

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION

Mitigating the risks
of conflict over urban
land and water in
fragile contexts



CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

CONTENTS

Acknowledgements	3
Acronyms	4
Executive summary	5
1. Introduction	10
1.1 Background	11
1.2 Research objectives and research questions	12
1.3 Research process	13
2. Methods	14
2.1 Research design and methodology	15
2.2 Research Advisory Boards	23
2.3 Limitations	24
3. Literature review	25
3.1 Urban migration and displacement	26
3.2 Urban conflict and natural resource management	26
4. Findings	30
4.1 Maiduguri, Nigeria	31
4.2 Bukavu, DRC	44
5. Conclusions	55
6. Recommendations	59
6.1 Recommendations for practitioners and policymakers	60
6.2 Recommendations for future research	60
References and endnotes	62

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

ACKNOWLEDGEMENTS

Research team

Katja Starc Card (Research lead)
Andrew Meaux (Co-lead)
Dr. Blaise Muhire (Bukavu section)
Belen Fodde
Melissa Pavlik
Sandra Rincón

The research is a collaborative effort. The authors would like to thank:

Research Coordinators

Zara Ahmadu (Maiduguri, Nigeria)
Jessy Kapesa (Bukavu, Democratic Republic of Congo)

Maiduguri Researchers

Cecilia Akawu Ballah
Babakura Bukar
Dr. Joseph Wilson

Bukavu Researchers

Galigombi Butalya Galy
Naomie Denise
Benefit Fikiri Nshombo
Ecstasy Kituza
Fiston Mangominja Bisimwa
Julienne Rehema

Contributors

The research has benefited greatly from the technical support and review of IRC staff including Marissa Bell, Camilla Bober, David Clatworthy, Dr. Kathryn Falb, Noémie Kouider, Emily Krehm, Guillaume Labrecque, Dr. Wale Osofisan, Molly Schneider, Emily Sloane, and Chinook Terrier.

Special thanks to the members of the Bukavu and Maiduguri Research Advisory Board who were instrumental in informing data collection, analysis, and report drafting.

Finally, we thank all the research participants who made this research possible and shared their experiences with us.

This publication was made possible through the generous contribution of the United States Institute of Peace. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the United States Institute of Peace.



Citation

Katja Starc Card, Andrew Meaux, Blaise Muhire, Sandra Rincón, Belen Fodde, Melissa Pavlik. *Cities at the forefront of conflict and climate migration: Mitigating the risks of conflict over urban land and water in fragile contexts.* (2022) New York City: International Rescue Committee.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

ACRONYMS

CBO	Community-Based Organization
DFID	Department for International Development United Kingdom
DRC	Democratic Republic of Congo
ECHO	European Civil Protection and Humanitarian Aid Operations
FCAS	Fragile and Conflict-Affected Settings
FGD	Focus Group Discussion
IDP	Internally-Displaced Person
INGO	International Non-Governmental Organization
IRC	International Rescue Committee
KII	Key Informant Interview
NGO	Non-Governmental Organization
NRC	Norwegian Refugee Council
NRM	Natural Resource Management
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnerships
UNICEF	United Nations International Children's Emergency Fund
US	United States
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene

EXECUTIVE SUMMARY

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

INTRODUCTION

Forced migration and displacement are re-shaping cities and countries across the globe. More people are displaced by conflict and natural disaster today than at any point in history, and the percentage of people who are displaced globally is increasing (UNHCR 2020). Climate change is widely recognized as a contributing and exacerbating factor in migration and in conflict (Podesta, 2019). When people flee, in most instances it is not across borders, but rather to the closest cities. Cities are the most common destinations of migration inflows (Adamo, 2010). Cities experiencing conflict can have particularly fast growth as urban expansion processes are often accelerated by armed conflict near urban centers (Pech & Lakes, 2017).

While much climate change research is focused on the push-factors for displacement, less is known about locations of resettlement and about the solutions to mitigate negative impacts and harness positive impacts of migration. Cities are at the forefront of climate migration response, yet many are ill-prepared and under-researched to manage growing urban populations. This study aimed to increase knowledge of how displacement affects the governance

of natural resources in these areas and of promising approaches in addressing problems that may arise. The study was guided by the following research questions:

- How does forced displacement affect access to and competition over natural resources in urban and peri-urban areas located in fragile and conflict-affected settings (FCAS)?
- What factors and conditions exacerbate or mitigate the risk of violent conflict over access to, and distribution of, natural resources in these areas?
- What formal or informal governance structures emerge in these areas to manage natural resources and mitigate conflict?
- What are the promising governance and natural resource management (NRM) approaches that enhance resilience and mitigate risk of violent conflict in these areas?

The study employed an area-based, 'two-case' exploratory case study approach conducting primary research in two neighborhoods affected by climate migration in Maiduguri, Nigeria and Bukavu, Democratic Republic of Congo (DRC). The study complemented primary research with a literature review. The case study cities were selected based on: their situation within a region where climate change-affected



Photo: MONUSCO/Abel Kavanagh

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

urbanization patterns, direct or indirect experience with fragility and conflict, status as a secondary city experiencing rapid growth, and status as a location where IRC had capacity and local stakeholder relationships to conduct the research. Neighborhood selection within each city sought a balance of an urban neighborhood (consolidated informal settlement, central location, higher density) and one peri-urban (semi-consolidated settlement, expanding into rural areas, lower density). Finally, a research advisory board composed of local experts on governance and urban natural resource management, including government officials, academics, and community representatives, was engaged throughout the process to advise on research design, review and validate findings, and support local research findings dissemination.

FINDINGS

Based on a synthesis of the comparative case study findings across the two cities studies and situated against relevant aspects of the literature review, the following three overarching conclusions emerged.

Displacement to urban areas contributed to by conflict and climate change may decrease the accessibility and affordability of land and water, but these effects do not necessarily lead to violent conflict.

As expected, the increase in population in Bukavu and Maiduguri put significant strain on resources in the researched urban and peri-urban neighborhoods. Both migrant and longtime residents are affected by outdated urban planning that is inadequate for managing urban growth. Vulnerable urban residents face challenges when engaging with stakeholders they depend on for accessing natural resources at multiple levels – from the ‘street-level’, as is the case with preferential behavior of water managers in Bukavu or the arbitrary price hikes by water vendors in a context of limited alternatives in Maiduguri, to government officials in Bukavu, where respondents alleged to corruption in land administration. Women and children in underserved urban areas are particularly vulnerable, disproportionately bearing the costs of water scarcity and limited infrastructure and experiencing ‘everyday insecurity’.

Tensions around natural resources were reported in both contexts. However, despite the presence of multiple factors that were identified in the literature on migration as conducive to conflict – increased competition for scarce resources in host cities with underdeveloped property

rights, migrants being of a different ethnicity than their urban neighbors, and the existence of socioeconomic fault lines which increased competition for jobs or land - no violent intergroup conflict between displaced and host communities was observed in the researched areas (Reuveny, 2007). In Maiduguri, the presence of an effective, vertically integrated traditional system that communities can access at the neighborhood level and the establishment of relationships between host communities members and new arrivals were found to be helpful in the researched areas. The research findings also indicate displaced persons and migrants in both contexts face exclusions and differential treatment, and, consistent with Null’s and Herzer’s (2016) observations for climate migrants, they are marginalized and weak, thus less likely to cause social unrest.

Over the long-term urban governance rather than displacement and migration might have a larger effect on exacerbating vulnerabilities and risk of violent conflict

While tensions around urban land and water did not escalate to intergroup or identity-based conflict in the researched neighborhoods in Bukavu and Maiduguri, exploitative, speculative, arbitrary, preferential and other non-transparent practices in the management of urban resources may cause situations that can lead to interpersonal violence. In the researched areas, while some of the exclusions in access to resources are identity-based and to some extent horizontal (between communities), a divide was observed between government authorities and communities, as non-government respondents (residents, NGO workers, scholars) expressed concern about the impacts government actions might have on vulnerable urban residents. Investments in responsive and inclusive urban planning are critical to improving access, availability, and quality of urban natural resources and decreasing the likelihood of conflict. NGOs and private sector actors fill a critical gap in contexts where urban management and urban planning have not kept pace with population pressures, but 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. 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, as appeared to be the case in Bukavu (Tillett et al., 2020).

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Community-level structures are key to managing conflict and play a role in access to natural resources, particularly water, and their effectiveness can be further improved by promoting inclusiveness

In the researched urban areas, conflict was largely mitigated and managed at the community level. Much like in rural areas, informal governance structures, 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 – the Bulama in Maiduguri, the avenue and district chiefs in Bukavu-, is key to mitigating conflicts. 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.

There are, however, limitations as traditional authorities may not be sufficiently responsive to the needs of women and minorities and neighborhood level governance structures may also not be representative of all residents. In addition, the feasibility of solving land and water challenges vary considerably. Land scarcity appears to be a more intractable problem constrained by the realm of politics and speculation, whereas access to water is primarily constricted by technology, finance, and environmental limitations. Management of water might be an easier entry-point for conflict prevention and mitigation at the neighborhood level.

The findings of this study should be interpreted with limitations in mind. First, while similarities were found between the two case studies, especially the important role played by local leaders and structures in managing conflict, it is important to note there are limitations to generalizability of case study findings. Second, the study also does not attempt to make causal inferences, but rather aims to contribute to an understanding of dynamics around displacement and natural resource management in destination areas. Finally, the study focused on the lived experiences of the host and displaced residents in selected urban and peri-urban areas and did not explore local politics or assess organizational capacities.

RECOMMENDATIONS

City Leaders

- Reinforce and/or establish effective and inclusive community engagement mechanisms and feedback and complaints mechanisms to understand how residents are experiencing access to water and land.
- Establish inclusive coordination and problem-solving forums at the city and community-levels with representation of government, civil society, and communities to problem-solve and develop solutions to natural resource management challenges.
- Establish or strengthen participatory urban planning processes, with an emphasis on long-term water and land management.
- Strengthen existing water and/or land management departments to engage in disaster risk reduction and climate adaptation planning
- Explore public-private partnerships to enhance the availability and affordability of water.

Community Leaders

- Strengthen inclusion of women, displaced people, and marginalized groups in community leadership structures and decision-making to represent all residents of the community.
- Strengthen leadership skills in inclusive and accountable management of water and land disputes.
- Establish advocacy mechanisms to government and civil society organizations to channel feedback of residents and capacity strengthening and support in water and land management.

