

# Translating the Human Right to Water and Sanitation into Public Policy Reform

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**Abstract** The development of a human right to water and sanitation under international law has created an imperative to implement human rights in water and sanitation policy. Through forty-three interviews with informants in international institutions, national governments, and non-governmental organizations, this research examines interpretations of this new human right in global governance, national policy, and local practice. Exploring obstacles to the implementation of rights-based water and sanitation policy, the authors analyze the limitations of translating international human rights into local water and sanitation practice, concluding that system operators, utilities, and management boards remain largely unaffected by the changing public policy landscape for human rights realization. To understand the relevance of human rights standards to water and sanitation

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practitioners, this article frames a research agenda to ensure that human rights aspirations lead to public policy reforms and public health outcomes.

**Keywords** Human rights · Water and sanitation · International law · Public policy · Water governance · Public health

On July 28, 2010, the United Nations (UN) General Assembly declared water and sanitation to be a human right, creating an international political consensus to implement this right through water and sanitation policy. Given the pressing public health implications of water and sanitation—with 768 million people lacking access to improved drinking water and 2.5 billion people lacking access to improved sanitation services, underlying a wide array of communicable and non-communicable health threats—policymakers are looking to this human right as a means to frame government efforts to address these pervasive harms. This article evaluates pathways for implementing public policy reforms to realize the human right to water and sanitation.

This article reflects research examining the interpretations of the new human right to water and sanitation in global governance, national policy, and local practice. Through literature review, documentary policy analysis, and forty-three evaluate interviews with stakeholders in international institutions, national governments, and non-governmental organizations, the authors evaluate the understandings and actions of policymakers in implementing the human right to water and sanitation. Examining the implementation of human rights as a basis to address the public health implications of water and sanitation, this article outlines the role of human rights as a normative framework for public policy, assesses the evolution of human rights for water and sanitation under international law, and examines the political recognition of these rights through the 2010 UN General Assembly Resolution on the Human Right to Water and Sanitation (UN Resolution). With international organizations, national governments, and non-governmental organizations moving to secure implementation of the UN Resolution, this article explores opportunities to implement human rights as a means to influence public health outcomes through rights-based water and sanitation policy.

In spite of expanding opportunities for human rights implementation, obstacles remain in the realization of a human right to water and sanitation. With local system operators, utilities, and management boards largely unaffected by the changing global landscape for human rights realization, this article analyzes the limitations of translating international human rights into local water and sanitation practice and outlines research necessary to examine the causal pathways by which such international human rights impact local water and sanitation systems. Given that local systems can facilitate or impede the implementation of the human right to water and sanitation, the authors recommend that further research be developed to analyze gaps between national policy efforts and the local practice of system operators, utilities, and management boards.

## The Evolution of Human Rights for Water and Sanitation

Human rights offer a normative framework to advance global justice through public policy, outlining legal responsibilities to progressively realize water and sanitation for all. Instrumental to human dignity, rights seek to address basic needs and frame individual entitlements to uphold a universal moral vision (Donnelly 2003). Addressing this moral responsibility for improved water and sanitation systems (WHO 2003), international human rights law identifies individual rights-holders and their entitlements and corresponding duty-bearers and their obligations, empowering individuals to seek improved water and sanitation under law rather than serve as passive recipients of charitable donations (Steiner et al. 2008). Where all rights must be respected, protected, and fulfilled by states, governments ensure the progressive realization of water and sanitation by seeking to guarantee their availability, accessibility, acceptability, affordability, and quality (UN CESCR 2002). With governance increasingly driven by these human rights frameworks, a rights-based approach to water and sanitation offers international legal standards by which to assess obligations, shifting the consideration of rights from moral responsibility to legal accountability.

Through the international legal institutions developed under the UN's human rights system, human rights for water and sanitation have evolved from an implicit responsibility—under human rights to health, development, and an adequate standard of living—to an explicit obligation (Gupta et al. 2010). 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 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” (UN 1977). As global consensus developed around the scope of this right (beginning with attributes of the right concerning water access and water quality), the UN extended this recognition of a right to water by adopting a series of international human rights treaties, General Assembly declarations, and committee interpretations to recognize a wide range of international legal obligations supporting water and sanitation (Salman and McInerney-Lankford 2004).

