

COMMENTARIES

Emotionality in domestic water use in the global south: Who cares who is deprived of?

Najibullah Loodin

Civil Engineering School, Herat University, Herat 3001, Afghanistan; loodin2234@gmail.com

ABSTRACT

While access to safe and reliable water for domestic purposes is the basic need of human beings, inequality in access to reliable water is a major challenge in Global South (GS). Drawing on sociology of emotion, this article aims to explore the struggles of low-income communities in water acquisition in Global South, focusing on a case study of New Delhi. Although a large body of literature has analyzed the emotional distress of local communities in access to drinking water in GS, the discourse of ‘why and who’ triggers such emotional distress in contemporary cities has largely remained unappreciated. It was argued that influential elites and high-income residents, who wield significant influence in decision-making processes concerning water supply system in major cities including New Delhi, contribute to the marginalization and exclusion of underprivileged communities, thereby fueling the emotional distress of the disenfranchised communities.

Keywords: sociology of emotion; drinking water; water access; global south; underserved communities

1. Introduction

Given the adverse effects of human-induced climate changes alongside the over-abstraction of the flow of water—both surface and groundwater resources—^[1-3], water insecurity is on the rise, especially in the Global South (Global South refers to a wide range of locations and countries in Asia, Africa, Oceania, and Latin America). This term along with “Third World” refers to countries with low-income and socio-economic, political, and cultural marginalization^[4]. While Sustainable Development Goal (SDG) 6, especially indicators 6.1.1 and 6.2.1 call for equitable and safe drinking water and hygiene across the globe, by 2030, approximately 1.6 billion people will not have access to safe and reliable water for drinking purpose, particularly in the Global South where local communities, especially the underserved communities whose basic rights to water are infringed by the government^[5]. Achore and Bisung^[6] believe that lack of access to safe and reliable flow of water for domestic purposes not only creates profound health and hygiene crisis in the Global South, but also amplifies the emotional sufferings of unserved communities. Some of these sufferings are anger, embarrassment, anxiety, worry, unhappiness, sadness, hate, etc.^[7,8]

The unequal and unfair access to water, sanitation and hygiene has triggered psycho-emotional distress, especially in underserved communities; in particular the women who are in charge of cooking and household chores in the Global South^[9]. While Sultana^[10,11] has assessed the sufferings and emotional ties of women in access to arsenic-free water in rural Bangladesh, Egge and Ajibade^[12] have documented the sufferings and emotional distress of women in “not well-performing their daily chores”, e.g., washing dishes, cleaning the

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house, and laundry due to insufficient water in East Porterville, California. Additionally, Kangmennaang et al.^[13] highlighted the emotional sufferings of women who fail to get access to reliable and safe water for cooking in urban slum in Accra, Ghana. Similarly, Workman and Ureksoy^[14] explored the psycho-emotional impacts of water inaccessibility on men and women in three low-income districts in Lesotho, Africa. Also, using a qualitative research approach, Wutich and Ragsdale^[15] uncovered the emotional distresses of local communities in Villa Israel, a slum settlement in Cochabamba, Bolivia. They found out that there are three dimensions of water insecurity that have radically affected the emotional distress or sufferings of the Villa Israel community in Bolivia, namely insufficient water resources, lack of proper access to water distribution system and the reliance upon seasonal water availability. Additionally, they also noticed that among the Villa Israel community, women, who are mainly in charge of household chores, expressed their negative feelings, e.g., anger, sadness, and fear, due to lack of time and money to secure sufficient water for their domestic purposes. Moreover, the third dimension of water insecurity which was explored by Wutich and Ragsdale^[15] has been well-documented in water and drought literature. Zamani et al.^[16], for instance, argue that seasonal variability and emotional distress are indisputably interwoven into the farming lands and agricultural communities where food insecurity—driven by water insecurity—serves as emotional stressor. Added to this, the recent special themed section in *Water Alternative Journal*, “*Affective Hydro-politics*” edited by Sehring and Wolf^[17] unveils the role of emotions in decision making processes among the riparian nations of a shared watercourse. For instance, Seide and Fantini^[18] challenged the current conventional approach—rationality—in decision making process over the Nile River Basin. They documented how farming communities especially in the downstream of the Nile, in Egypt, fear of water insecurity due to the filling and operation of the Grand Ethiopian Renaissance Dam (GERD) in the upstream and how Ethiopians, the upstream users, felt deprived, unfair, and unjust due to lack of access to water prior to the construction of GERD (p. 6). They asserted that, contrary to the conventional thinking, emotional attachment to the flow of a shared watercourse does challenge the negation process between the riparian nations. In line with Seide and Fantini^[18] findings, Ramawadh et al.^[19] also offer nuances to the conventional thinking, rationality. They believe that emotions and spirituality also influence the decision-making process in hydro-diplomacy. Thus, both at the intra-basin and inter-basin levels, lack of access to safe and reliable flow of water for the domestic purposes triggers the negative emotional dynamics of local communities, especially the underserved communities whose basic rights to water are violated.