Donors

- Invest in strengthening long-term urban planning from the start of a displacement shock as an anticipatory measure for the situation becoming protracted.
- Invest in destination cities as part of climate strategies.
- Invest in strengthening existing informal governance structures to help with preventing the escalation of tensions and mitigates the risk of violence in fragile and conflict affected contexts.
- Establish systems to monitor for any negative impacts or unintended consequences of aid on conflict in urban areas.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Civil Society

- Conduct thorough context analysis informed by tools such as Political Economy Analysis, Conflict Analysis, Gender and Social Inclusion Analysis, and [Urban Context Analysis](#) to identify entry-points for programming.
- Proactively engage formal and informal governance actors in the planning and design of activities going beyond securing approvals to establishing equal partnerships on areas of shared interest in a principled way.
- Align interventions in land and water natural resource management to long-term plans of the city. If no plans exist, then prioritize development of joint plans at city and/or community-levels.
- Strengthen creation of inclusive coordination and problem-solving forums at the city and community-levels with representation of government, civil society, and communities to problem-solve and develop solutions to natural resource management challenges.
- Partner with women-led and migrant-led organizations in the design and implementation of projects.
- Facilitate participatory disaster risk reduction and climate adaptation planning in urban areas to enhance urban resilience, especially to risk of flooding and heatwaves.
- Explore public-private partnerships in water resource management to enhance the availability and affordability of and sustainable access to water.
- Prioritize land use planning interventions in partnership with national/local government as both a humanitarian and development approach. Focus on participatory and community-level land registration procedures, to assure long term sustainability and to diminishing the barriers women, displaced persons, and ethnic minority groups have in accessing land.

Future Research

Increase understanding of contextual and organizational constraints of city-level state and non-state actors in fragile contexts

- Research should be conducted to better understand the contextual and organizational challenges faced by state and non-state actors and structures at the city and community level to inclusively manage natural resources in urban areas affected by displacement in fragile and conflict-affected settings, along with the identification of strategies to address these.

Innovation and learning in inclusive city planning in fragile contexts

- Explore, design and test partnership modalities between non-governmental humanitarian, development, and peacebuilding actors, including CBOs, with state and municipal authorities for inclusive land management. Specifically, this could focus on participatory, community-level land registration procedures that bridge customary and state institutions in urban areas affected by conflict and displacement and in disaster-prone areas.
- Explore, design and test partnership modalities between private sector, non-governmental humanitarian, development, and peacebuilding actors, including CBOs, with state and municipal authorities for conflict-sensitive, inclusive and sustainable management of water resources. Specifically, this could focus on identifying strategies to leverage local private sector actors to improve availability and quality of water in a sustainable and affordable way, including technologically innovative ways.

Role of NGOs in promoting more inclusive and equitable societies and potential pitfalls in hybrid urban governance contexts

- The role of NGOs in contexts of hybrid urban governance in FCAS, particularly their impact on local power dynamics and potential pitfalls, including exacerbation and/or mitigation of identity-based exclusion and vulnerabilities. This could focus on the identification of approaches that can be employed to improve inclusiveness and responsiveness of indigenous structures to the needs of marginalized groups, particularly women and LGBTQI individuals, without diluting their effectiveness in managing conflict.

1. INTRODUCTION

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

1.1 BACKGROUND

Conflict, climate change, and forced migration in fragile and conflict-affected settings

Forced migration and displacement are re-shaping cities and countries across the globe. 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. Although there are few instances of climate change as the sole factor in migration, climate change is widely recognized as a contributing and exacerbating factor in migration and in conflict (Brookings, 2019). The complex relationship between climate change and migration is influenced by individual characteristics, household strategies, and socioeconomic and institutional contexts (Cattaneo et al, 2019). Cities are the most common destinations of migration inflows, and environmental change outside of cities can exacerbate the influx of temporary or permanent migrants to cities (Adamo, 2010). Cities experiencing conflict can have particularly fast growth as urban expansion processes are often further accelerated by armed conflict near urban centers. In these environments, cities offer spaces of relative security and stability; thus, cities can act as a magnet for internally-displaced persons (IDPs) (Pech & Lakes, 2017). Internal displacement subsequently is one accelerator to urbanization. The inflow of migrants can lead to the expansion of slums or neighborhoods with pre-existing socioeconomic and environmental risks. For example, IRC's 2017 systematic review *Violence in the City* (IRC, 2017) found that people in urban areas affected by displacement are often socially excluded, experiencing low socioeconomic development and limited access to services. These critical factors are believed to increase the risk of violent conflict (Mach et al, 2019).

Climate-related change has an impact on previously known drivers of civil war and armed conflict, such as low per capita economic growth and weak state institutions (Bergholt, 2012). Studies that focus on less organized forms of violent conflict suggest that communal conflict is a more plausible outcome of environmental degradation rather than large-scale violence between or within states, with several studies showing how competition over scarce resources primarily reinforces low-intensity and long-lasting conflicts (Buhag, 2015)¹ While the decision to resort to group violence depends on a web of interrelated mechanisms, several pathways that link climate-related change to an increased risk of violence have been identified. Increasing migration is highlighted as one of the pathways that can lead to

conflict. Political, social, and economic contexts are crucial for the actualization of the conflict pathways. Governance structures and adaptive capacity are decisive for risk impacts of migration and an improved understanding of how these could be strengthened in different societal contexts – such as urban displacement in low-income countries – is necessary (Mobjörk et al., 2016).

Land conflicts are recognized as a critical factor impacting urban violence and insecurity. In the context of urban growth and inequality, acute competition for land and the regulatory failures of states often results in conflict, affecting urban authorities and residents. In already marginalized areas, increasing scarcity of land and growing populations exert additional pressure on the urban environment, increasing the potential for dispute. Depending on contextualized factors, land conflict may have the potential to tip over into violence (Lombard, 2016). Competition over land can be especially pronounced when coupled with social marginalization and the spillover from regional ethnic, religious, and political tensions as well as political manipulation (Rigaud et al., 2018).

In 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). The literature on the place and role of ethnicity in African politics demonstrates that ethnic identity remains a crucial aspect in the neo-patrimonial redistribution of resources, in political representation, and in dynamics of violent mobilization. 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. The presence of state and non-state actors results in hybrid forms of urban governance. 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).

Although water scarcity has historically been more acute in rural areas, emerging trends point to worsening availability and quality of water in urban areas. In light of climate change and continued growth of urban populations, there is concern that the gap between the availability, supply, and demand

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

for fresh water will widen even further in sub-Saharan Africa and disproportionately affect informal settlements where the majority of urban populations reside. Distribution and allocation of water will be affected by climate-induced water stresses, under-resourced institutions, ineffective governance, and weak political will to address scarcity and mediate uncertainties in future supply (Dos Santos, et al., 2017). While conflicts with water scarcity components, especially in urban settings, usually do not lead to violent deaths, urban water conflicts, like urban land conflicts, revolve around unequal distribution of a limited access resource. Different social classes in an urban area have different types of access to water and sanitation, with informal settlements often not being served either by public or private service providers. In non-piped urban areas with lower incomes, the right to sell water can occur through corrupt or criminal practices or filled by individual water 'entrepreneurs' (Gooijer & Thomasson, 2006). Often, it is not the scarcity of water that leads to tensions, but the way in which it is governed and administered. Furthermore, risks of violence around water are more pronounced at the local or subnational levels than at the national level (Rigaud et al., 2018).

Research Rationale: Shifting the focus from areas of origin to displacement destination areas

While much climate change research is focused on the push-factors for displacement, less is known on the positive or negative impact of forced displacement on host communities and locations of settlement, which are primarily urban areas. Similarly, 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. Boas et al (2019) argues that research on climate needs to shift focus from "sending areas to destination areas", arguing that whether human mobility becomes a problem depends on the management and solutions adopted in the destination areas. The World Bank's Groundswell report notes that "many urban and peri-urban areas will need to prepare for an influx of people" (Rigaud et al., 2018).

The Organization for Economic Co-operation and Development (OECD)'s 2016 State of Fragility report notes that "urban violence is becoming the new norm" as "governance, security and services have not kept pace" with urban population growth. Krampe and Nordqvist (2018)'s systematic review of climate change and violent conflict recommended future research on "vulnerability of urban centers," an understanding of "context-specific differences",

and "institutional capacity and governance." Recognizing the necessity to better understand conflict around natural resource scarcity in contexts of protracted crisis and displacement, this study will shift the loci of exploration to informal urban and peri-urban areas, focusing on rapidly growing secondary cities in fragile context in sub-Saharan Africa.

Cities are at the forefront of responding to forced displacement in fragile and conflict-affected settings (FCAS), yet are ill-prepared to manage growing urban populations. While efforts have been made to improve 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.

1.2 RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

The objectives of the study were to (1) increase practitioner, policymaker, and academic understanding of the effects of forced displacement on urban natural resource management and risk of violent conflict, and of the identification of mitigating approaches; and (2) identify factors, conditions, and inclusive and accountable governance processes that enhance resilience and mitigate risk of violent conflict in peri-urban and urban areas affected by displacement in FCAS.

The study was guided by the following research questions:

- How does forced displacement affect access to and competition over natural resources in urban and peri-urban areas in FCAS? What are the impacts of displacement and displacement-related changes on pre-existing risks of heterogeneous displaced and host communities?
- What factors and conditions exacerbate or mitigate the risk of violent conflict over access to and distribution of natural resources in these areas?
- What formal or informal governance structures emerge in areas that manage natural resources and mitigate conflict? How do these structures form? Do they foster inclusion or exclusion of different groups and individuals with differential access to power and resources?

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

- What are the promising governance and NRM approaches that enhance resilience and mitigate risk of violent conflict in these areas? What approaches help amplify the voices of all people in the community on the management of natural resources in the places where they live?

1.3 RESEARCH PROCESS

The research was executed in two phases. First, a literature review was conducted by outlining key research and evidence pertaining to how forced migration impacts the governance of natural resources and risk of conflict in urban and peri-urban areas in FCAS. This included an analysis of governance aspects of rapid urbanization in 'destination areas' of forced migration and the risks and vulnerabilities affecting the heterogeneous displaced and host communities. The review also included the identification of factors, conditions, and approaches that might exacerbate or mitigate the risk of violent conflict involving access to and distribution of natural resources in these areas, such as governance and NRM mechanisms, processes, interventions, and actors.

