“Persistent precarity” in fragile urban areas

Migration, urban conflict, and water access in Sub-Saharan Africa

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Abstract

Forced displacement has increased dramatically in recent years, particularly in the urban centers of Sub-Saharan Africa. How does forced displacement affect natural resource management and access in vulnerable urban and peri-urban areas in fragile and conflict-affected states? This study focuses on two secondary cities in Sub-Saharan Africa with weak urban governance structures, seeking to understand whether displacement has led to outbreaks of violent conflict between newly displaced populations and longer term residents over natural resource access, and in particular, access to water. While this research does not find evidence of inter-group violence driven by the presence of displaced populations in these areas, it does describe episodes of conflict over water amidst persistent conditions of precarity, much of which is handled and mitigated locally by local, neighborhood, or traditional leaders. This study therefore seeks to problematize the notion of these communities’ ‘resilience’ by understanding this as an involuntary condition in response to precarity and a lack of urban planning and governance, rather than as a durable or acceptable solution to issues of resource access.

Introduction

At the end of 2023, the United Nations High Commissioner for Refugees (UNHCR) reported that nearly 110 million individuals were forcibly displaced worldwide (UNHCR, 2023a). This number well exceeds the population of Germany and represents a nearly 10% increase in a single year. The majority of these forcibly displaced are internally displaced persons (IDPs), and UNHCR reports that the increase comes as "people [flee] violence, insecurity and the effects of climate change" (UNHCR, 2021). However, forced displacement is not only the *effect* of insecurity, violence, and environmental change, but plausibly also *causes* shifts in these dynamics in the host area. In particular, climate-related influxes of displaced persons have the potential to complicate local natural resource distribution and related conflict processes in the host area, particularly in already-underserved settings.

These are precisely the conditions faced by many urban centers across sub-Saharan Africa, which have become the most common sites of IDP resettlement. Indeed, internal displacement is a key accelerant of urbanization on the continent. Of the 6.8 million "new displacements" identified by UNHCR in the first half of 2023, 83% are in sub-Saharan Africa (UNHCR, 2023b). And while popular images of the forcibly displaced tend to show residents in designated 'camps,' most IDPs settle in urban areas: rented apartments, unfinished buildings, and informal settlements in the peri-urban outskirts of a city (Earle, 2016). In these increasingly crowded and intensely vulnerable urban areas, it is important to understand the ways in which forced displacement can impact redistribution dynamics, natural resource allocation, and violent conflict.

How does climate-related forced displacement shape natural resource management and access in vulnerable urban and peri-urban areas in fragile and conflict-affected states? And what factors and conditions exacerbate or mitigate the risk of violent conflict over access to, and distribution of, natural resources in these areas? While much research on this dimension of the climate-conflict nexus focuses on the push-factors for displacement, less is known on the impact of forced displacement on host communities and locations of settlement. Additionally, studies exploring conflict related to climate change, migration, and natural resource scarcity in sub-Saharan Africa have largely focused on 'the rural' as the theater of violent confrontation;

despite the fact that the 'landing areas' for most IDPs are urban. As such, this article focuses specifically on urban areas.

Below, we explore the effects of climate-related urban displacement on access to and competition over water in two cities affected by conflict and resource scarcity in sub-Saharan Africa: Maiduguri in north-eastern Nigeria, and Bukavu in the eastern Democratic Republic of the Congo (DRC). In particular, we investigate how urban displacement may exacerbate pre-existing vulnerabilities and the risk of conflict in the management of natural resources. We also identify governance structures and water management practices that facilitate or constrain access to water in these places, and discuss how displacement flows may interact with these structures and practices to produce tensions and conflict. The study uses an embedded, 'two-case' exploratory case study design and employs qualitative methods: specifically, semi-structured interviews and focus group discussions.

Overall, rather than displacement and resource scarcity provoking violent conflict in the researched neighborhoods, we find that members of host and displaced communities shared a sense of 'persistent precarity,' where limited availability and accessibility of water compounded pervasive, everyday experiences of urban poverty to produce a tense but shared sense of emergency. During the study, participants described heightened tensions, but ones that did not result in outbreaks of intergroup violence. Conflicts were largely mitigated and managed at the community level, including by traditional leaders, neighborhood leaders and community-managed governance structures such as water committees. Similarly, a lack of urban planning, limited representation, and challenges engaging with stakeholders pushed individuals and communities to self-manage water access. Importantly, we find that, while community-based organizations and governance structures proactively engaged to address needs in their communities, they did not reliably extend enfranchisement or representation to IDPs in these areas. Overall, these residents were cornered into an 'involuntary resilience' in their individual and collective management of natural resources and accompanying conflict.

