

Everyday Experiences of Water Insecurity: Insights from Underserved Areas of Accra, Ghana

Leila M. Harris

Abstract

Water insecurity is a global phenomenon that affects billions of people. In Ghana, water insecurity is a significant problem, particularly in underserved areas. This study explores the everyday experiences of water insecurity in these areas, focusing on the challenges of accessing clean, safe, and affordable water. The study is based on a series of focus group discussions and interviews with residents of underserved areas in Accra, Ghana. The findings reveal that water insecurity is a complex issue that is influenced by a range of factors, including infrastructure, governance, and socio-economic conditions. Residents experience a variety of challenges, such as long queues, high costs, and poor water quality. The study highlights the need for improved water infrastructure and governance to address these challenges and ensure that all residents have access to clean, safe, and affordable water.

That water security is vital for public health is undeniable. In fact, water insecurity and associated diarrheal disease remain the biggest contributors to death and ill-health across the globe, are critical to a range of public health issues such as the care of those sick with HIV/AIDS or other illness, and have been suggested to be key to the spread or intensity of outcomes associated with COVID-19 during the ongoing pandemic.⁶ For Ghana, estimates suggest that up to 70 percent of the disease burden is linked to lack of access to safe water.⁷ Even when available, people might nevertheless turn to unsafe sources if water is unaffordable, as occurred during the high-profile cholera outbreak in KwaZulu Natal, South Africa, in 2000.⁸ Yet apart from the clear importance of water insecurity for bodily and public health, or linkages to other development goals, how else might water insecurity affect the lives and experiences of the nearly one billion people who live with this reality?

This essay focuses on this question with specific reference to the daily lived experiences of those navigating water insecurity in and around urban and peri-urban areas of Accra, Ghana. In so doing, the essay makes several contributions. First, the discussion allows us to consider the importance of water insecurity “beyond

To begin, it is important to consider some of the ways that water insecurity is frequently assessed in policy contexts concerning efforts to achieve the Human Right to Water (HRW), the earlier MDGs, and the current SDGs (especially SDG 6). The standardized metrics that inform these efforts generally track the presence or absence of pipes, physical distance to access points, or basic quality parameters.¹³ While important, this approach is limited. First, such metrics—such as whether an “improved” source exists or whether residents have access to a minimum of 40 or 50 liters per day—do not always give useful information as to whether the water is safe, reliable, or adequate for diverse users and their needs in varied cultural contexts.¹⁴ Reliance on these metrics can in turn reinforce a focus on infrastructural and technocentric pathways to redress water insecurity: that is, build more connections or work to extend access in middle-income areas where residents might be more likely to pay for services. This is at times referred to as incentivizing the “low-hanging fruit”: extending access for middle- and high-income areas and charting progress toward these targets, rather than extending access to those most in need, where building the infrastructure, or ensuring payment of bills, may be more intractable. Related to this, others have argued for the need to move away from country-level or

My conceptual framework understands water insecurity as much more than something that is important for our bodies, but that has broader relevance for our lives, including senses of self and community. As such, there is an imperative to attend to the ways that water insecurity, or the inequities associated with uneven implementation of the human right to water, is felt, embodied, lived, and invested with meaning. This approach is informed by critical discussions of the human right to water, analytical and policy debates regarding inequity and water governance, as well as recent discussions regarding everyday embodied experiences of water insecurity for households and individuals.¹⁷ Approaching the HRW and water insecurity in this way also helps to foreground key issues regarding gender, caste, class, or other axes of difference and linked theories of equity and water justice.¹⁸ As such, it is a critical component of efforts to repoliticize debates about water (in)security, including the context-specific implementation of the HRW and associated efforts to extend water access or engage communities in water governance.¹⁹ Considering household water insecurity experiences, the approach seeks to address how lack of water access, quality, and reliability affects considerations important for individual and communal well-being, including senses of belonging or emotional welfare (most often experienced as the opposite: that is, feelings of marginality, exclusion, stress, or worry).²⁰ I provide a few starting points to consider also how lived experiences of water insecurity and variable access to basic services might impinge on other dimensions of sociopolitical lives. For instance, recent work highlights how water insecurity or relative inequities encroach on citizen subjectivities, community conflict, or shifting state-society dynamics.²¹