The literature review highlighted key phenomena and themes at the intersection of forced displacement, urban governance, and natural resource management in FCAS, which were used

to draft and structure the data collection tools for the case study research. Additional sources were consulted at the time of report writing in 2022. A condensed version of the literature review is included in this report.

The phenomena and themes identified in the literature review were then further explored through participatory qualitative research in two case study cities – Maiduguri, Nigeria, and Bukavu, Democratic Republic of Congo (DRC), two secondary cities in fragile and conflict-affected countries that have experienced rapid urbanization through displacement. As a mechanism for community engagement in research, an Advisory Board composed of local experts on urban governance and urban NRM was formed in each city to consult on the contextualization and verification of the research. The advisors' expertise was technical, scholarly, and experiential, and included local scholars, government and civil society representatives, as well as community representatives from the neighborhoods included in the research.

At the time of analysis and writing, the findings from the literature review were used to situate and reflect on the empirical results of the two case study cities, on the analytical generalizability of the findings, and on the transferability of recommendations to similar contexts.

2. METHODS

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

2.1 RESEARCH DESIGN AND METHODOLOGY

Literature search strategy

A review of relevant studies and evidence/literature about conflict resulting from increased competition over access to natural resources in vulnerable urban and peri-urban areas was conducted. This review focused on practitioner focused databases using a systematic search protocol agreed upon by IRC technical experts². The initial search returned 147 sources. 37 sources were retained after title and abstract screening for full-text review. The search was complemented with 34 readings previously known to the research team, which included journal articles on trends in urbanization, climate change, displacement, and violent conflict, as well as grey literature on peacebuilding, humanitarian, and development programs in contexts of displacement. After full-text reading, 29 sources were ultimately consulted for the literature review in the first stage of the research study in 2020. A data extraction template was created in Microsoft Excel to conduct the analysis, based on the research questions, which guided the development of analytical categories-columns³. Data was extracted directly from the papers and included as a description of the main learnings in columns. Similar learnings were then grouped into general descriptors summarized in a literature review.

Embedded, area-based exploratory case study approach

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) to address the research questions. 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:

1. 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 – influenced by individual characteristics, household strategies, and socioeconomic and institutional contexts – 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.

2. 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. In these environments, cities offer spaces of relative security and stability and thus can act as a magnet for IDPs (Pech, 2017). 60 percent of the world's refugees and over 80 per cent of IDPs settle in urban areas (UNHCR 2020). This effect leads to rapid growth, converting smaller urban centers into large cities. The pressures of urban growth, combined with an institutional and policy vacuum associated with management of natural resources in peri-urban areas, ultimately can lead to competition, contestation, and conflicts over water.

3. Secondary 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 secondary towns and cities. Secondary cities, especially in African countries, are expected to double or even triple in population over the next 15 to 25 years (Githira et al., 2020). The

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

rapid urbanization of many secondary cities comes at considerable environmental and social cost. Many cities are experiencing poverty and are overcome by the pressures of development resulting from urbanization. They often have weak or dysfunctional governance systems⁴. Poorly managed growth and a lack of natural resources compound other gaps and needs, and lead to multiple systemic deprivations.

4. 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. The ability to hear their voices and learn about their lived experiences enables the IRC to design, based on our research findings, programs that address the needs of the people we serve. In Maiduguri, IRC Nigeria is implementing the ECHO-funded “From Response to Resilience (R2R)” project, which seeks to empower local authorities and local communities to jointly prepare for, and respond to, natural and man-made hazards. In Bukavu, the IRC implemented the DFID-funded “Engaging Sub-national Authorities in Accountable Practices (ESAAP)” project, which supported teams composed of sub-national authority officials, religious and community leaders, and civil society representatives to identify and resolve sub-national governance and accountability problems.

In each city, two neighborhoods, one central and once peripheral, were identified based 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.

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* (districts), 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. Each *quartier* has a development plan. Thus, in each *quartier* of the municipalities (communes) of the city of Bukavu, there is a Local Development Committee, which is the bridge between the population and the municipality. Through this local governance structure, the population participates in the design and development of priority projects to be integrated into the local development plan of the municipality (*commune*). For the purpose of this study, the *quartiers* served as the sub-unit of analysis (neighborhoods).

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

**MAIDUGURI CITY AND
NEIGHBORHOODS PROFILE**

Maiduguri is the capital and largest city of Borno State in northeastern Nigeria. Nigeria has a three-tier formal governance system, including the federal, state and local government levels. In Borno State and in Maiduguri, formal governance structures intertwine with traditional authorities, which are led by the Shehu. On the formal side, public sectors are governed at the State level, under the umbrella of State sector ministries and public agencies reporting to the state Governor. Maiduguri is composed of two local government areas (LGAs), Maiduguri metropolitan council (MMC) and part of Jere LGA, representing the third tier of government. At the community level, each neighborhood is represented by traditional leaders, called Bulama, who report to the Lawan at the ward level and these are often considered the most influential individuals within communities (Bell & Starc Card, 2021). In Maiduguri, a ‘neighborhood’ is defined as a designated area with clear boundaries and represented by a Bulama.

The last reliable demographic data from the 2006 census estimated the population to be 748,123 (Jere and MMC LGAs) and is currently estimated to be around 1 million. 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 city.

The city of Maiduguri has borne the largest burden of support to those displaced by the conflict, housing over 800,000 internally displaced people (IDPs) at the peak of the crisis. According to a 2016 UNOCHA statement, greater Maiduguri saw its population increase from around 1 million to 2 million with the influx of people displaced from other areas of the state, and more than 78 percent of the internally displaced people settled among host communities. At the end of 2020, approximately 300,000 IDPs still resided in Maiduguri⁵. While insecurity and conflict are the main drivers of displacement in Maiduguri, poor socioeconomic conditions, exacerbated by environmental degradation in the Lake Chad basin, contribute to forced migration in the area too⁶.

FIGURE 1 GOVERNANCE MODEL IN MAIDUGURI

	Government	Shezu Waziri Emirate Council
National	President	No representation
State	Governor	Shezu Waziri Emirate Council
Local Government (MMC and Jere)	Local Government Chairman (2 LGAs for urban Maiduguri)	Aja (9 districts for urban Maiduguri)
Ward	Ward Coucillor (15 wards)	Lawan (67 wards)
Sub-Ward/Community	No representation	Bulama

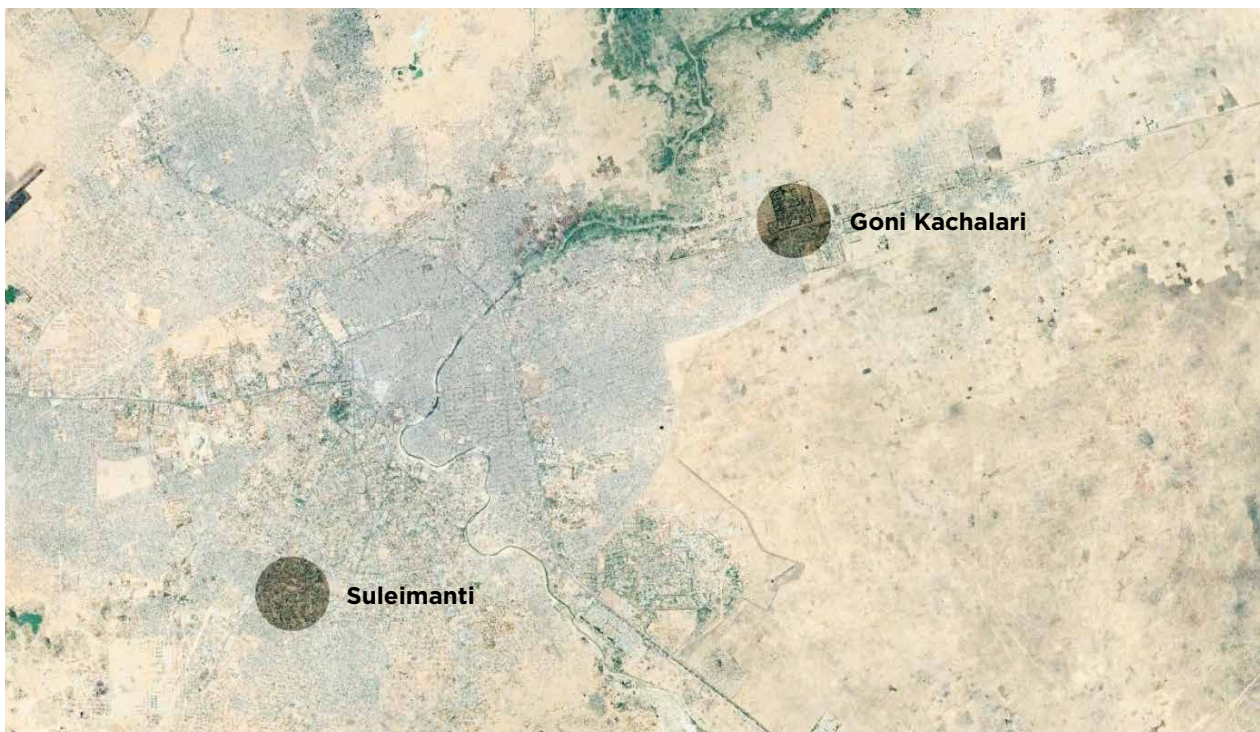
**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

Urban neighborhood: Suleimanti

The Suleimanti area is situated in the Maisandari ward, in the MMC LGA. It is composed of four smaller neighborhoods – Suleimanti 1, 2, 3 and 4, each one represented by a Bulama⁷. The IDPs live in informal settlements. It is considered an underserved area. In 2020, there were no health or education facilities and the estimated population was 18,000 (IMPACT Initiatives, 2020).