Identifying water as an independent human right, the UN Committee on Economic, Social and Cultural Rights (authorized by the UN to interpret state obligations and review state reports on economic, social, and cultural rights) held in 2002 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” (UN CESCR 2002, ¶1). Where states had never explicitly codified a right to water in international law, the Committee sought to interpret international legal obligations to reflect modern scientific understanding of drinking water needs (Riedel 2006). The Committee devoted its fifteenth General Comment to defining the substantive content of a human right to water, justifying this right based upon existing human rights (to an adequate standard of living and to health) and concluding that “[t]he human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses” (UN CESCR 2002, ¶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 articulated state obligations to progressively realize water systems for personal consumption, hygiene, and sanitation:

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).

As human rights continued to expand in scope and influence, water and sanitation—both instrumental to the realization of a wide range of human rights—came to be seen as a singular, composite human right.

With the adoption of General Comment 15, the UN Human Rights Council directed the Office of the UN High Commissioner for Human Rights (Office of the High Commissioner) to report on human rights obligations related to equitable access to safe drinking water and sanitation (UN Human Rights Council 2006). Supporting states in expanding the normative content of the human right, the Office of the High Commissioner concluded in 2007 that “it is now time to consider access to safe drinking water and sanitation as a human right” (OHCHR 2007). Given this support for water and sanitation rights, the Human Rights Council created the position of Independent Expert on human rights obligations related to access to safe drinking water and sanitation (UN Human Rights Council 2008). In her first report as Independent Expert, Catarina de Albuquerque conceptualized human rights obligations related to sanitation and recommended that states declare water and sanitation to be interconnected but distinct human rights (de Albuquerque 2009).

Rather than considering water and sanitation to be distinct rights, the UN General Assembly’s July 2010 Resolution on the Human Right to Water and Sanitation recognized an international political consensus on a singular human right to water and sanitation. In recalling the evolution of international legal norms for water and sanitation, the General Assembly’s 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; [and]
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).

From this General Assembly recognition, the UN Human Rights Council resolved in September 2010 that the human right to water and sanitation is legally binding on state governments under established human rights, avoiding the General Assembly’s expansive declaration of international obligations of “assistance and cooperation” while reiterating the “primary responsibility” of national governments for safe drinking water and sanitation (UN Human Rights Council 2010a, b, c). With the UN renaming de Albuquerque’s mandate to reflect this new human right, she argued, as

the first UN Special Rapporteur on the human right to safe drinking water and sanitation, that “we have an even greater responsibility to concentrate all our efforts in the implementation and full realization of this essential right” (de Albuquerque 2010). Responding to these developments, the UN Committee on Economic, Social and Cultural Rights published a November 2010 Statement to reaffirm the existence of a distinct human right to sanitation, concerned that sanitation would be neglected under a composite right to water and sanitation (CESCR 2010). While states, scholars, and advocates have continued to debate whether water and sanitation exist as a singular right or as distinct rights (Langford et al. in press), with these pragmatic debates recognizing that not all sanitation relies on water systems, few continue to doubt the existence of human rights obligations for water and sanitation (de Albuquerque and Roaf 2012). As these interconnected comments, resolutions, and statements memorialize global political support for water and sanitation under human rights law, the UN has created an international legal imperative to implement human rights through water and sanitation policy (Meier et al. 2013).

### **Case Studies of Human Rights Implementation**

Integral to human rights implementation, an understanding of the interpretations of international institutions, national governments, and non-governmental organizations can provide insights into public policy reform efforts and their potential to influence water and sanitation outcomes. With policymakers, practitioners, and advocates translating international human rights into rights-based outcomes, these stakeholders implement rights through global governance, national policy, and local practice (Guendel 2012). Through this implementation process, international institutions, national governments, and non-governmental organizations give meaning to ‘paper commitments’—developing policies for the progressive realization of rights and facilitating justice through rights-based accountability (London 2008).