This paper proceeds as follows. First, we review relevant concepts and literature, touching on climate change-related forced migration and urban displacement in sub-Saharan Africa, resource scarcity and vulnerability to conflict in informal urban areas, hybrid urban governance, and service provision in contexts of limited statehood – including the role of non-state actors and community resilience. We use these concepts to assemble a theoretical

framework revolving around insecurity in the form of communities' 'persistent precarity' and the 'involuntary resilience' that communities are expected to endure as a result. We then introduce our methodological approach and describe how our study was conducted. Finally, we outline and analyze our findings, and conclude with a discussion of the implications.

Urban displacement & resource conflicts: a review

A great deal of work in political science and related disciplines has begun to focus on the so-called "climate-conflict nexus," interrogating the ways in which the climate emergency may impact conflict patterns around the globe. However, most of these works are broad meta-analyses looking at general conflict trends, and do not attempt to "zoom in" on how local conditions might shape the relationship between climate change and conflict. This therefore leaves important questions unanswered, importantly the potential mechanisms or channels through which climate change might plausibly exert an impact on conflict at the local level .

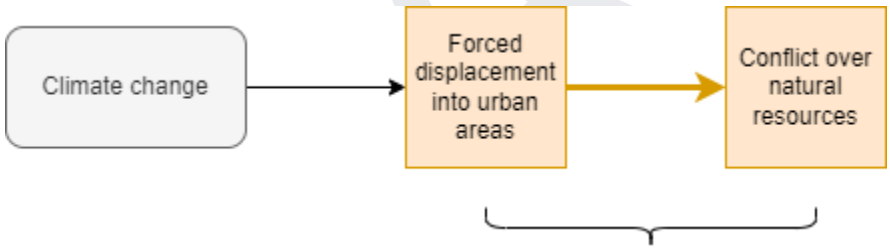

Figure 1. Stylized depiction of the premise. This paper focuses on the relationship depicted in the orange-shaded sections.

We focus on forced displacement into urban areas as a channel through which climate change could impact conflict. More people are displaced by conflict and natural disaster today than at any point in history, and the percentage of people displaced globally is increasing. Below, we first briefly provide background on the relationship between climate change, conflict, and forced displacement, especially in the context of cities in sub-Saharan Africa. We then turn to a discussion of how forced displacement can behave as a *channel* through which climate can prompt further conflict, in particular related to the governance of and competition over natural resources in urban areas.

The climate-conflict nexus: forced migration as a channel

A recent literature has begun to emerge about the impact of climate change on conflict. Scholars have identified an impact on previously known drivers of civil war and armed conflict, including weak per capita economic indicators and state institutions (Bergholt & Lujala, 2012). Other studies have indicated that communal conflict is more likely as a result of environmental degradation than large-scale violence, but that these conflicts are likely to take the form of long-lasting, low-intensity conflicts over scarce resources (Buhaug, 2015)[1]. Climate change is becoming more widely recognized as a factor in migration and conflict (Podesta, 2019). This relationship is complex and is likely to be related to multiple factors, such as individual household strategies, socioeconomic and institutional contexts, and decisions at the level of the individual (Cattaneo et al., 2019). Increasing migration has been highlighted as one of the pathways that can lead to conflict, though this is not necessarily the case under all political, social, or economic contexts (Mobjörk et al., 2016).

In the Sahel and African Horn regions, some studies have investigated the role of climate change on pastoralist and herder conflicts in rural areas. However, violence and instability has also been observed from climate change-induced migration in urban areas (Null & Herzer Risi, 2016). While IDPs are often fleeing instances of rural conflict, some of these dynamics may follow these migrants as they settle in urban areas (Moser & Rodgers, 2005). Environmental changes may also exacerbate these influxes of temporary or permanent displacement into urban areas (Adamo, 2010). Particularly in fragile contexts, cities may offer spaces of relative security, but the rapid growth and accelerating urbanization that comes with a large influx of new residents can severely strain their limited infrastructures and governance (Pech & Lakes, 2017). As of the early 2010s, more of the world's population now lives in urban or peri-urban areas. Both major cities and intermediary cities have rapidly expanded. In these cities, infrastructure is poorer and state services are more limited than in a country's most prominent urban centers. Such cities nevertheless serve as key links in a state's economy, and often evolve into a hub for many of a state's most vulnerable residents (Githira et al., 2020). As Büscher notes specifically of the DRC, after "20 years of violent conflict, urban centers in Eastern Congo along the borderlands with Rwanda and Uganda have developed from provincial towns into booming

[1] Environmental degradation and competition for scarce resources like water are not all driven by climate change. But climate change can compound existing environmental issues, such as overpopulation and poor agricultural practices.

cross-border trading hubs and central nodes in (political) economic networks that connect the mineral-rich Congolese hinterlands to the global markets" (Büscher, 2018). These fast-growing hubs are very often the destination of internally displaced individuals seeking an area to resettle – temporarily, or permanently. In the coming decades, urbanization is expected to continue, particularly in Sub-Saharan Africa. Given the impact of climate change and increasingly severe weather events, many more people will live in areas affected by underdeveloped infrastructure, resource scarcity, and climate-related migration. This makes it especially crucial to understand and anticipate how these dynamics are likely to play out in rapidly urbanizing contexts.