Peri-urban neighborhood: Goni Kachalari

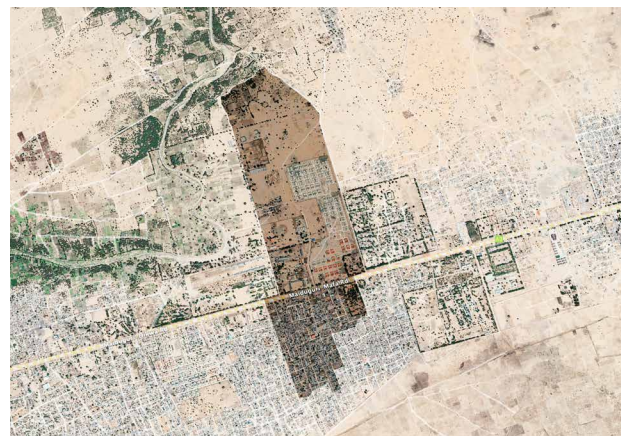
Goni Kachalari is situated in the Mashamari ward, in the Jere LGA. It includes the Alhaji Tar settlement, which hosts around 1000 IDP households. The leader representing the Alhaji Tar IDPs is overseen by the Goni Kachalari Bulama. In 2020, the estimated population was 22,000 (IMPACT Initiatives, 2020).



Maiduguri City and location of neighborhoods. Source: Google Earth



Suleimanti. Source: Google Earth, Impact initiatives, 2020



Goni Kachalari Source: Google Earth, Impact initiatives, 2020

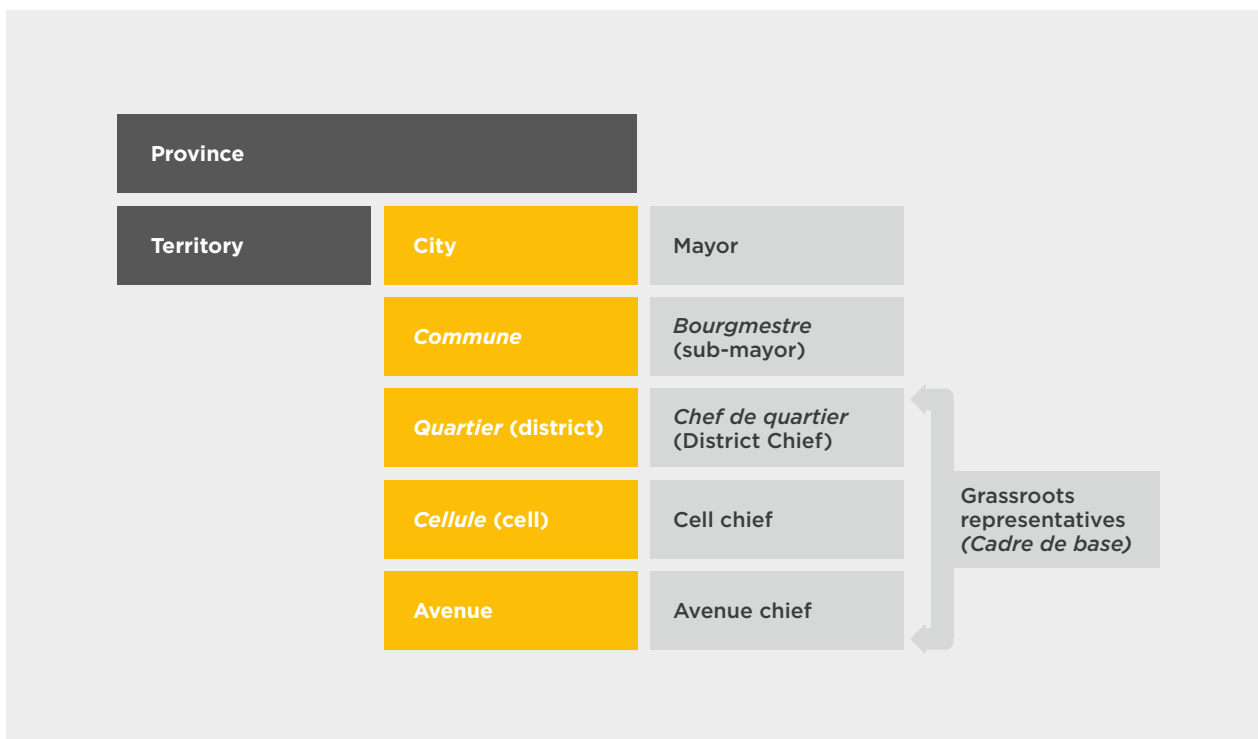
**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

**BUKAVU CITY AND
NEIGHBORHOODS PROFILE**

Bukavu is located on the southwestern shore of Lake Kivu and is the capital of the province of South Kivu. DRC has a decentralized model of governance with 26 provinces divided into territories, cities and communes. In cities, communes are divided into quartiers (districts). Bukavu has three communes—Ibanda, Kadutu and Bagira—, which are divided into districts. Districts are further divided into cells, and these into avenues. The city is headed by a mayor, the commune by a bourgmestre (sub-mayor) and the district by a chef de quartier (district chief). Together with the district head, the cell chief and the avenue chief make up the cadre du base – grassroots representatives. These low-level urban administrators function as a bridge between the state and society⁸. Each quartier has a Local Development Committee. Through this local governance structure, the population participates in the design and development of priority projects to be integrated into the local development plan of the municipality (commune).

Bukavu has experienced significant demographic growth since the 1990s due to a ‘rural exodus’ as large influxes of displaced people arrived in the city, fleeing waves of violence and fighting in the rural hinterland, starting with the First Congolese War (1996-1997), followed immediately by the Second Congolese War (1998-2003). Today, Bukavu hosts over 1 million inhabitants. The number of IDPs in Bukavu is hard to determine as the demarcation between being a resident or an IDP is fluid and self-defined, depending to a large extent on the socio-economic position. More affluent IDPs have less problems settling in the city and can be seen as residents within a couple of months. Others, lacking means to create sustainable living conditions, still define themselves as IDPs after more than 10 years into displacement. Constructing or buying a house is reportedly seen as an important marker for the transition from IDP to resident (Jacobs and Milabyo Kyamusugulwa 2018). In addition to pockets of insecurity that continue to drive migration from rural areas, 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 Bukavu’s urban expansion⁹.

FIGURE 2 GOVERNANCE MODEL IN BUKAVUS



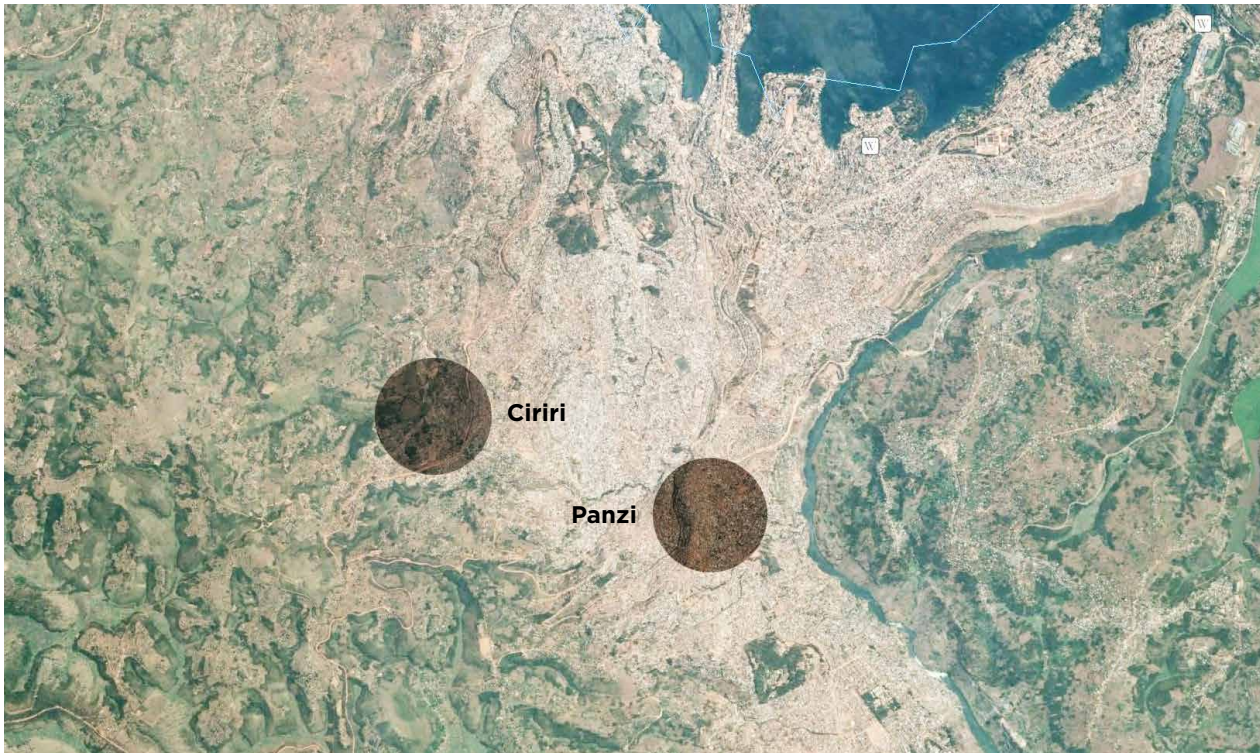
**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

Urban neighborhood: Panzi

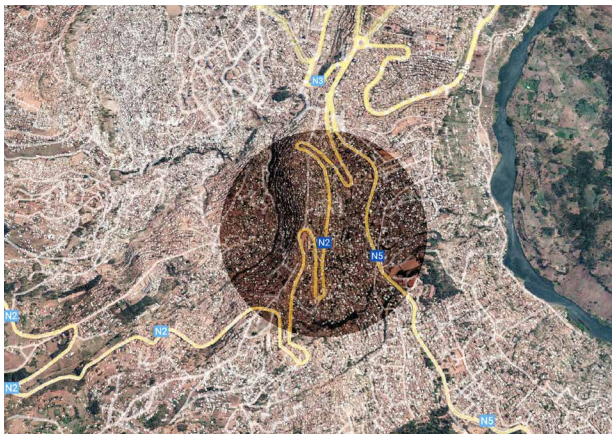
Panzi is an urban district located in the Ibanda commune. Panzi is considered a more established neighborhood and the IDPs residing here are considered 'settled'. While Panzi is better served than Ciriri, the level of services is still low compared to central Bukavu. The estimated population is 73,000 inhabitants.