Drawing on structured interviews with stakeholders in the water and sanitation sector, members of the research team held preliminary interviews at the 2011 Water and Health Conference in the United States and the 2012 World Water Forum in France, asking informants from international institutions, national governments, and non-governmental organizations:

- Are you aware of the declaration of water and sanitation as a human right? Has this right changed the way you work or make decisions?
- What opportunities and obstacles exist at the international and national level for the implementation of this human right?
- In order to implement this human right, what information do you use or need?

These preliminary interviews at global conferences were complemented by a review of the human rights implementation literature and detailed studies of three nations—Brazil, Ecuador, and Malawi—with these 2012 case studies providing semi-structured interviews with a range of national policymakers and local water utility operators. To select varied rights-based responses, the authors identified the

three countries in this comparative study through cluster analysis, examining the decision-making processes by which policymakers, practitioners, and advocates interpret the human right to water and sanitation (Onda, et al. 2013). Focused on the implementation of human rights, the interviewers addressed the same issues of human rights implementation in each country, looking, among other things, to issues of policy reform, programmatic guidelines, service delivery, monitoring capabilities, and enforcement mechanisms (Gerring 2004). By comparing these case studies, the authors drew conclusions through an examination of varied responses to the same UN Resolution, with each case study supporting general themes for the implementation of human rights through public policy (George and Bennett 2005). Based upon transcribed answers from these forty-three interviews, the authors analyzed themes from the global conference interviews, human rights literature, and country case studies, examining pathways for implementing the human right to water and sanitation.

### **Implementation of the Human Right to Water and Sanitation**

As human rights for water and sanitation evolve through a reinforcing set of human rights standards, the political recognition of the right to water and sanitation by the UN General Assembly represents a milestone in the advancement of international law, reflecting an international consensus on the substantive development of an independent human right to water and sanitation. To understand the implementation of this right through global governance, national policy, and local practice, it is necessary to look at the interpretations and experiences of those in international institutions, national governments, and non-governmental organizations. International institutions—including UN agencies, development organizations, and interstate forums—are providing legitimacy for this right in global governance, invoking a rights-based approach to water and sanitation as a means to: frame the legal and policy environment, integrate core principles into policy and programming, and facilitate accountability for obligations (Hukka et al. 2010). Flowing from global governance, human rights are seen to ‘cascade’ down to the national level, by which these norms gain broader international acceptance through national policy (Sikkink 1998) and state duty-bearers internalize obligations to progressively realize rights through the water and sanitation sector (Felner 2009). With non-governmental organizations employing rights-based standards and monitoring in advocacy efforts, they have begun to consolidate their efforts under the UN Resolution as a means of holding duty-bearers responsible for realizing human rights to water and sanitation (de Albuquerque and Roaf 2012). These international institutions, national governments, and non-governmental organizations highlight the prospects of the human right to water and sanitation for governance, policies, and practice.

#### **International Institutions**

In adopting a human right to water and sanitation in global governance, international institutions now have an expanded normative framework by which

to structure rights-based water and sanitation policies and programs. Through an expanding human rights system, states have vested international institutions with the supranational political authority to make collective decisions through global governance, monitor state compliance with human rights norms, and direct global programs for international assistance and cooperation (Zurn and Stephen 2010). Harmonizing policies to structure the availability, accessibility, acceptability, affordability, and quality of sustainable sources of water and sanitation, these institutions of global water governance provide a forum by which global norms are set and consensus is built to coordinate the crowded landscape of institutions addressing water and sanitation throughout the world (UNDP 2006).

Where many of these institutions had not explicitly sought to implement human rights in their water and sanitation programming and partnerships (Russell 2010), the UN Resolution has provided a mandate for a new rights-based approach to governance. The UN 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” (UN 2010). Providing shared norms to structure global partnerships, with the UN General Assembly convening a 2011 High Level Plenary Meeting on the right to water and sanitation, this human right has become firmly rooted in international affairs—reinforced in international conferences on sustainable development (UN Conference on Sustainable Development (Rio + 20) 2012), employed to reform monitoring of water and sanitation data (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation 2011), incorporated into the post-2015 development agenda (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation 2013), operationalized in foreign assistance programs (Langford et al. in press), elaborated by the Special Rapporteur (de Albuquerque and Roaf 2012), and translated into global governance.