Forced displacement and urban conflict

There is debate within the scholarship about the likely impacts of forced displacement on urban conflict. Some argue that, due to their precarity, climate migrants have more incentive to assimilate with host populations than risk social unrest (Null & Herzer Risi, 2016). However, others have noted other potentials for conflict: a low capacity of relevant institutions when faced with a rapidly growing population, shifting ethnic composition in urban and peri-urban areas, and increased competition for scarce resources. Particularly, scholars have noted that challenges to natural resource distribution and availability risk intergroup and political conflict (Yanda & Bronkhorst, 2011). Forced displacement and urban population increase can alter the political and economic networks of urban neighborhoods in ways that reflect national and regional conflict dynamics or the compositions of social groups, ethnicities, or language use (Büscher, 2018).

This is the result both of particular conditions and of larger structural factors (Moser, 2004). IDPs relegated to the marginal areas and low-income neighborhoods face social exclusion and a lack of basic citizenship rights. IDPs, too, may be a convenient scapegoat for persistent social issues and poverty (Stark et al., 2019). Governments sometimes clash with IDPs over illegal land occupations, when the latter attempts to assert a claim to rights (Lombard & Rakodi, 2016). Especially in contexts where the governments are weak or corrupt, this may lead to political mobilization or violence based on a lack of perceived state legitimacy (Earle, 2016). Particularly where property rights are weak or poorly enforced, socioeconomic competition and perceived differences in social group competition can lead to conflict (Reuveny, 2007). Indeed, even if the presence of displaced people do not actually threaten the livelihoods of host communities, a sense of uncertainty or pernicious narratives about them may indeed provoke

conflict (Null & Risi, 2016). This conflict could take a variety of different forms: criminal violence among gang networks, intimate or domestic partner violence, or more organized political group-based violence (Moser & McIlwaine, 2014).

Urban governance and natural resources: Water access

Many IDPs live in informal settlements in marginal areas of cities – which are often governed by a mix of formal and informal structures (Earle, 2016). These settlements often have few water and sanitation systems, face legal insecurities and a lack of public services, as well as poorly constructed and overcrowded housing (Satterthwaite et al., 2007; Githira et al., 2020). This is evidenced by a "lack of infrastructure such as piped water, wastewater treatment, sanitation, reliable electricity supply, health clinics, and other social services" (Stark et al., 2019). Policing and access to judicial proceedings are also uneven in these areas (Moser & Rogers, 2005).

In Africa, "by 2020, between 75 million and 250 million people are projected to be exposed to an increase of water stress due to climate change" (Satterthwaite et al., 2007). This is particularly true of poor and marginalized groups, such as IDPs and migrants. It is expected that the gap in availability of fresh water will further widen, especially in informally settled urban and peri-urban areas, disproportionately affecting already vulnerable groups. In cases where climate change is driving rapid population growth, and in contexts of weak or under-resourced institutions, this is likely to particularly affect the availability of clean fresh water for residents (Dos Santos et al., 2017). In urban areas, water's scarcity can compound conflicts. Water access and sanitation services are often differentiated based on social class, and informally settled areas have much lower access to public or private service provision. Individual water 'entrepreneurs' often step in to fill the gap in non-piped urban areas, which can sometimes lead to corrupt or exploitative situations (Gooijer & Thomasson, 2006). Unreliable or unclear governance of these resources is often what leads to tensions, particularly at the local or subnational levels (Rigaud et al., 2018). Increased urbanization due to forced displacement strain water distribution because areas of informal settlement necessitate the design and decision-making of new infrastructures and governance practices. This can create areas of a "fragile supply/demand balance" where water scarcity and contested infrastructures can lead to conflict (Dos Santos et al, 2017).

Dynamics of territorial ownership, controlling access to water infrastructure, and strategic uses of water sources in existing conflicts have all been observed (USAID, 2014). There are also concerns about environmental pollution and the degradation of water sources in the midst of growing populations, particularly when effective sanitation or waste management practices are not in place (ibid.). The extraction of ground water requires specialized infrastructures, which can be provided by private sector sources, but may also lead to exploitative pricing or rent-seeking activities that strain already low-income populations. We discuss more of these particular dynamics in the areas under study in our findings section below.

"Persistent precarity", involuntary resilience, and potentials for water conflict

Based on the literature reviewed above, we suggest that climate-induced migration into cities could create the potential for resource conflict. For urban residents, the dynamics of rapid population increase and poor urban and city planning can manifest as a state of "persistent precarity"-- wherein the state is simultaneously absent and consistently evoked by a variety of non-state actors that usurp control of resource access. While certain non-state actors can manage resources more effectively when state capacity is low, this creates challenges with transparency and monitoring, and often falls short of maintaining crucial sustained dialogue with state authorities (Batley and Mcloughlin, 2010). Across many cities of sub-Saharan Africa, urban governance is fragmented and hybrid, "encompassing multiple sites of power where legitimacy and authority are being exercised and contested" (Büscher, 2018). Amidst this murky configuration of actors, resource access may not always be guaranteed, and residents are often placed in a situation of 'involuntary resilience' where they must navigate complex governance dynamics to access basic resources like water.