Peri-urban neighborhood: Ciriri

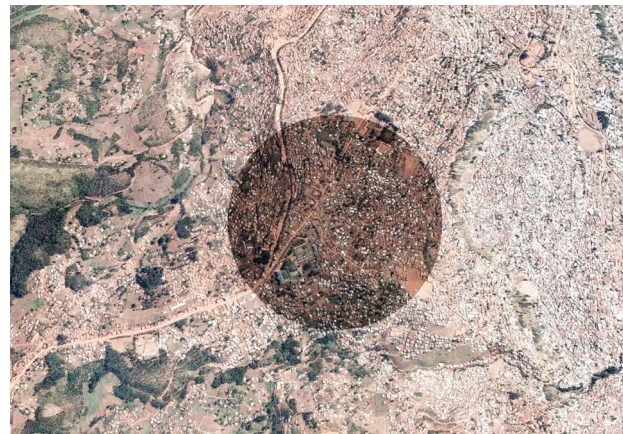
Located in the Bagira commune, the Ciriri district serves as a transitional area between the countryside and the city, with people settling in Ciriri due to its affordability compared to more central locations. Ciriri is considered substantially more marginalized and less integrated than Panzi. The estimated population is 15,000 inhabitants¹⁰.



Bukavu city with location of neighborhoods. *Source: Google Earth*



Panzi. *Source: Google Earth*



Ciriri. *Source: Google Earth*

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

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 representative of different social groups were consulted to identify research participants. Due to the Covid-19 pandemic, all conversations were conducted by telephone. In Maiduguri, to ensure representation of heterogeneous and marginalized groups in the study, the research participants were from the neighborhoods of the R2R project implementation areas and were selected with the help of IRC contacts in the neighborhood.

FGDs were conducted with community leaders representative of heterogeneous groups, and civil society members. FGD participants were purposively 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.

In Maiduguri, the tools and consent forms were translated from English to Hausa language for data collection. The wording of the questions in Hausa was checked by the Advisory Board members. The Research Coordinator also worked with the local researchers to translate the consent forms into Hausa and ensure all critical terms are adequately translated. The local researchers, who were fluent in English and Hausa, conducted the translation from Hausa to English during interview transcription. Interviews with scholars and NGO workers were conducted in

English. In Bukavu, the written tools were translated from English to French, and the key informant interviews (KIs) and FGDs were conducted in Swahili. Transcripts were produced in French. This approach is common practice and it is due to Swahili being more of a spoken language and hard to translate in written form. To ensure consistency of translation of the tools and consent forms, the research staff agreed on the French-Swahili translation of key terms during training before data collection.

Data analysis

Qualitative analysis was led by IRC researchers. All data was translated from local languages to English for analysis. An initial deductive coding structure was developed in alignment with themes explored with the data collection tools. The tools were informed by the literature review, discussions with IRC's technical specialists and the Research Advisory Board. Representing two case studies, the Maiduguri and Bukavu datasets were analyzed separately but using the same initial set of codes. Additional codes were developed based on themes emerging from the data. All data were coded using the qualitative analysis software Dedoose. The analysis of interview transcripts and of interpretation of findings were complemented with insights from researcher notes taken at debriefing meetings with the local research team in Maiduguri and with an initial analysis of the main themes from Bukavu provided by the Research Consultant. Quotes are used to illustrate themes identified during the analysis.

Quality assurance, control and validation

Quality of the study was ensured in multiple ways. First, the research team was composed of United States (US)-based IRC researchers, an IRC technical advisor, and Maiduguri- and Bukavu-based researchers with thematic and contextual expertise and previous experience with conducting research and programming in fragile and conflict-affected areas. Locally hired researchers in Maiduguri and Bukavu were selected based on their extensive experience with conducting qualitative data collection on sensitive topics with populations in need. Before data collection, the researchers underwent an in-depth refresher training on qualitative data collection and research ethics.

Second, the data collection tools were reviewed and revised multiple times before being administered by IRC technical specialists, Advisory Board members, and the local researchers, who also tested and optimized the tools during training in Maiduguri. Before data collection in Bukavu,

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

the tools used in Maiduguri were reviewed by the Bukavu Research Advisory Board for contextual appropriateness. No significant changes to the tools were required.

Third, during data collection in Maiduguri, the US-based IRC researchers held daily debriefings with the local researchers to review the individual and group interview transcripts on a rolling basis and to discuss and interpret findings as a first step towards data analysis. Consistency in data analysis for comparability of case studies was ensured with the application of a set of deductive codes in Dedoose. In Bukavu, the research team was managed by a locally-based Research Consultant.

After completing the analysis for each case study, research validation workshops were held with IRC technical specialists, IRC country program staff, and the Advisory Boards in each location. During the internal validation workshops with IRC technical specialists and country staff, the main findings and recommendations were presented, and thematic, policy and context related feedback was

received and included as part of the final results. After the internal validation workshops, the Maiduguri and Bukavu research coordinators presented the results of the study to the Advisory Board members in the two cities. Their feedback was included in the final version of the analysis at the city level.

Finally, the draft research report was reviewed by local researchers from Maiduguri and the Research Consultant from Bukavu as well as a scholar from the Research Advisory Board in Maiduguri. Internal IRC reviewers were from a cross-sector of departments including governance, livelihoods, protection & rule of law, and research. The cross-cutting conclusions were drawn by the US-based researchers.

Research ethics

Due to contextual differences, two separate research protocols were developed, one for Nigeria and one for DRC, and approved by the IRC Institutional Review Board.

Maiduguri			
	Neighborhood 1 (Suleimanti)	Neighborhood 2 (Goni Kachalari)	Total
FGD Community Leaders	4	4	8
FGD Community Representatives	4	4	8
FGD Civil Society Network	1	1	2
Individual Interviews	20	21	41
Individual Interviews City Level			4
Individual Interviews NGOs			7
Individual Interviews Scholar			2

Bukavu			
	Neighborhood 1 (Panzi)	Neighborhood 2 (Ciriri)	Total
FGD Community Leaders	4	3	7
FGD Community Representatives	4	4	8
FGD Civil Society Network	1		1
Individual Interviews	29	31	60
Individual Interviews City Level			3
Individual Interviews NGOs			3
Individual Interviews Scholars			6

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

The research protocols also obtained local research clearances from the National Health Research Ethics Committee of Nigeria for research in Maiduguri and from the Comité National d’Ethique de la Santé - Direction Provinciale du Sud-Kivu for the research in Bukavu. The Research Advisory Boards also reviewed the data collection tools for the sensitivity of the topics and questions discussed. The study was implemented in adherence with research ethics standards, ensuring interviews took place only if informed consent was provided; confidentiality and privacy were guaranteed before, during and after data collection; and approved protocols and practices were employed to mitigate social and psychological risks. Data protection and storage protocols were followed. Researchers and data collectors were trained in advance to recognize distress in research participants and referral pathways were mapped ahead of data collection. No breaches of approved research protocol were reported. IRC organizational and country Covid-19 guidelines and protocols were followed to ensure safety of all involved in the research.

2.2 RESEARCH ADVISORY BOARDS

Purpose

Because this was a standalone exploratory research project not tied to a specific intervention or program, the US-based research team was concerned it would feel extractive to the communities in the target neighborhoods and of limited value for local stakeholders. For the research to be valuable to the communities and local stakeholders, the project introduced Research Advisory Boards, one per city, as a community engagement mechanism to:

1. consult on the contextualization, validation and interpretation of the research findings
2. provide a place for communities to present their learning needs and articulate their research priorities
3. define the approach to local dissemination

Composition

The Research Advisory Boards were composed of local experts on governance and urban natural resource management. Expertise was conceptualized broadly, including technical, scholarly, and experiential expertise. As such, in addition to local scholars and government representatives, the Research Advisory Boards include community representatives from the neighborhoods included in the research. While including government

officials was important to ensure government buy-in to the research, the composition of the Boards was skewed towards community representatives to enhance the voice of residents from the selected urban neighborhoods.

Process

During the research planning phase, the IRC Maiduguri and Bukavu Research Coordinators approached identified community representatives in the target neighborhoods to discuss the implementation of the research in their communities.. During these first individual discussions, the IRC Research Coordinators explained the purpose of the study and invited them to serve as members of the Research Advisory Board. The IRC Research Coordinators asked a set of questions to gather inputs about key issues at the intersection of natural resource management, urban displacement, and governance in their neighborhoods and cities affecting their communities to incorporate into the study as local research needs. Individual discussions were also held with local scholars and government representatives to invite them to serve on the Board and to ask for their input to further localize and contextualize the scope of the study. Due to the Covid-19 pandemic, all the discussions were conducted over the telephone.

In Maiduguri, the responses provided by the Board members were analyzed, and shared themes (problems & concerns) were identified. The community members of the Research Advisory Board were then invited to attend a group meeting at the IRC Maiduguri office. The Lead Researcher presented a summary of common observations for each question. The presentation of the shared themes served as an introduction to the review of the draft data collection tools. The Research Coordinator and the Research Advisory Board members discussed the tools question by question, including those considered sensitive. Feedback from the community leader members of the Research Advisory Board was used to revise the tools, including adding sections that focused on government responsiveness and communication. Due to the Covid-19 pandemic, in Bukavu, the tools were shared with the Advisory Board members electronically and feedback was received over email.

The Research Advisory Boards were mobilized once again after data collection and analysis to discuss the research findings. The Boards’ feedback was used to finalize the research findings presented in this report. These workshops were designed as a two-way learning experience to clarify outstanding questions, validate and interpret research

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

findings, discuss local dissemination and the preferred format of research outputs that would be useful for local communities, and to reflect on utilization of the research findings.

2.3 LIMITATIONS

The research was designed and led by US-based researchers. The locally hired researchers in Maiduguri and the Research Consultant in Bukavu were not involved throughout the entirety of the research process. They were primarily involved in data collection and, in Maiduguri, they were also included in the revision of tools. While they were involved in analysis and interpretation to some extent (in Maiduguri, through daily debriefings and discussions of findings; in Bukavu, the Research Consultant summarized the findings in an analytical brief, which was used in the write up of the report), the setup of the research team and research process limited the inclusion of local research inputs into the study. This was mitigated by the researchers reviewing the draft report and their feedback being used to develop the final version of the report.

The study was implemented during the Covid-19 pandemic. In Maiduguri and Bukavu, interviews with neighborhood were conducted in person, following safety and hygiene protocols. However, international travel was restricted, preventing the US-based researchers from visiting the research sites and meeting with the local researchers, Research Advisory Board members, or the research participants. The lack of firsthand unstructured observations and accompanying field notes, which are an important aspect of qualitative and particularly ethnographic research, restricts the interpretative ability of the lead researcher. This was mitigated by holding regular debriefings with local researchers in Maiduguri and asking them to provide observational notes in the interview transcripts (on respondents' demeanor, tone of voice, expression etc.); the Research Consultant in DRC was also involved in data analysis.