With the UN Resolution elevating human rights beyond a mere catchphrase in water and sanitation governance, states have laid the groundwork for international development professionals to, as noted by a senior UN official, “recognize the value added through the rights-based approach.” The UN Resolution has provided an expanded normative basis for discussions of equity (within and between countries) to be reflected in global governance through international development policy and official development assistance, with international partnerships (e.g., UN-Water, Sanitation and Water for All, and the Water Supply and Sanitation Collaborative Council) bringing together institutions to realize these shared goals (McIntyre 2012).

In these partnerships, the right to water and sanitation can structure coordination to address global inequalities, providing a basis in global governance to incorporate this human right in framing a post-2015 approach to global water and sanitation policy (de Albuquerque 2011a, b). As the UN Resolution came into force at the same time that international institutions began planning for the post-2015 agenda, with water and sanitation funding and benchmarks set to be reevaluated with the 2015 expiration of the Millennium Development Goals (MDGs), the UN Resolution has provided a means for the World Health Organization (WHO) and the UN

Children's Fund (UNICEF) to enlist the Special Rapporteur in examining how human rights could be reflected in measuring progress in water and sanitation (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation 2011). These international institutions seek to develop indicators that reflect the normative content of rights-based obligations and can facilitate accountability through treaty monitoring bodies, with human rights institutions seeking to harmonize data benchmarks across countries and create consistency in rights-based monitoring (Meier et al. in press). In building from these indicators, the human rights approach is extending the MDG benchmarks for water and sanitation while integrating rights-based concerns for equality and non-discrimination in global water policy and the post-2015 agenda (Baillat et al. 2013). Buttrressing current measurements under the WHO/UNICEF Joint Monitoring Programme (JMP), these new measurements will better reflect the rights-based experience of water and sanitation, serving as a political tool to impact the policies of national governments (Luh et al. 2013).

### National Governments

Translating international human rights norms into national laws, policies, and programs, national governments bear the principal responsibility for implementing the human right to water and sanitation (Staddon et al. 2012). In building from the UN General Assembly Resolution, the UN Human Rights Council “reaffirm[ed] that States have the primary responsibility to ensure the full realization of all human rights, and that the delegation of the delivery of safe drinking water and/or sanitation services to a third party does not exempt the State from its human rights obligations”. As these UN efforts provide international political recognition of the definitions, standards, and obligations of this evolving right, such normative frameworks can structure national legislation, reprioritize national budgets, and advance political advocacy to ensure human rights accountability for national water policy.

Where international law has no direct (or self-executing) effect on national governments, it becomes necessary to operationalize state human rights obligations through national policy. Because many national regulatory frameworks for water and sanitation remain dissociated from international human rights frameworks (Cullen 2011), implementation of the right is supported most directly through codification in national law—whether enshrined in a national constitution, drafted into implementing legislation, or extrapolated from other rights (WASH United et al. 2012). Addressing domestic implementation following the UN's 2010 resolution, UN Secretary-General Ban Ki-Moon recognized that several national governments had already included rights to water and sanitation in their constitutions and domestic legislation, urging those that had not yet done so to “follow suit without delay” (United Nations 2011). Beyond direct recognition of a right to water (and, to a lesser extent, sanitation) in national constitutions, several countries have implicitly recognized these rights through an interpretation of long established rights (such as the right to life in India or the right to development in Malawi), providing constitutional support for government commitments to water and sanitation (Jeffords 2013). Whether or not countries have constitutionally

codified human rights for water and sanitation, there is a continuing need to incorporate human rights in the legislative, policy, and regulatory frameworks that govern water and sanitation systems, establishing rights in the enabling statutory frameworks of national ministries (Fernández and Cisneros 2012).