Some scholars have distinguished between two types of state capacity: capacity to maintain security and capacity to provide services (Krasner and Risse, 2014); however, on a local level, these two functions of statehood may be linked. For example, in urban and peri-urban areas, communities with less access to resources are often left out of governance decisions and emergency planning (Satterthwaite et al., 2007). In many parts of sub-Saharan Africa, rapid urbanization, displacement, and resource scarcity intersect with local politics of patronage,

rent-seeking, and state capture by powerful elites. Political capture by powerful elites is even more common at the local level, where political parties use the city government as an instrument in a larger game of patronage, extortion, and selective development (Pieterse, 2014). In informal urban areas, where formal state authority may be weak, governance is exercised by non-state actors such as warlords, economic big men, customary authorities, youth gangs, etc. Fragmented power groups compete over political, economic, spatial, and social legitimacy and control over the city, resulting in a divided urban society where key actors continuously challenge one another's legitimacy to govern urban space. These dynamics result in unstable forms of urban governance which can turn violent, and form the basis for different forms of urban civic conflict (Büscher, 2018).

In the absence of state capacity to provide services, various local leaders or informal groups may engage in an "institutionalized co-production" of services, strategically engaging with state and non-state actors to secure more reliable access (Joshi and Moore, 2004). Over time, people often develop a form of mutualistic 'community resilience' in the face of these dynamics, which can even be 'engineered' as a relatively stable form of governance (De Florio et al., 2014). However, this type of resilience is rarely developed by choice, and the positive connotation of 'resilience' can obscure dynamics of neglect, corruption, or exploitation of certain populations (Kaika, 2017). While donors, humanitarian actors, and scholarship typically code 'resilience' as a positive characteristic, we contend that, especially in these under-resourced contexts, it is often shorthand for a set of stopgap practices residents undertake in the absence of long-term or systemic solutions to the challenges that cause cycles of poverty and vulnerability. We therefore do not aim this study at extrapolating, engineering, or scaling practices of community resilience, and in fact, we regard such conditions where coping practices are developed by communities to be symptomatic of persisting problems. Our empirical study, then, focuses on whether the dynamics of 'persistent precarity' and 'involuntary resilience' relative to water access lead to conflict.

Methodological approach

Embedded, area-based exploratory case study approach

This article draws from research conducted by the International Rescue Committee (IRC) in 2021, which used an embedded, 'two-case' exploratory case study design and employed qualitative methods (semi-structured interviews and focus group discussions). This research was funded by the United States Institute of Peace and was part of the broader UNITE Study on linkages between land access, water access, and conflict. The results of this larger study were published in 2022 as an IRC report entitled "Cities at the Forefront of Conflict and Climate Migration: Mitigating the Risks of Conflict over Urban Land and Water in Fragile Contexts" (International Rescue Committee, 2022). Recognizing the necessity to better understand conflict around natural resource scarcity in contexts of protracted crisis and displacement, this research was designed to investigate the link between resource scarcity and conflict in informal urban and peri-urban areas, focusing on rapidly growing intermediary cities in fragile contexts in sub-Saharan Africa.

To select cities that matched developed criteria defining the context of the research problem, the study used an embedded 'two-case' exploratory case study design (Yin, 2003). Each city was treated as a case study and a unit of analysis. Within each city, two neighborhoods most affected by displacement and rapid growth were identified and treated as embedded subunits of analysis. One of the neighborhoods was urban (consolidated informal settlement, central location, higher density) and one was peri-urban (semi-consolidated settlement, expanding into rural areas, lower density).

This design allowed the study team to (a) investigate city-wide processes and city-level conditions as well as intergroup dynamics, (b) explore dynamics at the neighborhood level, and, importantly, and (c) investigate the relationships between dynamics at the city-level and those at the neighborhood level. The subunits add an opportunity for extensive analysis, enhancing the insights of the case study. Common findings derived from the two case studies characterized by different contextual factors expand the external generalizability of the findings (Yin, 2003).

The qualitative research was conducted through focus group discussions at the neighborhood level, semi-structured interviews at the neighborhood and city levels, and interviews with topical experts.