In May 2021, a volcano erupted in the Goma region, which was one of the originally selected research locations. The eruption caused displacement from the city and a disruption of humanitarian operations. The eruption had a significant impact on IRC's operations and called into question the appropriateness of conducting research in the city following the aftermath of such a devastating disaster. To mitigate the impact of this event, the IRC moved the research to

Bukavu, which equivalently met the site selection criteria and allowed for the exploration of the research topics as planned. The shift delayed data collection in Bukavu which, combined with limited time to collect data and the dispersed nature of the research team due to the Covid-19 pandemic, affected the ability to follow up on issues that came up in the data and would have benefitted from additional perspectives.

By design, a case study approach limits the generalizability of research findings. This known limitation was mitigated by the inclusion of two case studies. The limitations to generalizability are mitigated by providing clearly articulated site selection criteria, which researchers and practitioners can recognize as applicable to other contexts of interest with similar characteristics. Common findings derived from the two case studies characterized by different contextual factors indicate a level of relevance of the findings and potential transferability of the derived recommendations to settings with similar characteristics.

It is important to note that this study does not attempt to provide an institutional diagnosis, an organizational capacity assessment, or an analysis of organizational politics of the government institutions and actors involved in natural resource management. It also does not analyze the political economy of the cities where the research took place or of the land and water sectors it focused on. While including perspectives of government officials, traditional leaders, NGO workers, and local scholars, this study deliberately focuses on the lived experiences of host and displaced residents in selected urban and peri-urban areas in fragile contexts. It does so to amplify the voices of people mostly affected by crisis and conflict by presenting the challenges they face in their daily lives and documenting the everyday practices they employ to access natural resources and to mitigate and resolve conflicts in urban areas. To provide additional nuance to the dynamics presented in this report, more research should be conducted to better understand the contextual and organizational challenges faced by municipal authorities to inclusively manage natural resources in urban areas affected by displacement in fragile and conflict-affected settings, along with the identification of strategies to address these. By highlighting the experiences of host and displaced urban residents, the authors hope to draw attention to areas where humanitarian and development actors can support city authorities to manage natural resources in ways that are responsive to and inclusive of the voices of populations most affected by crisis.

3. LITERATURE REVIEW

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

3.1 URBAN MIGRATION AND DISPLACEMENT

Both environmental factors and conflict have resulted in the forced migration of millions across the continent of Africa (Reuveny, 2007). While popular images of refugees and IDPs tend to show these individuals residing in designated 'camps,' most refugees and IDPs end up in urban areas: rented apartments, unfinished buildings, informal settlements, and in urbanizing rural areas on the outskirts, both within formal administrative boundaries or beyond the recognized confines of a city (Earle, 2016).

Residents of these informal settlements face a variety of challenges, and these challenges are especially impactful for IDPs. In these informal settlements, millions face inadequate water and sanitation provisions, as well as legal insecurity, lack of services, and unsafe and overcrowded housing (Satterhwaite et al., 2007; Githire et al., 2020). They suffer from "lack of infrastructure such as piped water, wastewater treatment, sanitation, reliable electricity supply, health clinics, and other social services" (Stark et al., 2019). Migration to urban areas can deprive some IDPs of stable structures and strong social networks which characterize rural life (Lombard 2012). Weak public service provision in these areas also impacts the distribution of security, policing, and judicial procedures (Moser & Rogers, 2005). Income inequality is also more evident in urban areas than in rural areas (Moser, 2004). IDPs face reduced employment opportunities compared to their host community neighbors. Such economic exclusion is a vicious cycle which ensures IDP communities are excluded from formal economic and production processes (Moser & Rogers, 2005). This informality itself often prevents IDPs from accessing or even receiving knowledge about available services (IRC, 2017). On the other hand, migrating to urban areas affords people opportunities and sometimes a standard of living they would not be able to access in a rural area (Turley et al., 2013).

The establishment of and residence in informal settlements can emerge as a key source of tension between people who have been displaced and their established urban neighbors. Landholders of rural land outside the city may be distrustful and resistant to rural land being incorporated into urban areas, increasing tension. The geographic separation of IDPs can keep these residents from comfortably using public services and can increase intergroup tensions and 'othering' with more affluent neighborhoods (Mose & McIlwaine, 2014).

Urban governance across many cities is fragmented and hybrid, "encompassing multiple sites of power

where legitimacy and authority are being exercised and contested" (Büscher, 2018). In urban and peri-urban areas, communities with less access to resources are often left out of governance decisions and emergency planning. Urban policies often cater to urban elite and to wealthy economic interests, including those real estate interests who wish to gain access to the land occupied by informal settlements. These real estate interests can be domestic or foreign, and often times national and local governments will act in the interest of private sector investors, further perpetrating forced displacement and dispossession. As such, urban officials and low-income communities with informal governance structures are often at odds, with the former conceiving of the latter as a problem facing the city's development, rather than the group which most needs development policies (Satterhwaite et al., 2007). More well-off community members and neighborhoods have more influence on governance of all levels, as well as the ability to work independently of the government to solve problems themselves (Satterhwaite et al., 2007).

One difficulty lies in recognizing the precarious situation of those internally displaced persons and migrants who are displaced by climate change; such migrants often are not offered the legal protections offered to official refugees, despite facing many of the same challenges (Null & Herzer Risi, 2016).

3.2 URBAN CONFLICT AND NATURAL RESOURCE MANAGEMENT

Risk of Conflict

Climate change-related conflict is prevalent in the Sahel and African Horn regions, and many studies investigate its impact on pastoralist and herder conflicts in rural and agricultural areas. However, violence and instability can result from climate-change induced migration in urban areas as well: its likelihood depends on local context, including demographic makeup, pre-existing conflict, and economic opportunity available to both migrants and host populations (Null & Herzer Risi, 2016). Rural conflict often creates IDPs; but indeed, conflict in rural areas can follow these migrants to their new urban homes (Moser, 2005).

Urban conflict in developing countries is a complex phenomenon to track and explain. Some argue that climate migrants are less likely to cause social unrest as they find themselves weak, marginalized, and may instead try to assimilate with their host population (Null & Herzer Risi, 2016). However, others note that climate migration has the

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

potential to result in the outbreak of violent conflict through a few means: lowering the capacity of relevant institutions to attend to the population, shifting ethnic composition in cities, and provoking competition for resources between communities.

The forced displacement into urban and peri-urban areas present challenges for natural resource distribution which can result in intergroup and political conflict (Yanda & Bronkhorst, 2011). Forced displacement and urban growth are directly correlated and can cause the altering of economic and political networks within urban neighborhoods, which in turn reflect national and regional conflict dynamics (Büscher, 2018). For instance, politically salient ethnic divides which cause conflict on a national level may also cause ethnic division and segregation at the local level, especially with a sudden increase in people who are involuntarily displaced of an ethnicity or social group drastically different from pre-existent residents of their landing area. Similarly, the salience of political divides such as ethnicity and language can increase when diverse individuals alter the social composition of urban neighborhoods (Büscher, 2018).

Conflict in urban areas is a product of both structural factors (such as the structure of the city's economy, existing infrastructure, and quality of governance) and daily realities for people living in low-income urban areas (Moser, 2004). IDPs are commonly forced to the margins of cities, and in low-income areas, urban violence can erupt as a result of social exclusion and lack of opportunity and basic citizenship rights. IDPs and migrants are particularly vulnerable to the social consequences of natural resource scarcity and can suffer as the scapegoat of a variety of deeply embedded social issues (Stark et al., 2019). Such inherent distrust can manifest as conflicts between the government and in particular illegal land occupiers – often IDPs – in terms of the recognition of rights (Lombard & Rakodi, 2016). Such grievances and mobilizations necessary for the eruption of violence are more likely when the governments in question are weak or corrupt. As such, perceived state illegitimacy by the public can increase the risk of violent conflict (Earle, 2016). One of the channels through which such an event can cause conflict is through uncertainty: even if migrants do not in actuality threaten the livelihood or safety of host communities, the perception that they do may itself provoke conflict (Null & Risi, 2016).

Urban violence is impacted by different factors depending on overlapping series of identities and contextual circumstances such as socioeconomic and citizenship

status. The potential for violent conflict resulting from struggles over urban governance is contextually determined by actors and their relationships, as well as the political nature of urban governance structures and their fragmentation (Büscher, 2018). Young men from “alienated, frustrated, or excluded populations” in urban contexts are particularly vulnerable to participation in violence, including both criminal and political violence (Moser, 2005).

Reuveny (2007) suggests migration can spur conflict through four causal pathways; conflict will be especially likely when multiple channels are activated under certain auxiliary conditions, including low development or pre-existing conflict. These pathways are:

1. Where there is increased competition for resources, especially where resources are scarce in the host city and property rights are underdeveloped.
2. Where conflict- or climate- migrants are of a different ethnicity than their neighbors in the urban center to which they resettle.
3. Where there is distrust between the area of the origin of the migration and receiving areas.
4. Where socioeconomic fault lines exist which increase competition for jobs or land.

Conflict can take the form of criminal violence and illicit gang networks, intimate partner violence in the home, or even political or rebel-group violence (Moser & McLwaine, 2014). One type of violence that may result from inequality in the distribution of scarce resources is communal and intergroup violence. As Moser notes, “This goes beyond conflicts between neighbors or local communities, with cultural identity providing a base for contesting inequalities in housing and service provision” (Moser & Rodgers, 2005).

Conflicts over natural resource distribution are one of the key sources of intergroup violence in rapidly urbanizing areas. Examined below are three key natural resource-related conflict origins: water access and sanitation, land and housing, and risk of natural disaster.

Access to Water

Water has an intimate relationship with climate change as well as with migration, both of which have severe impacts on the livelihoods of urban dwellers (Viala, 2017). 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). Poor and marginalized groups, such as IDP and migrant communities, are more likely to experience this scarcity.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Increased urbanization and the demographic shifts that accompany it during forced displacement place strain on water distribution, beyond the fact that an increased population size increases the sheer demand for water and increased pressure on public service infrastructure. Decisions about how to design rapidly developing urban spaces to distribute water infrastructure, such as formal water outlets, include decisions about where to put such infrastructure. Underlying tensions can create “areas with an unfavorable or fragile supply/demand balance” and heighten the likelihood that water distribution will cause daily political conflict (Dos Santos et al, 2017).