In the past decades, scholars have pushed for a more expansive theorization of what might be included in the idea of the “human right to water,” moving beyond notions of basic access to water to include productive uses (such as for agriculture or livelihoods), involvement in decision-making over water-related concerns for affected communities, or broader recognition of the cultural, spiritual, and historical roles water might play for different communities (that is, particularly for Indigenous communities).²² As several contributions to this issue of *JGIM* highlight, recent work on water security has similarly emphasized the importance of relational conceptualization, moving beyond access and the physical resource to include broadened relational understandings of the capabilities and hydrosocial relations that give rise to water-related well-being, development, and justice.²³

With such reconceptualization, water access is not necessarily the focus in and of itself, but rather attention should be given to broader and sustained hydrosocial processes that can enable water flows, quality, uses, and distribution in order to support well-being in line with notions of human capability, development, and flourishing.²⁴ As such, we can consider complex social and institutional or normative arrangements important for conditioning whether and how households

and individuals are able to secure access to safe and affordable water, particularly in times of scarcity.²⁵ These might include practices and norms related to water sharing, property rights, or familial and social networks that contribute to specific forms of water-related resilience and vulnerability (in line with social capital and social infrastructure discussions).²⁶ These issues are often as important, if not more so, than seasonality, changing precipitation patterns, or other concerns related to the physical availability of water.²⁷ And yet the threat of increasing variability and hydrological or meteorological scarcity due to climate change, among other factors, makes an understanding of these diverse aspects of water insecurity and resilience all the more apposite.²⁸ With the anticipated intensification and unpredictability of water stress across many regions of sub-Saharan Africa, and indeed across the globe, these social and cultural coping mechanisms, or attributes associated with resilience, will be key to mitigating the impact of these stressors and related catastrophic events (such as floods, drought, or storms).²⁹ Given that this reconceptualization focuses much more on the social and cultural context, rather than on water in a material or abstract sense, the reorientation toward a relational understanding of water security is also amenable to context-specific understandings of what might constitute justice, or specific ways that water might be meaningful for flourishing in a particular community.³⁰

The following case study draws on a decade of multi-sited, multi-method (qualitative, quantitative, and community-based), and multi-investigator work on water access, narratives, and citizenship with a focus on the most underserved communities of Accra, Ghana. The data highlighted draw primarily on fieldwork conducted by the author and several scholars associated with the EDGES (Environment and Development: Gender, Equity, Sustainability) collaborative at the University of British Columbia, working with local research assistants with support from colleagues at the University of Ghana-Legon (similar research was also undertaken in Cape Town, South Africa).³¹ All told, we conducted hundreds of interviews with residents, a dozen focus groups, feedback sessions with members of Local Water Boards, and two surveys (one involving 243 respondents in Ashaiman and Teshie conducted in 2012, and another involving 200 households in Ga Mashie and Madina, implemented in 2014), and produced a participatory video project on water and sanitation involving activists, local councilors, and residents in the coastal community of Teshie (see Figure 1).³²

By way of background, it is important to note that the water system of urban Accra was privatized with a five-year contract granted to Aqua Vitens Rand Limited (AVRL) for the operation and management of Accra's water system from 2006–2011, a requirement of World Bank loan conditionalities. While the privatization of the system was stalled due to some initial corruption and considerable local resistance, it eventually went forward with the

agreement that the AVRL consortium would operate on a not-for-profit basis.³³ Nonetheless, the transfer raised significant concerns related to democracy, sovereignty, and transparency. In 2011, just days before our first fieldwork season in Accra, the Ghanaian government decided not to renew AVRL's contract, citing, among other reasons, failure to improve the situation of nonrevenue water, as well as criticisms related to not involving local NGOs and other stakeholders in decision-making (thus highlighting concerns of procedural justice and participatory governance).³⁴

While newspaper headlines from the past several years have highlighted impending water crises in high-profile cases, such as that associated with "Day Zero"

this would mean that “ . . . living in Ghana have adequate, safe, affordable and reliable access to a basic level of water service, practice safe sanitation and hygiene and that water resources are sustainably managed.”³⁶