Site selection criteria – cities and neighborhoods

Case study cities were selected based on the following criteria and justifications:

First, we restricted our population to *cities in a region where urbanization is affected by climate change*. While the relationship between climate change and urbanization through rural-urban migration is complex, cross-country panel data suggest that climatic change, as proxied by rainfall, has impacted urbanization trends in sub-Saharan Africa but not elsewhere in the developing world (Barrios et al, 2006). While the impact of climate change on the growth of Bukavu and Maiduguri cannot be readily determined, the selected cities are located in a region where climate change has affected patterns of urbanization. Second, we chose cities in *fragile and conflict-affected contexts*. Cities experiencing conflict can have particularly fast growth as urban expansion processes are often further accelerated by armed conflict near urban centers. Third, we focused on *intermediary cities experiencing rapid growth*. While many capital cities are set to become megacities in the near future and have been the focus of urban development and governance interventions, in sub-Saharan Africa much of the urban growth has been taking place in intermediary cities. Finally, we selected only from *cities where the IRC recently implemented a governance project*. Conducting research in communities the IRC works allows the research team to leverage deep connections with communities to access the most marginalized and affected populations whose voices are rarely heard. In each city, two neighborhoods, one central and once peripheral, were identified based on the level of municipal service provision (limited), income level (low), presence of both host and displaced communities and limited resources (access to land and water).

In Maiduguri, a 'neighborhood' is defined as a designated area with clear boundaries and represented by a traditional leader called the 'Bulama'. Bulama are part of the traditional authorities in Nigeria's Borno state, and often considered the most influential individuals within communities. The DRC has a decentralized model of governance with several levels of administrative divisions: province, city, commune, and sector/chiefdom. Decentralization provides the legal entities management and financial autonomy in decision-making. In cities, communes are divided into quartiers, which are further divided into cells, and these into avenues. While the quartiers are not decentralized administrative divisions as they do not enjoy decision-making and financial autonomy, they are the local governance entities that ensure

participatory local governance at the community level. For the purpose of this study, the quartiers served as the sub-unit of analysis (neighborhoods).

Case backgrounds

Bukavu City Profile

Bukavu is located on the southwestern shore of Lake Kivu and is the capital of the province of South Kivu. In recent years, large influxes of displaced people arriving in Bukavu fleeing violence and fighting in the rural hinterland has intensified conflicts and challenged claims on urban space. Bukavu currently has over 1 million inhabitants. Over the last ten years, many of the peri-urban areas have been deforested and now experience heavy erosion (Jacobs and Kyamusugulwa, 2017). Justice, security, land allocation, water supply, and other services are not easily accessible by residents, and rapid and uncontrolled informal urbanization has created strong competition over land. Governance structures seem to have limited ability to manage this as protracted armed conflict in the region has fostered the emergence of parallel networks of power and regulation and new alliances between urban elites, which has given rise to 'hybrid governance' or a situation where local power and authority are contested by multiple stakeholders. Climate stressors (i.e. increased temperatures, more variable rainfall, prolonged dry spells, or increased frequency of extreme weather events) are anticipated to significantly impact agricultural production in rural settings which could further drive urbanization in the city.

1. Urban neighborhood: Panzi
2. Peri-urban neighborhood: Ciriri

Figure TK. Map of city and neighborhoods

Maiduguri City Profile

Maiduguri is the capital and largest city of Borno State. Its main Local Government Area (LGA) is one of 16 that constitutes one of Nigeria's traditional states, the Borno emirate. Formal and traditional governance structures are intertwined (hybrid governance), as in most areas in Nigeria. On the side of formal governance, public sectors are governed at the State level, under the umbrella of State sector ministries and public agencies reporting to the governor. All State ministries are headquartered in the city of Maiduguri. At the community level, each

neighborhood is represented by traditional leaders, called Bulamas. They are the primary channel through which communities are connected to the institutional structure of the government.

The city of Maiduguri has grown rapidly beyond the initial borders of its LGA with a 1.5% yearly demographic growth since 2000. As a result of the regional instability caused by Boko Haram, 2.1 million have been displaced since 2009 with hundreds of thousands of residents of Borno state seeking refuge in Maiduguri and in the camps surrounding the suburban areas of the city. Maiduguri has seen its population more than double from 1 million to 2 million with the influx of people displaced from other areas of the state. The large demographic growth in the city of Maiduguri has resulted in the expansion of the city beyond the initial urban area into other LGAs (Jere and Konduga LGA). This rapid growth in addition to the influx of IDPs has made it more difficult to plan and scale up provision of basic services across multiple LGA (IMPACT, 2020). In an area already economically deprived, more than 78 percent of internally displaced people are living among host communities (UNOCHA, 2016).

1. Urban neighborhood: Suleimanti
2. Peri-urban neighborhood: Goni Kachalari

Figure TK. Map of city and neighborhoods

Participant selection and data collection

In Bukavu, the UNITE Research Coordinator liaised with the members of the Advisory Board to introduce the research to the communities in the selected neighborhoods. To ensure voices of heterogeneous groups within the selected neighborhoods were included in the research, Civil Society Organizations operating in the selected neighborhoods and representatives of different social groups were consulted to identify research participants. Due to the Covid-19 pandemic, all conversations were conducted by telephone. Focus group discussions (FGDs) were conducted with community leaders representative of heterogeneous groups, and civil society members. FGD participants were purposely selected based on their familiarity with neighborhood and/or city level NRM and governance related topics as well as the needs of residents in urban and peri-urban areas. Semi-structured in-depth interviews were conducted with host and displaced residents in selected neighborhoods – men, women, youth, minority and majority clans and persons with disabilities – to capture a range of lived experiences. Key informant interviews

were also conducted with state and non-state actors, experts and NGO workers, who were selected based on recommendations from IRC teams in Bukavu and Maiduguri.