While a large body of literature analyzed emotional ties or emotionality—preferentially the negative emotions—of local communities in lack of access to reliable flow of water for domestic purposes^[20–30], the discourse of who and why such segregation—the upper class who has access to flow of water versus the low income households who are deprived of access to reliable and safe drinking water—has been existed in the Global South has largely remained unappreciated. Drawing on sociology of emotion, this article aims to investigate who and why there is disparity in a community in terms of access to safe and reliable water for domestic purposes, especially in the Global South. This paper hypothesizes that the decision-making processes on water supply and distribution are highly politicized and influenced by the elites of the communities leading to unequal supply of water within urban areas.

This topic is of high significance as under-resourced communities, mainly slum communities who form a large part of an urban population, are overlooked by the government. While politicians are deeply relying on the votes of these slum-dwellers in the Global South, their basic needs—access to reliable water for their domestic purposes—has been ignored by the politicians and the elites in urban environments. For instance, applying a Feminist Political Ecology Framework, Truelove^[31,32] documented that slum communities, especially women who withdraw extra-legal water, are labeled as criminal. In fact, these slum dwellers are

excluded from the rights and spaces of Delhi's upper-class groups. It has also been asserted that only elites have the right to access to abundant water while marginalized communities are punished and abused if get access to water for their daily consumption. Truelove's^[31] argument is augmented by the findings of Kumar et al.^[33] who contend that policies and regulations on water allocation and water supplies have been influenced by the elites in India. Such marginalization and segregation of communities into wealthier versus poorer has triggered the negative emotions, e.g., access to extra-water is associated with public abuse, harassment, shame, fear, and sometimes sexually victimized^[34]. Thus, it is important to explore the mechanisms behind urban water segregation as water is critical for hygiene, sanitation, and the health of these disenfranchised communities^[35] and how lack of access to water arouses the negative emotional demeanors of the marginalized communities leading to water tension in major cities in the Global South. To better unravel inequality in water distribution among the citizens, low-income (slum dwellers) versus wealthier residents, the water governance in Delhi will be used as a case study.

2. Sociology of emotion

A large number of scholars have defined emotions. For the sake of the scope of this article, I will suffice to the definition of Lawler and Thye^[36] who state that emotions are “relatively brief, positive, and negative evaluative states which have physiological, neurological, and cognitive elements. According to Lively^[37], almost all sociologists believe that emotions act as a signal function. In other words, emotions tell us how we push or act in a specific social interaction. As a pivotal reference, emotions evolve around self or individual organism. Now, the question is why sociology should take part in the discourse of emotions. While emotion has been considered as physio-neurological phenomenon, sociologists consider it as a social phenomenon that explains the social behavior of humankind^[38]. Kemper^[39] asserts that our felt emotions, in fact, carry meanings in terms of our social interactions or engagements. In another word, one can argue that the way we express our emotions or emotional ties to something/ or someone is directly affecting our social connections or interactions. For instance, the expression of happiness, anger, frustration, unhappiness, sadness, dis/satisfaction, joy, trust, grief, horror, fear, pride, shame, etc., emerge in social situations that we encounter on our daily basis. Thus, a group of experimental social psychologists such as Lerner et al.^[40] claim that through understanding the emotions of a group of people, one can realize or uncover the social relations of that group of people.