In framing new policy initiatives and creating new regulatory entities, the UN Resolution seeks to prioritize water and sanitation in government programming. Describing the perils of insufficient and poorly targeted financing, the Special Rapporteur has lamented that “frequently, beautiful plans are written but the money is not allocated for their implementation” (de Albuquerque 2011a). With water and sanitation widely accepted as both an economic good and a social good, national policy becomes necessary for sufficient investment in (and maintenance of) water and sewerage infrastructures (Winpenny 2003). Providing a basis for sustainable government investments, national commitments under the right to water and sanitation have supported the inclusion of finance ministers in discussions on water and sanitation policy, with several nations mainstreaming the right to water and sanitation in their national development plans and international assistance programs (de Albuquerque and Roaf 2012). Even where states are not explicitly framing their efforts based upon human rights, these rights are increasingly implicit in national reforms, with national stakeholder interviews highlighting policies for water and sanitation financing and enabling legislation for water ministries that reflect human rights principles without using human rights terminology. With the progressive realization of human rights prioritizing the most marginalized, the human right to water and sanitation is seen to influence government actors to use their ‘political will’ to assure the maximum available resources for those in greatest need, and national policymakers are coming to apply human rights as a means to allocate scarce resources and thereby narrow inequalities in access through water and sanitation systems (Cullet 2013).

Realizing water and sanitation under a human rights framework requires that governments address equality and non-discrimination in water access while expanding consideration of the attributes of the right, focusing on issues of availability, accessibility, acceptability, affordability, and quality (UN CESC 2002). Not all countries have accepted the human right to water and sanitation as a basis for legal accountability; however, few countries now deny the importance of human rights to the future of national water and sanitation policy (Winkler 2012). With the international consensus of the UN Resolution, states are beginning to share good practices that reflect the attributes of human rights (de Albuquerque and Roaf 2012) and develop policy roadmaps for implementing the right to water and sanitation (WASH United et al. 2012). As seen in examples of national human rights implementation, the UN Resolution is driving government commitment, bringing visibility to national reforms to address water and sanitation, and supporting those efforts through non-governmental organizations.

### Non-governmental Organizations

With the UN Resolution galvanizing civil society efforts, non-governmental organizations (NGOs) are increasingly seen as integral to the implementation

process—both in programs to realize rights and in advocacy for policy reform. Efforts are underway by various organizations—whether public, private, or civil society—to legitimize and motivate their activities in accordance with the human right to water and sanitation, looking to the international community’s support in their domestic efforts (Russell 2010). Through efforts to challenge national policies and practices, holding state duty-bearers to account for failures to realize human rights obligations, these organizations are shifting their advocacy to facilitate the empowerment of marginalized groups, address economic and social disparities, and ensure participation in decision-making (Kindornay et al. 2012). With funding agencies now expecting reference to human rights in grant proposals, many of these organizations are moving beyond their rhetorical invocation of human rights to contemplate how the implementation of human rights standards can influence their service delivery campaigns to improve access to water and sanitation (de Albuquerque and Roaf 2012). Partnering with established human rights institutions, these water and sanitation NGOs support states in mainstreaming human rights in global water governance and implementing global efforts through national policy and international assistance.

Facilitating public policy reforms, the human rights norms endorsed by the UN Resolution are being employed informally—in principle, if not in law—to advance national discourses through political advocacy, wherein advocates undertake ‘naming and shaming’ activities as a means to catalyze government action (Smets 2006). As noted by a prominent NGO leader, “I think it [the UN Resolution] has changed the way we talk about it [water and sanitation] and get people mobilized around the way we do work.” To increase and prioritize resources in the water and sanitation sectors, NGOs are invoking the UN Resolution as a basis for demands on national financing and as a rallying cry for policy reform. As seen where the Centre for Legal and Social Studies (CELS) and the Centre on Housing Rights and Evictions (COHRE) have designed training workshops with local leaders to build human rights capacity, subsequent local efforts have sought to raise human rights claims to provide leverage in advocacy, giving communities a “bargaining tool” in negotiations with government actors, donor agencies, and international institutions (COHRE et al. 2007). Expanding the range of advocates in policy debates, these NGOs are providing human rights training for marginalized populations to assist individuals to recognize their rights and make demands on governments to secure access to water and sanitation (Barlow 2009).