At present, however, different parts of the country (notably across rural-urban gradients), or various sections of the greater Accra region, remain uneven in terms of water and sanitation services, quality of water, or affordability. This variability is linked to income, location or geography, new migrant status, or home ownership, among other axes of inequality.³⁷ In part, variegated water access can be directly traced to legacies of infrastructure and development during the colonial period, histories that served to condition uneven infrastructure and water flows. It is clear that these patterns have persisted since independence, fueled in part by ongoing political instability. Indeed, the country has been unable to keep pace with migration to the city from rural areas or from nearby countries, or with its growing debt, among other challenges.³⁸ Policy scholar Kweku Ainuson indicates that two-thirds of low-income residents of Accra do not have access to piped water in their homes, compared to 12 percent among wealthier households.³⁹ The analysis by researchers Ayisha Mahama and colleagues in 2014 provided evidence that in Accra, the significant determinant of homeowners’ access to improved drinking water was income, while education, income, and location of the household were significant for access to water for other domestic uses. Compared with recent migrants to the city, Indigenous people and people from mixed areas were less likely to have access to improved water for other domestic purposes (see our comparison between new migrant communities of Madina and Indigenous areas of Ga Mashie below).

Based on our survey conducted in 2012 in the Indigenous community of Teshie and the mixed new migrant community of Ashaiman (both underserved urban and peri-urban areas near Accra, see Figure 1), affordability, access, and quality remain key concerns.⁴⁰ Sixty-eight percent of our respondents across both settlements, for instance, suggested that they do not consider water to be “affordable.” Linked with this, nearly half of respondents in Ashaiman and Teshie relied on water vendors or other intermediaries associated with increasing sachet water consumption.⁴¹ Some research has estimated that poor or low-income households in Accra spend between 58– 91 percent of their after-tax household income on water, often at least ten times more than their counterparts with access to piped systems as part of the municipal network.⁴² Suggesting that this is a long-term persistent challenge, earlier work from the 1990s by Rudolf Amenga-Etego and Sara Grusky estimated that a significant proportion of residents in Accra lived on less than \$1 per day, and may have paid as much as one-quarter of their income (or more) to meet daily water needs.⁴³

Our follow-up qualitative research (in Teshie, Ashaiman, Madina, and Ga Mashie) also revealed the extent to which access to piped water networks does

not guarantee water security, whether due to irregular service (that is, linked to a

been relied on by the city's water purveyors.⁵² As of January 2018, however, the new desalinization plant was taken off-line due to disputes over the contract with the private companies managing the facility.⁵³ Together with the failures associated with the previous AVRIL contract, this example raises concerns for water security given the reliance on the Public Private Partnerships (PPPs) that were engaged to build and operate the plant, considering the at times inherent incompatibilities between private interests and achievement of the HRW.⁵⁴ Recent evidence suggests that cut-offs and rationing nonetheless continue, which has been a particular concern during the COVID-19 pandemic.⁵⁵

Apart from quality, affordability, reliance on vendors, and relationship to rationing, our collective work also sought to highlight meanings of water insecurity, how it is narrated in people's daily lives, how it reveals important emotional and affective realities, or what these daily negotiations mean for senses of citizenship, for community and sociopolitical dynamics, or for future resilience and vulnerability.⁵⁶ On meanings, being able to enjoy enhanced water security was associated by some broader notions of development or freedom. In Ashaiman, a community with many recent migrants from rural areas, as well as from Nigeria and other surrounding countries, the settlement is one of the fastest-growing areas of Accra. Located on the outskirts of the city and generally not connected to the municipal network, several residents noted that they would be "free" and "free from suffering" if they could have better access to water. One middle-aged woman in a newer area of the community noted a preference for enhanced government service provision "so we will be free."⁵⁷ Others also connected the issue to global gradients across the North and South in terms of who is able to enjoy such access, or not. As one resident commented in response to a question from the North American researcher about water in2 (esidents noted thak:we w223sould b]TJ 0.

ed water pricing).⁶⁰ For instance, surrendering to the billing technology of water meters requires a great deal of trust because of the inability of residents to monitor or negotiate the usage and associated bills. The bill is issued, and one simply must pay. As a seventy-two-year-old man remarked: “If you have a meter, you cannot ‘talk anything about that’ ... as in, if there is measurement, the assessment is done, your bill is given to you and you pay.”⁶¹ This was a significant concern for many

(and associated entitlements) fragile, rather than allowing those living in these neighborhoods to be more secure (as we might have otherwise anticipated given the presence of pipes and of demographically homogeneous populations with many extended kin networks). Drawing on an entitlements approach, the analysis demonstrates that even with pipes coming directly to their homes, households in Ga Mashie had higher senses of worry, stress, and community conflict in comparison with counterparts living in other areas of the city without piped connections,