As far as the incorporation of emotions in sociology is concerned, Bericat^[38] believes that the sociology of emotion was coined by Arlie R. Hochschild, Thomas J. Scheff and Theodore D. Kemper in the late 1970s. Among these scholars, Hochschild was the pioneer in using the term “sociology of emotions”, exploring the linkage between emotion and gender. In her book, “*The Managed Heart: The Commercialization of Human Feeling*”^[41], Hochschild coined ‘emotional labor’ and its effects on individuals in the service industry. In her novel work, she tried to depict the suppressed feelings and affects (Affects = emotions^[42]) of workers to meet their organizational requirements. Also, in his book, “*A Social Interactional Theory of Emotions*”, Kemper^[43] argues that emotions are the results of the interactions in two basic social dimensions, power, and status. For instance, fear is the result of the interaction of two actors, among whom one is more powerful than the other.

When it comes to the role of water and sociology of emotion, using emotional political ecology, Egge and Ajibade^[12] assert that water allocation among communities is contingent on power relations and how the power of water impacts social systems. Within the field of sociology of emotion, infrastructure, e.g., the water supply network, construction of water canals, etc., becomes a dynamic force through which urban citizens, particularly powerful and influential elites, shape and co-shape the governance of water supply and water access within the city. While the scholarship of citizens' everyday experience in access to services, water for domestic use, has largely been documented in the anthropological research, less research has been conducted to assess how

marginalized and underserved communities experience political space and power associated to urban water infrastructures^[44], particularly in the Global South where elites and upper class (the ones with more power) influence government's decision-making policy concerning water supply distribution and provision^[33,45]. Thus, sociology of emotion, a subfield of sociology is concerned about the emotions and how emotions are shaped, experienced, and expressed in the realm of social interactions in a community.

3. Water governance in Delhi: A legacy of colonialism?

A significantly high portion of Delhi's population who live in slums or unauthorized residential areas are marked by high levels of deprivation, devastating living conditions, and challenges in accessing their fundamental needs, e.g., water and sanitation. In fact, the current urban policies are designed to push economically disadvantaged communities toward the outskirts of both physical and societal realms. The majority of informal urban settlers reside in cramped 6–10 m² huts within slums, obtaining water from public taps, tankers, and tube wells^[33]. Centuries of entrenched caste-based discrimination have contributed to higher levels of poverty among the lower castes. Even when individuals share the same economic status, reports indicate that due to systemic exclusion, lower castes experience reduced access to water and sanitation facilities^[46]. The Harvard Report shows that while slums and elites communities sit next to each other, underserved communities are deprived of access to water. In fact, the powerful political communities—industries and wealthy communities—tend to benefit from the government resources as these communities influence the decision-making process including the water infrastructure^[45], a legacy of British Colonialism. During British presence in India, there were three different water supply networks. The first system, a modern piped water supply network covered New Delhi exclusively connecting White rulers and Indian bureaucrats during the British Empire. The second water supply, wells within houses, was designed for the wealthy and high-income residents. Finally, the low-income residents had access to public wells, ponds, and canals. However, a significantly high portion of the population was deprived of access to reliable and safe flow of water^[33]. This argument is in consistency with the findings of the New York Times^[47] highlighting how India's Jat Caste—the large-scale irrigators and farmers—influence the flow of water through water infrastructures, e.g., water canals. The potent political group, India's Jat Caste, who forms 27% of Haryana's population, controls one-third of seats in the State's Legislature depriving the disenfranchised and underserved populations.