In total, 18 focus group discussions (FGDs) and 54 interviews were held with 120 participants in Maiduguri, 38% of whom were women and 62% were men. In total, 16 FGD and 73 interviews were held with 137 participants in Bukavu, 42% of whom were women and 58% were men. Data collection was first conducted in Maiduguri, with the majority of the interviews being conducted in June 2021, with some stretching into July and August 2021, followed by data collection in Bukavu in September 2021.

Findings: Everyday struggles and filling the gap

Everyday Struggle

Overall, in the areas studied, we found limited evidence of displacement and resource scarcity directly increasing the risk of violent conflict. Instead, our findings indicated that members of host and displaced communities shared a sense of general precarity, where limited availability and accessibility of water added on to a pervasive, everyday experience of urban poverty. As in other similarly underserved urban settlements, respondents narrated a story of everyday struggle to make ends meet. For example, one interviewee in Maiduguri shared that "the increase in population has made access to water difficult, meaning that, "everyone needs the water and so water vendors charge more when the demand is high." In Bukavu, one man shared how his family members sometimes "don't eat because of the lack of drinking water," while another shared that "in the community some people go 5 days without washing" because of water scarcity.

While tensions around increased pressures on water did not escalate to intergroup or identity-based conflict in the researched neighborhoods in Bukavu and Maiduguri, interviewees described exploitative, speculative, arbitrary, preferential, and other non-transparent practices in the management of urban resources that occasionally lead to interpersonal violence. In the face of limited government regulation or oversight, residents are subject to compounding vulnerabilities and exclusions. Women and children in underserved urban areas are particularly affected, disproportionally bearing the costs of water scarcity and limited

infrastructure. Particularly because women and children are often the members of households sent to fetch water, they are often exposed to insecurity, exploitation, coercion, or sexual violence while at, and on journeys to and from, points of collection. For example, in Maiduguri, some interviewees reported that children are forced to clean the houses or property of private water borehole owners before being allowed to collect water, and in Bukavu, several interviewees described widespread instances of rape against girls and women traveling to fetch water in dark early morning hours. For example, in Maiduguri, one man described how "children are sometimes exposed to maltreatment, such as asking them to sweep a compound or dump refuse for them before they are allowed to access water in some private homes," and that "security guards in such homes flog children to prevent them from accessing the boreholes."

In both cities, a lack of transparency about ownership and availability often lead to sharp price fluctuations, particularly in times of overall water scarcity. This price insecurity places enormous strain on already cash-strapped households; some interviewees described situations during which they were unable to prepare food because they could not afford to purchase water. Residents often travel long distances to reach water access points and may wait in long queues, consuming a large amount of time in their day and straining the capacity to perform care duties or income-generating activities. In both cities, interviewees reported instances of interpersonal violence breaking out at these collection points–typically over disputes in price, bribes for preferential access, or queue-skipping, and some reported frequent fights among children at these locations. However, this violence tends to be episodic and situational, rather than an indication of sustained patterns of inter-ethnic tensions or the result of resentment against displaced persons. For example, one interviewee in Maiduguri reported that "inadequate water supply leads to friction during attempts to access water, which "has led to prolonged tension between families," including instances in which "some people have been insulted and labeled as witches during abusive exchanges at water points."

The already-limited infrastructure is also strained by the security situation, and water collection points can be the target for theft. In Maiduguri, for example, solar-powered or submersible pumps at water boreholes are targets for vandalism or theft, and because replacement is often a complicated and costly process, this may decrease or eliminate operability of these water collection points for long periods. In both Maiduguri and Bukavu, many sources of water are dirty or poorly treated, and residents in both locations mentioned waterborne

illnesses or health issues resulting from prolonged reliance on contaminated water. These conditions result in an experience of everyday struggle and reinforcing cycles of precarity and vulnerability.

Lack of Urban Planning and Representation

Both migrants and longtime residents are affected by outdated urban planning that is inadequate for managing urban growth. Massive population increases in informally settled urban and peri-urban areas, primarily driven by conflict and patterns of rural-urban migration, far outpaces the limited plans that exist for the growth of these cities. As such, access to official water infrastructure is extremely limited, and residents have few representative channels to influence urban government. Instead, structures of informal, traditional, or neighborhood-based governance are often the only ways that residents can raise issues or request assistance; in both cities, these structures are typically the most trusted and accountable, but due to traditional views on gender or existing interpersonal networks, they may also under-represent certain identity groups or new arrivals.