Accra, as elsewhere, participation is promoted as a means to improve water security, water governance, and resilience in the face of climate change. For instance, the World Bank has highlighted “participation and engagement” as the key theme of an urban water project in Ghana, while the Global Water Partnership has emphasized the need to promote Water User Associations across the country.

exist, even as we were aware of at least one LWB in Teshie at the time. However, 57 percent of respondents suggested that they “wish they could participate more in community meetings,” with 67 percent agreeing that they feel that they have something to offer. It is possible that there is recognition among residents regarding the importance of participation, even as there might be constraints or little in the way of opportunities for such engagement.

Even with some progress on bulk water supply, or extending access to some impoverished neighborhoods, there are, nonetheless, profound and lasting concerns related to daily experiences of water insecurity, how water shortages differentially affect households and communities, and how those with limited financial or social resources might be less able to navigate these circumstances. And while there might be interest in enhanced engagement in governance, there appear to be significant obstacles to doing so.

What do insights related to the everyday lived realities of water insecurity suggest for broad debates regarding the human right to water and its uneven implementation, among other efforts to overcome water insecurity? How might this aid ongoing efforts to extend water access to underserved communities, or to engage these communities more meaningfully in water governance?

To respond to these questions, we can consider the practical ways that difficulties addressing monthly bill payments in large compound households represent a barrier for residents, leading them to pay more for water on a per-unit basis, and potentially worsening their vulnerability in moments of water-related stress. Recall that residents with piped infrastructure (for example, in Ga Mashie) were nonetheless vulnerable to affordability and quality concerns, and highlighted significant conflict over water and other issues that affected their daily lives. Evidence from Ga Mashie and Madina also showed that water-sharing is practiced, a phenomenon that has recently been documented as significant globally, with the potential to help communities navigate water stress, disaster events, and similar conditions.⁷⁶ From Ashaiman, we learned that residents prefer some aspects of the informal water landscape and have existing community governance practices that should likely not be supplanted with formal water governance institutions imposed by external actors. Without familiarity with these day-to-day realities, we might miss opportunities to strengthen some beneficial social practices, or in turn might aggravate aspects of the contextual realities that contribute to lack of access to safe and affordable water for all. Attention to lived realities and how people navigate these complexities supports the argument that solutions for communities must transcend technical factors to include a range of social, institutional, natural, and infrastructural considerations.⁷⁷

The discussion of everyday realities of water insecurity in urban Accra also lends force to the argument that we need to highlight equity more fully in discussions regarding water infrastructure, or goals such as the Human Right to Water. How water insecurity is experienced will necessarily differ depending on social context, including caste, class, gender, and a host of other considerations. Aspects of water insecurity experienced in Accra help to attend to the socially and contextually specific responses to ongoing water challenges, and give weight to the claim made by ecologist Flora Lu and colleagues that “despite the gravity of the water crisis, our theoretical and analytical models do not adequately explain inequitable water access and distribution, nor how equity might be achieved.”⁷⁸ While affordability is especially of concern for lower-income households, we need to continue to unpack equity dimensions related to ethnicity and gender that explain patterns of water insecurity— or its uneven outcomes. Accomplishing this requires careful and sustained engagement with debates of justice, fairness, and ethics.⁷⁹

Attending more adequately to the social, contextual, and everyday dimensions of water insecurity shows that relationships, norms, and other practices are of critical importance. As the work in Ashaiman and Ga Mashie illustrate, it is necessary to consider the advantages and disadvantages of various forms of water provision, given their complex articulation with other social and institutional factors. Notably, in Ashaiman at present, access to the piped network is not viewed as being singularly advantageous, since there are clear perceived disadvantages (such as avoiding large bills or concerns regarding the unresponsiveness of GWCL to community needs). In Ga Mashie, the presence of pipes is insufficient to ensure water security; complex socioconflictual dynamics and hydrosocial vulnerabilities remain. Indeed, these concerns are particularly acute in moments of water stress. All told, it is important to provide water and associated infrastructure in ways that remain attentive to these realities.