One can argue that challenging the historical legacies of power and privileges seems to be a difficult task as prevailing these legacies requires actions to uproot the entrenched regimes, of which current political parties have become their inseparable part. Thus, the 'civilizing mission' established by the colonial regime consistently extended into the Indian republic's political structure after 1947^[33]; transitioning from such prevailing system into an equitable and sustainable water supply regime seems impossible in near future.

4. Upper class versus lower class: Who gets connected to the water supply system?

While SDG 6.1 stresses universal and equitable access to safe and affordable drinking water, roughly 2 billion people use contaminated water for their daily consumption^[48]. Although SDG 6.1 is set to be inclusive in terms of achieving equity in access to reliable and safe flow of water for drinking purposes, especially for the marginalized and under-resourced communities, the inequality in access to water is still prevailing. For instance, the disparity in access to reliable source of water is a major challenge in South Asia and Sub-Saharan Africa where richest or high-income communities are connected to reliable water supply network while low-income communities are deprived of access to the flow of water^[49]. Kumar et al.^[33] documented the past and present water governance in the capital of India, New Delhi, where the existing water supply network has

excluded vulnerable and underserved communities. Such marginalization has triggered the negative emotionality of vulnerable communities.

Using infrastructural power concept, Rodgers, and O'Neil^[50] believe that elites of the community—in our case the most powerful and high-income communities—shape and influence the decision-making process on water supply network and provision in cities. Coined by Mann's^[51], infrastructural power highlights the broader role of infrastructure, in our case, a water channel, a dam or a diversion channel, etc., in governing and regulating societies. However, the uneven distribution of materials, including the water supply network, affects the marginalized and poor groups in contemporary cities. Due to their influence and power relation, high income communities, for instance, in New Delhi, play an active role in resources allocation decision-making processes^[33]. That is why Savelli et al.^[52] argue that urban water crisis, the unequal access to reliable and affordable flow of water, is created by “asymmetrical power relations” that determines who controls water and why and how water is allocated within a city. They further argue that the water scarcity and unequal access to water are due to the politics and power dynamics that administer a city. Also, in a case study of Cape Town, Savelli et al.^[53] assessed that elites and upper-middle income settlements (1.4% and 12.3% respectively) are categorized as privilege group influencing and controlling the resources in Cape Town, South Africa. This group of people usually have spacious houses with gardens and swimming pools consuming a high level of water in an unsustainable and unfair manner. In contrast, the informal dwellers who form the majority of Cape Town don't have tapes or toilets inside their houses^[53].

However, it has been unexplored how marginalized communities in these major cities react or express their feelings to this unjust water allocation and how arousal of their negative emotional ties—underserved communities form the majority of a society in terms of population—challenge this conventional way of water governance where high-income residents and political elites are provided with reliable water supply network. For instance, millions of people, almost low-income communities in southern Indian city of Chennai face water shortages due to climate changes and water misallocation by the local government. Added to this, the four reservoirs that supply Chennai's water needs have dried up triggering the negative emotions of the local poor communities. As a result of the arousal of their negative emotions, thousands of communities protested with empty water containers in front of the city's municipality asking for water^[54]. The opposition party, Dravida Munnetra Kazhagam (DMK) accuses the government of water mismanagement and misallocation of water resources in the city calling for a statewide protest^[54]. Hence, the arousal of these negative emotional attachments to the basic needs of human beings can challenge the normative water governance approach in the Global South, especially in the densely populated areas such as India where the rights of underprivileged communities are violated by the local government. Additionally, New Delhi's water supply system was disrupted after protestors inflicted damage to the Munak Canal in the State of Haryana. While this canal supplies water for almost 60% of the 33 million inhabitants of New Delhi (almost 20 million people), its operation has come to a stop after the riot by the Jat Rural Caste who considers themselves as the disenfranchised and victimized community^[55]. Given the adverse effects of climate changes and dramatic heat wave in New Delhi, India, these agrarian protestors argue that the government prioritizes the water needs of urban and high-income residents over the water needs of rural and suburban areas. The government is now worried about the future strike and protest over the poor water management and water scarcity due to the evolving changing climate. Daigle^[56] argues that as water crisis is prevailing across India, especially in largely densely populated cities such as Haryana, New Delhi, etc., the government fails to effectively address the water shortages in these populous cities.