Especially for women, minorities, and IDPs, this can be the case at the neighborhood level. In our research, some women without male household members willing to serve as interlocutors reported instances of discrimination, particularly when attempting to engage with traditional leaders. Especially in Bukavu, some interviewees suspected differential treatment by neighborhood or traditional leaders on the basis of being new arrivals or along the lines of tribal or ethnic affiliation. When governance structures are designed such that concerns are primarily raised by male heads of households, they can also insufficiently account for the individual concerns of women. Ad hoc resource governance structures, such as NGO-launched water committees in Bukavu, are key mechanisms for women's participation–women make up a large proportion of membership, are involved in key policy development and finance functions, and are instrumental in setting water access prices. However, these bodies are typically selected from within the communities that use particular water access points, and with governance processes set up at the same time as the water access points, new arrivals and IDPs can be excluded from representation.

Urban residents in these neighborhoods face challenges when engaging with the stakeholders they depend on for accessing resources at multiple levels. For example, at the

'street-level,' water vendors who purchase water at access points and resell them in more convenient locations are common in Maiduguri; these vendors are also known to hike prices and clog queues at water access points, making household collection of water without a mark-up more difficult. However, these vendors are a key part of securing water access in these communities, and residents often negotiate and build relationships with particular vendors. In Bukavu, water access sites typically employ a manager, and these managers have been known to exhibit preferential behavior toward certain community members, hoard water for their own household use during times of scarcity, or solicit bribes for timely access. In Bukavu, some water access is negotiated at the state level, via subscriptions and private 'sub-subscription' arrangements for access to the water infrastructure of state-owned utility company Regideso. Some respondents complained about Regideso's non-transparent and arbitrary pricing, which is often passed through 'sub-subscriptions,' sometimes with an additional mark-up.

At each of these levels, residents must navigate a set of interests and dynamics that are only weakly mediated by structures of authority. Often, local or traditional leaders are called in to solve problems, but only in the case of individual disputes, and they lack the political heft to advocate for long-term solutions or improved urban planning at other levels of government. The findings in both Maiduguri and Bukavu are consistent with previous scholarship indicating that, in contexts of state weakness or state disinterest (and specifically in urban contexts with lack of urban planning which limits access to resources), communities self-manage and individuals are pushed to find alternative ways to access water.

Filling the Gap

Non-state actors, communities, and individuals fill the gaps left by the state in urban natural resource management, including mitigation and resolution of water conflicts. These practices and approaches are complex – some facilitate access to water, some hinder it; some mitigate the risk of urban water conflicts at the neighborhood level, and some exacerbate it. Often, structures that facilitate access and mitigate the risk of conflict do limit or exclude certain residents, and in the lack of an overarching presence of government authority, the impacts of certain arrangements of informal, local, or ad hoc governance can vary greatly based on the particular situation or context.

In the researched urban areas, the risk of conflict was largely mitigated and managed at the community level. Community-based organizations and individuals proactively engage and mechanisms between neighbors are devised to address the needs in their communities. Much like in rural areas, informal governance structures (like water committees), elders, and trusted community and traditional leaders play a key role in managing conflict in urban and peri-urban areas. The effectiveness of these leaders – such as the Bulama in Maiduguri, the avenue and quartier chiefs in Bukavu – is key to mitigating conflicts. These leaders reside in their communities, are responsive and advocate for community needs, and are also embedded in vertical governance structures which enable them to refer conflicts to formal and traditional authorities when needed. While not uniformal, in the researched areas, the closeness of the community leaders with the communities they represent is in contrast with the observed gap between the communities and the government officials.

However, as mentioned before, traditional authorities may not be sufficiently responsive to the needs of women and minorities. Neighborhood-level governance structures may also not be representative of all residents, as might be the case for IDPs in the Bukavu neighborhood of Ciriri. Water committees were reportedly not inclusive and responsive to IDP needs in some areas of Bukavu, but strengthening their skills might help, as some respondents reported it did with traditional leaders for conflict resolution in Maiduguri.

Several mechanisms for resource access between neighbors and at the individual level also exist. For example, in Maiduguri, some individuals have drilled private boreholes and control access to water this way. Practices around these boreholes vary—in some cases, owners exercise arbitrary and exploitative pricing, while in others, respondents report some private borehole owners acting as benefactors of the community and charging minimal prices for their neighbors or community members to access water. In Bukavu, interviewees discussed a sub-subscription mechanism, by which one household successfully obtains a Regideso subscription based on its ability to pay and proximity to existing water pipes. This household then offers ‘sub-subscriptions,’ by which neighbors or community members collect water from their household for a fee. In some cases, this appears to be a cost-sharing measure among neighbors, while in others, respondents reported significant profit-seeking behavior from subscription holders. Respondents generally criticized Regideso for arbitrary price hikes, non-transparent practices for billing or metering, poor water quality, and ineffective service,

which then impacted sub-subscribers alongside primary subscribers. In cases where residents are renting from a primary owner with a subscription, some reported being charged for water access on top of the cost billed to the owner by Regideso.