To support these individuals through judicial enforcement, litigation has the potential to advance human rights accountability, pressing governments to continuously reexamine efforts to implement rights for water and sanitation (McGraw 2011). Through national courts or before human rights treaty bodies, individual complaints allow NGOs and civil society actors to contest government policies and practices for the progressive realization of water and sanitation, thereby clarifying national implementation, enforcing government obligations, and providing remedies for violations (Roaf et al. 2005). An expanding array of contemporary examples highlight the importance of litigation to the implementation of human rights for water and sanitation: the Israeli Supreme Court has ruled that the right to water requires “reasonable accessibility to minimal quality of water” for residents

of unrecognized Bedouin villages (Murthy et al. 2012); the South African Supreme Court has found that the government must adhere to rights in sanitation and provide toilets with adequate privacy and safety to residents of the Western Cape (Langford et al. in press); and the African Commission on Human and Peoples' Rights has held that Kenya violated water obligations by allowing the pollution of water sources that provide for the Endorois indigenous peoples (Cavallo 2012). With this public interest litigation supporting individuals and communities whose water and sanitation rights have been violated, NGOs are employing litigation to enforce government obligations and create precedents for implementing rights in the water and sanitation sectors (WaterLex 2012).

Coordinating this national advocacy across countries and organizations, NGOs are now working closely with the Special Rapporteur on the human right to safe drinking water and sanitation, developing guides to advance civil society lobbying, advocacy, and monitoring efforts to support future rights-based policy reforms (Water Aid 2009). With these NGOs proving instrumental to monitoring the progressive realization of the right to water and sanitation—building from their longstanding support for rights-based approaches to water and sanitation policy and leading to new policy, program, and finance commitments—these non-governmental projects contribute to a wide range of global, national, and local efforts to promote rights-based accountability for implementation of the human right to water and sanitation.

### **Limitations in Translating the Human Right to Water and Sanitation into Local Practice**

The development of a right to water and sanitation under international law has charted a path by which this right can be implemented in public policy and thereby come to influence individual lives. Through partnerships across international institutions, national governments, and NGOs, a new rights-based governance for water and sanitation is rising out of the normative framework of the UN Resolution. These global governance and national policy efforts have created an ethical basis by which implementation of the right to water and sanitation can frame water and sanitation systems to promote the public's health. Yet interviews with policymakers frequently raised a lack of consideration of the human right to water and sanitation at the local level, and local system operators, utilities, and management boards frequently raised a lack of relevance of human rights to water and sanitation practice. Based upon the limitations highlighted by this thematic analysis, it becomes clear that additional steps must be taken to secure implementation of the human right to water and sanitation through local practice, ensuring that global norms address local concerns.

With many nations pursuing decentralization of their national water and sanitation systems, local system operators, utilities, and management boards are facing greater demands from users and increased responsibility for ensuring access to water and sanitation (Bakker 2007). This increased responsibility is leading to conflicts between practitioners and users (UNDP 2006), and it is unclear how

national governments—already subsidizing the ‘up front’ financing of water (capital investments for developing and expanding water systems) and sanitation (transportation systems for collecting, treating, and disposing of wastes)—should assume responsibility over the operations of these local actors (Briscoe 2011). System operators have looked for implementation guidance from the human rights regime; however, governments have not defined national standards for local practice or developed locally relevant targets to translate human rights norms into data monitoring mechanisms. For example, while human rights do not prohibit user fees and water pricing, there is not sufficient clarity on how governments can assure affordability in either public or private systems—structuring utility costs in different settings (through household financing, local taxes, and international assistance) while facilitating subsidies for impoverished users, profitability in service delivery, and sustainability throughout water infrastructures.