As Peloso and colleagues note:

We must at once keep a focus on longer term goals of universal, safe and affordable water access, while acknowledging that a myopic and singular focus on connectivity to a centralized utility service oversimplifies the complex experience of water insecurity for millions of residents across the globe. Achieving the goal of universal water access necessitates that we fundamentally rethink our understanding of water as a material. . . . Doing so reorients our focus from water pipes and infrastructure to the social relationships that are necessarily entangled with water access and security.⁸⁰

If we add to this work the challenge of more effectively engaging marginalized communities in water governance, it is clear there is much more to do.

Leila M. Harris

EDGES

UBC

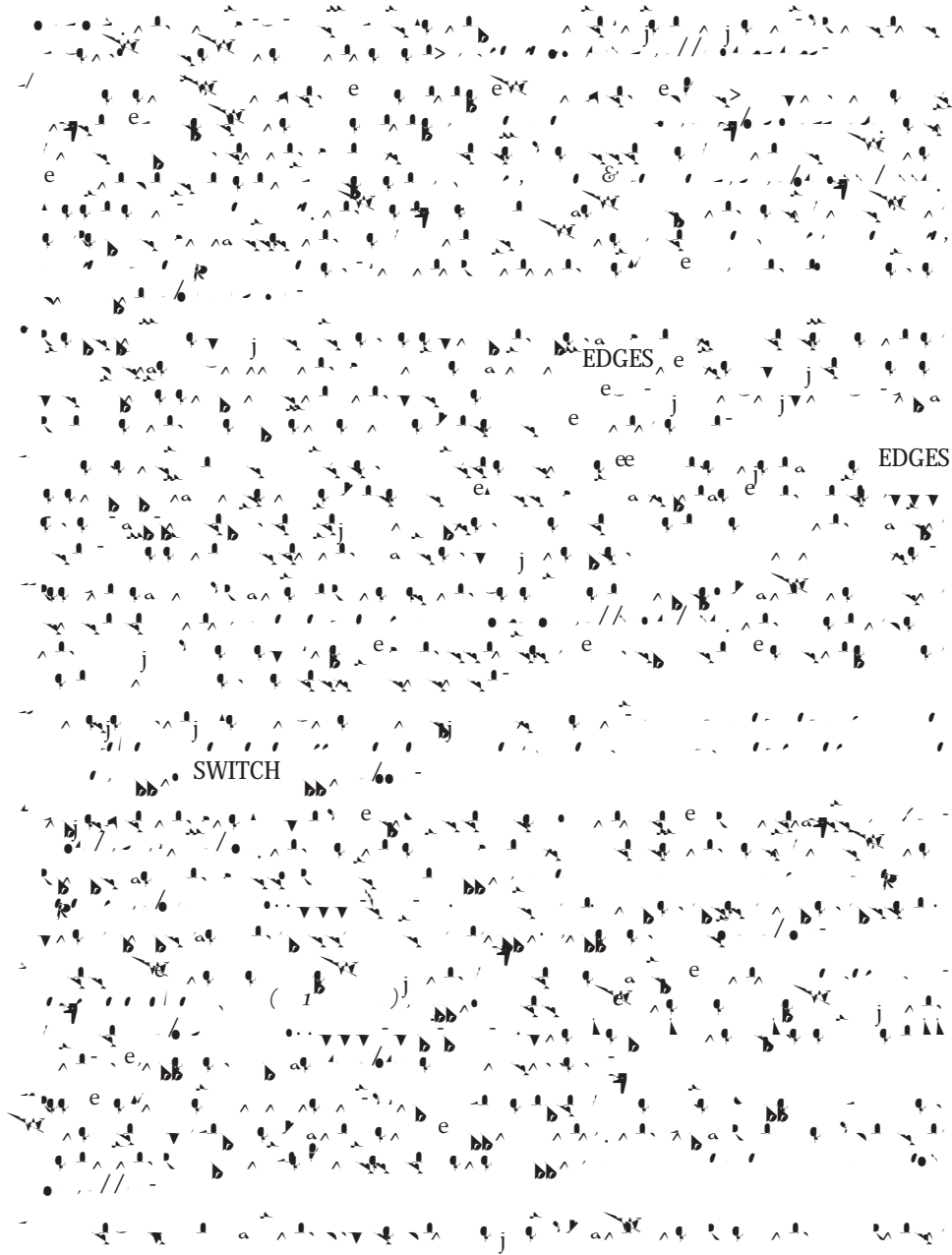
MDG

HRW

COVID

Everyday Experiences of Water Insecurity





Everyday Experiences of Water Insecurity