Water insecurity is also closely related to land insecurity, as the infrastructure for managing water requires use of land; green infrastructure for long-term water security also requires land policies such as erosion control and reforestation to sustainably manage watersheds (Viala, 2017).

The relationship between water and conflict is understudied, in part because it encompasses a wide diversity of relationships which emerge on different scales of political activity (USAID, 2014). It can trigger conflict, such as when territorial ownership over vital water sources is contested. Water can also be used as a conflict tactic, such as a state purposefully maneuvering to control water supplies in order to make water access difficult for insurgents. Migration can both be a cause and an effect of water insecurity, as many times migration is spurred by insufficient resources, and increased population in landing areas can also spur conflict. Rural to urban migration, including internal displacement, “are most concerning for water management and supply because of associated shifts in demand” (USAID, 2014).

Migration flows to urban areas increase demand for infrastructure and development, which can also cause environmental stress and damage water supplies. Degradation of water sources can exacerbate conflicts regarding water supplies, and water-related infrastructure such as dams can do the same (USAID, 2014). Despite water infrastructure development generally taking place at the local level, international water issues can ‘trickle down’ to the local issues, as most water systems are shared by different countries (USAID, 2014). Where groundwater is necessary for the provision of clean water to populations, as is true across many urban areas, governance issues are particularly fraught. The extraction of ground water is a difficult and technologically-intensive process, and inefficient or unbalanced infrastructure coverage can be

a source of grievances for populations. Private sector engagement can play both a helpful and detrimental addition to water governance regimes, and create controversy over water pricing and safety. Inadequate transparency in water privatization measures and the resulting price increases can fuel violence; however, private sector influences can increase efficiency and lower cost (USAID, 2014).

Access to land

Land is a crucial natural resource both physically and conceptually; there is an emotional and national identity element to land ownership, particularly in cities, with implications for social capital, and even citizenship. When land is politicized, it increases the likelihood that inequality – and conflict – will result (Lombard & Rakodi, 2016).

An influx of IDPs can transform the urban landscape by affecting “local urban patterns of land use, land access, and the social and demographic composition of urban neighborhoods” (Büscher, 2018). This means that the use of land can change as new residents consolidate, meaning the previous uses of land – such as for grazing or agricultural purposes – can create negative relationships between urban dwellers and farmers, especially pastoralists (Magigi & Drescher, 2010). Moser notes that increased inequality in access to land and other natural resources spurs violence (Moser & Rodgers, 2005). Disputes over land and poor natural resource governance can provoke mild political conflict, or escalate into full-scale violence (one example is the civil wars in Liberia and Sierra Leone, which were at least in part based on geographic claims to lands) (Bruce & Boudreaux, 2013). The framing of national political conflicts in terms of ‘land conflict’ can also be a deliberate decision on the part of actors who want to purposefully connect conflict dynamics at different levels, either in the interest of solving these issues or focusing solutions on land-related issues (Van Leeuwen & Van Der Haar, 2016).

When land is inefficiently governed or land rights are vulnerable to corrupt enforcement, actors can maneuver land use for unauthorized extractive purposes (Bruce & Boudreaux, 2013). Urban residential areas are spatially segmented according to dynamics of civil conflict, often along ethnic lines (Büscher, 2018). The use of public spaces in urban areas are often subject to violent contestation. As a result, infrastructure – including water access points, roads, and development – are physical manifestations of authority over territory, as well as

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

legitimacy, both by official government arms or by armed groups which exert governance extra-legally, such as some gangs or rebel groups (Büscher, 2018).

IDPs with insecure housing tenure are faced with inadequate basic services, constant fear of eviction and governance authorities, risk of extralegal violent violations (including criminal violence), and social exclusion. However, it is not just the populations with insecure land tenure that suffer: such systems also result in distorted land prices, weakened government capacity, and lower revenues for local governments.

It is often everyday instability, which most often arises from ongoing violence, that can broaden and expand the scope of conflict, and the mechanisms connecting local level land conflicts with national dynamics are complex and varied (Lombard, 2012; Van Leeuwen & Van Der Haar, 2016). As Lombard (2012) notes:

land conflict has the potential to escalate into more serious violence, through the stimulation of 'low intensity localised violence', and potentially 'a situation in which frustration continues to mount, social unrest increases, and the rule of

law is openly defied', with negative consequences for local and national economies (Brown et al. 2005, 13). Certain events may trigger the escalation of conflict into violence, such as the strategic organization of particular interest groups, the availability of arms, political events and environmental disasters.

Land matters in other ways as well. The urban infrastructure of public projects such as public transportation are often made without services catering to IDP communities, further reducing livelihood potential and furthering social exclusion (Moser & Rodgers, 2005). As Moser & Rodgers (2005) note: "Violence and conflict over land is also an urban phenomenon closely linked to both squatter invasions and forced evictions – both exacerbated by changing urban land ownership patterns and increased speculative investment, aggravated in some contexts by globalization." Goldman (2011) notes how land speculation of *rural* land by the government in the interest of international businesses in Bangalore actively dispossesses these populations, highlighting the complex role the government often has in contributing both to urbanization and the production of displacement.

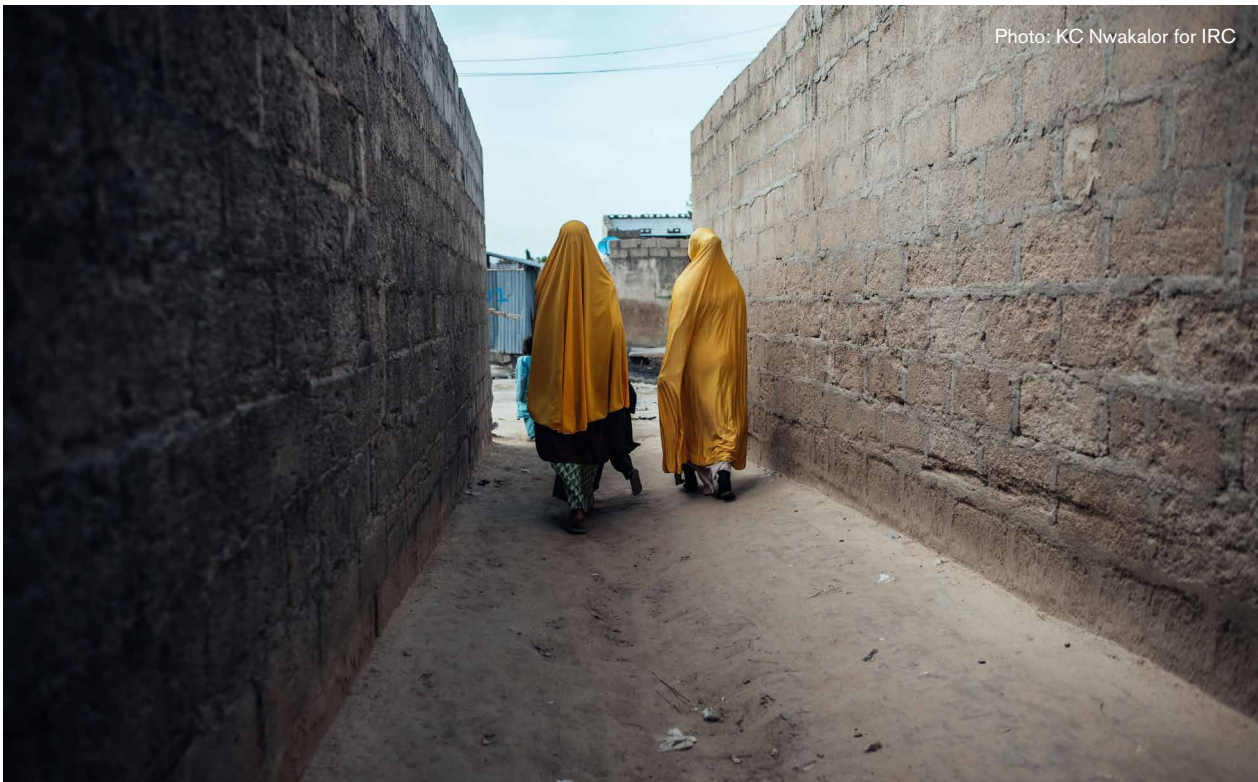


Photo: KC Nwakalor for IRC

4. FINDINGS

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Photo: KC Nwakalor for IRC

MAIDUGURI, NIGERIA

4.1 MAIDUGURI, NIGERIA

Effects of displacement on access to and competition over natural resources and pre-existing vulnerabilities

This section discusses the effects of displacement on urban natural resources, organized by type of resource, and risk of conflict.

Overall, rather than displacement and resource scarcity increasing risk of violent conflict, the sentiment shared by members of host and displaced communities was one of general precariousness, where limited availability and accessibility of natural resources 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:

“We don’t really quarrel in our community. Our poverty is enough of a problem. We don’t go about making trouble. Hunger is our number one problem. We tell our children to just mind their business and look for money to survive.”

FGD with women leaders, Suleimanti

“There are no real tensions – everyone is engaged with struggle for survival as most people are poor.”

FGD with traditional leaders, Suleimanti

Access to Water

The increase in population has impacted water access, but is not the only factor impacting the availability, accessibility, price, and quality of water in Goni Kachalari and Suleimanti neighborhoods.

Insufficient availability of water and dependence on boreholes. Respondents reported nearly universally that the existing water infrastructure is not sufficient to meet the demand.

Residents access water from boreholes, which are operated by the government, NGOs, or private individuals. Residents can access boreholes directly, but more often they gain water through private vendors who collect and sell water from the boreholes. As explained by a CBO member in Goni Kachalari - “It is the water vendors that we buy water from. They buy from private boreholes owners and sell to us”.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

“The increase in population has made access to water difficult. Even my family is affected. We spend more on water. Everyone needs the water and so water vendors charge more when the demand is high.”

Male host community member, Suleimanti

As neither Goni Kachalari nor Suleimanti are connected to Maiduguri city’s limited water infrastructure system, NGOs and private individuals have resorted to drilling boreholes to increase access to water.

“We buy water for 80% of our needs because of the collapse of the public water supply system.”