We also learned of several community-level structures and approaches. In Bukavu, water committees have been set up by NGOs building new access points, which respondents reported as important and effective structures for community governance and women's participation. However, as mentioned previously, issues with representing IDPs and new arrivals, as well as a possible lack of overall capacity, have occasionally limited the impact of these bodies. Also in Bukavu, water point managers oversee community access. In Maiduguri, community-based organizations are involved directly in the provision of water and in negotiation with water vendors. In both cities, neighborhood-level leaders and governance structures are involved in the provision of water. In Bukavu, avenue and quartier chiefs play this role, while in Maiduguri, traditional leaders (Bulama) are involved in managing water access for members of their communities.

NGOs and private sector actors fill a critical gap in contexts of poor urban management and urban planning that has not kept pace with population pressure. However, limited coordination of non-government actors with city governments, coupled with the lack of enforcement of government regulation and quality control, results in suboptimal and unsustainable outcomes. This can be seen in the deterioration of water quality and increase in price by a private provider with an initially innovative and successful approach in Bukavu and is also exemplified by the challenges with boreholes in Maiduguri, some of which are initiated and resourced by NGOs. While NGO interventions help, alignment and coordination with the government are needed, as structural inequalities cannot be addressed through fragmented, timebound, and uncoordinated interventions.

In some urban contexts, public-private partnerships (PPPs) are providing encouraging results (Tillett et al., 2020). This appears to be the case with a unique partnership between an INGO, a government agency, and Chinese state-owned enterprises (SEO) to support water administration in Bukavu. The IMAGINE (Integrated Maji Infrastructure and Governance Initiative for Eastern Congo) project is implemented by Mercy Corps in coordination with Regideso, with the aim of improving water infrastructure and improving community accountability for these systems. Panzi is one of the areas served by this project, and respondents

in this research indicated that IMAGINE has had a positive impact in water provision in the community. In this research, they affirmed that standpipes installed through the project have expanded access, improved water quality, reduced waterborne illness, and lowered the travel time to access water for many community members. Additionally, several respondents indicated that the presence of Mercy Corps seems to have helped stabilize Regideso's pricing and improve its service provision, with one noting specifically that "since the presence of Mercy Corps, Regideso has also had a fixed price," which has "has brought positive changes in the community." This project is a prime example of how a variety of actors have moved to 'fill the gap' amidst a lack of reliable state water provision.

Discussion and concluding remarks

Amidst a massive worldwide increase in forcible displacement, it is increasingly important to understand how displacement flows triggered by conflict, governance failures, and climate change shape the political and social realities of the communities in which they settle. Reviewing the results of this study against the literature review, our most important finding is that displaced populations living in urban areas often faced similar issues with accessing resources as host communities. In a state of hybrid urban governance, both displaced and host populations developed similar and collective practices to access water, and in contexts of limited state service provision, non-state actors and neighborhood-level leaders took on a greater importance for securing resources. In these places, we did not find evidence of a link between displaced settlement in these resource-scarce environments and inter-ethnic or community violence. Rather, community self-management and neighborhood leaders took on the role of limiting potential interpersonal or inter-household conflicts over resources.

While these forms of community self-management appeared important in the context of hybrid urban governance, we wish to problematize the concept of 'community resilience' in fragile contexts and areas with limited state capacity. As discussed in the literature review, conditions of persistent precarity result from structural factors, such as limited urban planning, that exacerbate deprivation. Thus, for social science, international non-state actors, or governments to regard those communities merely as 'resilient' runs the risk of detracting attention from these structural factors and naturalizing conditions of extreme urban poverty and

deprivation. People in this position exert significant agency in solving problems, but a lack of services and underlying structural factors are what create conditions that demand this level of exceptional ingenuity in the first place. Communities are conditioned to be resilient; they are not resilient by choice.

Inclusive and transparent processes of urban planning, coupled with responsive governance structures at the neighborhood and city levels, are crucial to mitigating the structural factors contributing to resource deprivation in these cities. Cities are at the forefront of responding to forced displacement in fragile and conflict-affected settings (FCAS), yet they are ill-prepared to manage growing urban populations. While efforts have been made to improve the humanitarian, development, and peace nexus along with coordination in urban response, there still remains learning needs to operationalize and put into practice new approaches and ways of working. The study aimed to contribute to improving inclusive and equitable natural resource management (NRM) in fragile and conflict-affected urban and peri-urban contexts affected by internal migration through enhancing knowledge of how displacement affects the governance of natural resources in these areas, and through the identification of promising approaches in addressing problems that may arise. Particularly in the rapidly growing cities of sub-Saharan Africa, addressing structural issues of persistent precarity are a matter of responsive local governance and urban planning. They are also crucial to consider in humanitarian operations and crisis response.

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