In fact, the water challenge in India is not water shortages per se, but rather is segregation of communities into high income (powerful elites) and low-income residents (mainly slum residents). The manifestation of

divide between the elites who influence decision-making process and those who have access to free groundwater resources—wealthier communities are buffered from water crisis in India^[56]—versus low-income residents whose basic rights to water is overlooked by the government (Roy, 2013) is a legacy of the colonialism. Those with power, wealthier communities, use water for their gardens, luxurious houses, and swimming pools whereas slum dwellers rarely have access to water for domestic purposes, e.g., water for cooking and washing. The problem is not buffered by over-utilization of water resources; richer communities are also the biggest polluters of the natural environment and the ecosystem^[57]. This argument is reinforced by Joy et al.^[58] who contend that “those will less power, and rights suffer lack of access, exclusion, dispossession and marginalization”.

Despite the crucial role played by these workers in the development of Delhi, they are not accorded the status of full citizens; the state perceives these communities as existing on the periphery of economic and social class. Bhan^[59] explain that this perception is reinforced by the creation of an exclusionary citizenship narrative, wherein the upper class considers themselves as “lawful citizens of Delhi” while marking others as unlawful and non-citizens, leading to the marginalization and deprivation of their basic rights. This deprivation or marginalization also threatens slum’s rights to equal water access^[60] leading to the arousal of their negative emotions, which in turn, sometimes challenges the normative water governance in contemporary cities in the Global South.

The examples of Cape Town, South Africa and New Delhi, India highlight how government is responsible or is the main driver for the water misallocation or unfair distribution of the water supply systems in major urban areas in Global South. Such disparity or inequity in access to water, the basic need of human beings, arouses local communities’ negative emotions, especially the underserved and women.

Recalling from sociology of emotions, the struggles of under-served communities to access reliable water and the arousal of their negative emotional ties to the water flow is highlighted manifested in urban environment where high level decisions on water allocation is influenced by politically powerful elites and wealthy communities. As these communities do not have political ties and power relations, they are marginalized, excluded, and overlooked by the government^[58,61]. That is why these communities express their negative emotions, mostly in the form of anger and fear in lack of access to equal water use for their domestic purposes^[15,62].

5. Conclusion

Given the evolving changing climate alongside the dramatic increase in population, and over-exploitation of water resources—both surface and groundwater resources—access to reliable and sustainable drinking water is challenging in the Global South. Borrowing from sociology of emotion, this article sought to highlight the challenges of low-income communities, mainly slum dwellers, in acquisition and access to reliable flow of water for their domestic purposes in New Delhi, India. It was argued that the government who is in charge of providing safe water supply for the communities is the main driver for marginalization, exclusion, and dispossession of low-income and informal dwellers in the Global South. It was also argued that while powerfully political elites and high-income residents have access to water abundance—relying on groundwater—low-income communities, whose basic rights to water have been violated, express their negative emotions, mostly in the form of anger, sadness, fear, etc. Added to this, while the scholarship of exclusion and marginalization is well appreciated in academic literature, the role of power and emotions, preferentially negative emotions, as a challenge for policy-making decisions have been less appreciated. Thus, exploring this scholarship will further enrich the discourse of Sociology of Emotions concerning the politics

of water supply in large urban areas in the Global South and how the dichotomy of access to water versus lack of access to water highly affects the most under-resourced and marginalized communities.

Availability of data and materials

The data and materials that support the findings are included in the manuscript.

Conflict of interest

The author declares no conflict of interest.

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