Among the interviews in country case studies, local operators and members of water boards almost universally believed that human rights had no concrete effect on the management of water and sanitation systems. Human rights efforts create “political will from the top”, a civil society representative noted, but do not create “much traction” at the local level. Without a basis for rights-based water and sanitation management, a non-governmental advocate lamented that “it [the UN Resolution] sounds high level and nice, but you are not sure what it does in practice.” As governments often lack national plans or budget lines for water and sanitation, with accountability often divided across a wide range of national ministries, a government stakeholder concluded that “[the right to water and sanitation] is in our constitution, but the roadmap and how to make reparations is difficult [to determine].” In considering the role of privatized water and sanitation systems, many local water operators did not fully understand the role of the private sector in the realization of rights, believing either that the right to water and sanitation excluded the private sector or that the right required governments to provide services free of charge. Where some advocates have erroneously conflated human rights with free access, there has been little room for dialogue with local utilities. Emblematic of this disconnect between policy and practice, a local water utility operator argued, “we hear a lot about rights, but not a lot about the responsibility about who is going to pay for that access.”

In order for the implementation of rights-based policies to realize human rights outcomes, such policies must be translated into local terms, situated within local contexts, and integrated throughout local practice (Haglund and Aggarwal 2011). Only through capacity building for rights realization can states implement the human right to water and sanitation, providing policy information to system operators, utilities, and management boards (in local languages and with context-specific examples) and supporting consultations with water and sanitation users (bringing together all stakeholders and facilitating community participation). To situate these rights in the local context, local system operators, utilities, and management boards can work with the participation of affected communities to clarify rights in water and sanitation systems, provide institutional accountability at the local level, and assess the progressive realization of human rights (Singh 2013). In integrating these frameworks through local practice, system operators, utilities,

and management boards must shift beyond an examination limited to existing users, with government incentives to expand the reach of water and sanitation systems to marginalized communities that are not served by the local utility (including those living on illegally occupied land in unplanned areas) but lack the political agency to alleviate their marginalization. Reconceptualizing the connections between national policy and local utilities will necessitate local actors moving away from a focus on averages and moving toward a human rights framework that focuses on expanding water and sanitation systems to marginalized populations, recognizing the specific effect of water and sanitation efforts on those living in poverty (Baillat et al. 2013). Such government support for local practices must assure mechanisms for the affordable supply of water and sanitation to all individuals, especially for the most vulnerable (Prasad 2007), defining local affordability standards and implementing rights to frame the regulation, monitoring, and oversight of the local utilities that ultimately govern water and sanitation systems (Murthy 2013).

Where the UN Resolution looks primarily to the obligations of national duty-bearers, these obligations must come to influence the practices of local system operators, utilities, and management boards if they are to influence public health outcomes. As responsibility for water and sanitation provision becomes increasingly divided among various government ministries, private corporations, and NGOs, it is vital that no actor neglect responsibility for rights realization, with rights-based governance bringing all actors together in coordinated and cooperative efforts to improve local practice. Overcoming these local obstacles to water and sanitation, global, national, and local actors can seek to implement the rights-based consensus of the UN Resolution, with researchers examining the causal pathways by which international human rights influence local water and sanitation systems for improvements in the public's health.

## **Conclusion**

The 2010 UN General Assembly Resolution on a Human Right to Water and Sanitation presents a seminal international political consensus for implementing rights-based water and sanitation policy, addressing some of the most prevalent harms to health among the world's most vulnerable populations. This rights-based framework is beginning to influence international institutions, national governments, and NGOs. To ensure the realization of the human right to water and sanitation, however, it will be necessary to translate these implementation efforts into local practice.

In implementing international human rights law through public policy reform, research is needed to conceptualize the relationship between human rights implementation and water and sanitation realization, clarifying the causal mechanisms at each level of governance. Where researchers are seeking to understand the incorporation of international human rights in national water and sanitation policy, it is also necessary to research the actions of system operators, utilities, and management boards to implement human rights standards at the local level and progressively realize rights to water and sanitation.

While there is a sweeping imperative for implementation of human rights in water and sanitation policy, this research finds that the need for human rights implementation efforts is most pronounced at the local level—among the system operators, utilities, and management boards who bear the most direct responsibility for realizing water and sanitation and yet have the least connection to international debates. As human rights cascade from the global to local level, it will be important that actors at all governance levels build the capacity necessary to implement human rights in water and sanitation systems.

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