
With global institutions seeking to implement the right to water and sanitation, such supra-national authority for water governance may impinge sovereign control over water within national jurisdictions, leading to greater international competition for water and exploitation of common resources (Weiss, 2005). Despite the tempering of international obligations by the Human Rights Committee, developed nations have expressed continuing concerns that developing nations may employ this new right to compel other countries to supply needed water funding under the auspices of rights-based international assistance and cooperation (Khalfan, 2012). With the risk of international claims and without sanctions for non-compliance, there is a fear that such international obligations may lead developed states to further entrench themselves in policy efforts to achieve national self-interest, subverting the promise of cooperative partnerships under the UN Resolution (Pardy, 2011).

At the level of national policy, it is unclear to what degree changes in global health governance will result in beneficial changes in national water and sanitation policy. With many developing nations facing intense capital constraints, the construction and maintenance of infrastructure requires sustainable financial resources (costs associated with the infrastructure, operation, and maintenance needed to guarantee access to adequate water and sanitation) and administrative resources (capacity to ensure adherence to water safety and sanitation policies) (Briscoe, 2011). Given these resource constraints, there is a risk that efforts to implement the human right to water and sanitation could reignite debates on private sector involvement, with the reassertion of government control of water resources hampering access to water and sanitation (Asthana, 2011). As national policy seeks to assure responsibility for water and
sanitation, pricing decisions may cause tensions where the UN Resolution does not provide sufficient normative guidance to assure budgetary allocations in accordance with the principle of progressive realization. Where there are few institutional avenues by which to interpret human rights and enforce state obligations (or where such tribunals are not suited to the litigation of water and sanitation issues of a technical nature), disagreements over water and sanitation may not prove amenable to resolution through policy reform (Dennis and Stewart, 2004).

In leading to water and sanitation outcomes, given the myriad threats to water and sanitation, it is unclear whether the implementation of the right to water and sanitation will lead to the public health benefits sought by proponents. Where the human right is premised on national control (Bluemel, 2004), state accountability for safe water and sanitation may be confounded by global threats – chief among them, the environmental constraints brought on by global climate change (Kundzewicz et al., 2007). Further, in establishing state accountability through rights-based indicators, the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation has noted methodological obstacles in identifying data reflective of the realization of the human right, arguing that:

Our challenge is to identify indicators that can be used at the global level.

We need to find a way to measure water quality that works in different contexts…to measure affordability of water and sanitation services – understanding the very complex considerations of what gets included in household income, how to calculate unpaid work, etc…How can we measure reliability and sustainability…and adapt them to local and national circumstances? (de Albuquerque 2011a).
As states enact policies to impact water and sanitation outcomes, and indicators are developed to assess those outcomes, it will be necessary to identify measures that are reflective of rights-based obligations, assessable through existing data, and employed in human rights reporting.

**Conclusion**

The 2010 UN General Assembly Resolution on a Human Right to Water and Sanitation presents a seminal international consensus for implementing a rights-based approach to water and sanitation policy, holding the promise of reducing up to four percent of the global disease burden and addressing the most prevalent harms to health among the world’s most vulnerable populations. While there remain obstacles to the implementation of this rights-based agenda, the UN Resolution has created opportunities to enhance global efforts to realize water and sanitation through water policy. In translating international human rights law into policy and programming, research must explore the causal links between human rights implementation and water and sanitation realization at each level in the policy development process, understanding the mechanisms by which the human right to water and sanitation is implemented through global water governance, national water policy, and water and sanitation outcomes.
References


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