Male host community member, Goni Kachalari

However, there is overreliance on borehole drilling. As mentioned by an NGO worker, a hydrological report from the Nigeria National Emergency Management Agency warned that the “aquifer is exhausted and highly saturated” and advised focusing on borehole rehabilitation. The State Government is therefore reportedly shifting from supporting the drilling of new boreholes to “rehabilitating the ones that are not functioning”, the NGO worker explained. At the same time, the creation and rehabilitation of boreholes has not kept pace with the increased population.

Increasing cost of water access in both time and money. The respondents report increases of water prices, long waits at water points, and long distances from their homes to the water points.

“Sometimes even getting the water to buy from the water vendors is difficult. The vendors queue for endless hours in large number to buy water from the private borehole operators. The queue can be as large as 50 vendors taking turns to buy the water. [...] This has brought about high cost of water. Even the areas that have the borehole are faced with the issues of overcrowding and long queue at water points. The water is insufficient because of the overpopulation.”

CBO member, Goni Kachalari

“For large families of about 20 persons, you would need a lot of money to buy water that would be sufficient. Sometimes our people go to other areas within the community, but quite a distance from their homes to access water.”

Male host community member, Suleimanti

“Yesterday I sent my son to fetch water, and he spent the whole day waiting on the queue for his turn, until I went myself to beg a girl to allow me take her place to fetch water.”

FGD with women leaders, Goni Kachalari

Ongoing instability continues to affect water

infrastructure. Problems in access and availability of water cannot be pinned to the increase in population alone. At the time of data collection (June – July 2021), Maiduguri had been experiencing a prolonged electricity crisis resulting from an insurgent attack on power infrastructure outside of the city, forcing residents to rely on generators. Coupled with fluctuations in gas prices, this affected the accessibility of water at generator-powered boreholes:

“When the borehole is powered [by electricity or gas-powered generator] people access water from it, but if there is no gas to power the generator, there would be no water supply, which often results in scarcity and difficulty. A cart of water that used to be sold for 150 Naira now goes for 200 Naira. Some cannot afford it and would have to wait for the main borehole to be switched on and there are always long queues. Even the handpump boreholes, there are always queues and sometimes you find children fighting at such water points. We are really struggling.”

FGD with traditional leaders, Suleimanti

“When there was NEPA [National Electric Power Authority] power, we used to have sufficient water, but now that there is no electricity in the whole state, it has become very hard to get water. Even when they get fuel to power the borehole, it doesn’t last more than 2 or 3 days, and we are back to our suffering again.”

Female host community member, Goni Kachalari

A proliferation of unregulated private water supply practices exposes residents already experiencing need to exploitation and abuse. Respondents noted that not all water price hikes were a direct consequence of the conflict or increased commodity prices, which highlights the susceptibility of communities to unregulated and potentially exploitative practices of private water vendors. While water from government or NGO provided boreholes is technically free, that doesn’t mean it is free of cost and accessible to community members:

“[Water from boreholes] is hardly available for community members, as only the water vendors patronize such boreholes. These water vendors sell a cart for as high as 200 to 300 Naira (0.49 - 0.72 USD) per water cart. There was a time we held a meeting with the water vendors to address the issue of charging as much as 300 Naira per water cart. We told them that since the boreholes owners have not increased their cost of water, the vendors should not increase the cost either. We agreed that the charges for a cart should be 200 Naira only”.

FGD with CBO members, Suleimanti

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

As no interviews with water vendors were conducted, it is unclear whether they incurred other costs that might have led them to selling water at a higher price. Operating as microbusinesses who rent carts from enterprises that usually own several vehicles, the water vendors are likely impacted by cart rental price increase too.

In addition, the lack of a public water system and household reliance on private boreholes in the context of proliferating yet unregulated private service provision exposes children who fetch the water to unsafe conditions, maltreatment, exploitation, and sexual violence:

“Individuals have private boreholes that people in the community go to access water, but there are problems associated with that. We have had cases of molestation of children who go to access water, both male and female children, but such cases are usually secretly resolved. 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. Sometimes security guards in such homes flog children to prevent them from accessing the boreholes. Sometimes children are knocked down by vehicles while attempting to cross the road to go access water in neighboring communities.”

Male host community member, Suleimanti

Water pollution is common, leading to adverse health outcomes resulting from limited waste management and water supply system regulation.

Poor quality of water was reported as a major problem by residents. This is particularly problematic in areas with no sewage and drainage systems and limited waste management options such as Goni Kachalari and Suleimanti where, as noted earlier, pressures on land have impacted the availability of land for refuse disposal (Bell & Starc Card, 2021).

“The quality of the water from the vendors is not good, it spreads diseases such as kidney infection and malaria. The water sometimes changes color to red. Four to five people have died of kidney problems in this community, and we have no alternative sources.”

FGD with traditional leaders, Suleimanti

“We have a problem with space to dump refuse. It has been the major cause of malaria, flies and even cholera”.

FGD with women leaders, Goni Kachalari

As the depth of the boreholes is not regulated, many of the boreholes are shallow, which respondents highlighted as a main reason for poor water quality as water sources closer to the surface are more exposed to contamination.

“Most of the boreholes that had been drilled in this area are shallow boreholes. Shallow boreholes get contaminated easy. Contamination on the surface can contaminate water. More emphasis should equally be given to the quality of water provided, because you may be providing contaminated water to the community, and you end up getting everyone’s sick. So, you ended up doing more harm than good.”

NGO worker, Maiduguri

The water transportation model from the borehole to the home and the storage system at the household level can be problematic as the water in jerry cans is exposed to light, heat, and air pollution. At home, the water is often stored in plastic storage containers with no lid, thus exposed to the environment and can lead to hygiene issues.

Increased housing in flood-prone areas exposes residents to environmental hazards.

As the population has increased, many poor households have been driven to take housing in flood-prone areas along drainages. Some people report having to vacate their houses during the rainy season and stay with family. Floods cause pit latrines to fill up and spill, polluting the area and increasing the incidence of water-borne diseases such as cholera and malaria.

“Some houses turn to ponds during raining season, while it is raining you and the children will get drenched while the rain lasts.”

FGD with majority tribe male residents of Goni Kachalari

“We don’t have drainage network here and flooding is a serious problem during rainy season.”

FGD with minority tribe male residents of Suleimanti

Despite all the challenges that have worsened by displacement, host community members do not uniformly or exclusively blame the IDPs. Instead, their grievances are also directed towards the government.

“We have had challenge of flooding due to lack of drainage system for years. Some years back the commissioner came, and he promised us drainage. It’s been four years since we reported this challenge, but nothing has been done.”

Male resident of Suleimanti

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

“10 years ago, the population was not this high and so the scarcity was not this bad. Unfortunately, the government has not done enough to address the problem. During elections they (people in government seeking elective office) will come and make promises, when the win you will never see them again.”

Male resident of Suleimanti

Access to Land

Scarcity of residential land and increase in housing prices. Residents in both neighborhoods reported scarcity and unaffordability of land due to the rapid increase in population and constrained outward expansion of the city due to insecurity. Under population pressure and limited access at the outskirts of the city, existing urban land is expensive. Land on the outskirts of town that is accessible is expensive and out of reach for many individuals. Prices of land, houses and rent have reportedly all increased considerably in the past 5-10 years.

“The displacement has caused sudden increase of prices. To rent a house or tent to live in now is very, very difficult. [...] Their [the IDPs] arrival has made house rent prices skyrocket.”

FGD with women leaders, Suleimanti

“In the past rent was cheaper, but now it has increased. If you were paying 10 thousand Naira in the past as rent, you now pay above 50 thousand naira or more for the same apartment. This is largely due to increase in population because of the displacement.”

Male host community member, Suleimanti

Insecurity beyond the city limits and land scarcity within the city affecting livelihoods by restricting farming opportunities. Issues with land availability are not limited to residential purposes. As noted by a youth from Suleimanti, “displacement has led to overcrowding in the community ... [and] the increase in population has affected everything, including access to land” for different uses, from leisure to productive activities.

“Before now, there used to be plenty unoccupied lands. People would buy land and they would not use it immediately, so people used to farm on it or even rear animals on it. But that is not the case any longer. Now, every land is occupied with permanent structures or tents.”

Female host community member, Goni Kachalari

Residents of the peri-urban and urban neighborhoods complained about the compounding impacts of an increase

of population in the city and the presence of Boko Haram insurgents outside the city limits, which inhibits access to farmland in surrounding rural areas and has also led to an increase of food prices.

“Right now, Boko Haram are occupying the farming areas killing people. [...] They are stealing animals, recently they have stolen many animals belonging to members of this community. [...] The scarcity of land is caused by the insurgency. If the insurgency ended, it would enable all of us non-displaced people to go farm and food prices would reduce.”

FGD with traditional leaders, Suleimanti

“I don’t have adequate land for carrying out any activity. Even if I chose to farm now, I can’t get land because we have been told that we cannot go beyond the army post at the outskirt of the community. The soldiers have been warning that whoever goes beyond their duty post is on their own because the terrorist used to attack the community from that route.”

Female host community member, Suleimanti

As most of the IDPs came from rural areas and many of the urban residents also relied on farming as a main or complementary source of income, the lack of farming land has emerged as a major challenge to everyone’s livelihoods.

“Most of the people from the rural areas, which are the ones coming into a place like Maiduguri, for most of them farming is their main source of livelihood. So, after getting a place to live the first thing they do is to start looking for how to get back into their means of livelihood and farming is the first thing is that they try to explore. There’s a lot of competition for land for farming, which also puts a lot of pressure.”

NGO worker, Maiduguri

“All we need is access to farmland and nothing more. If we can get land to farm, we won’t even need the periodic food assistance or distribution we get from the government and NGOs. Farming is all we know; it is our heritage. If it wasn’t for the insurgency, some of us would have never seen an asphalt road. All we know is farming and animal rearing. It is the [conflict] displacement that brought of us out to the city.”

FGD with IDP leaders, Suleimanti

Unregulated waste disposal sites proliferating in a context of land scarcity. The lack of dedicated and properly managed waste disposal sites was reported as a problem by residents of both neighborhoods. As a result, residents resort to disposing of waste on private,

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

unoccupied land. In addition to adverse environmental and health impacts, unregulated waste disposal creates tensions in the communities.

“People dump waste on some land that belongs to individuals, which denies access for other use. Some landowners after evacuating the refuse dumped indiscriminately on their land would fence such land and no one will have access to it again for any other purpose.”

Male host community member, Suleimanti

“There is often conflict in respect of land for waste disposal. Refuse dumps are hard to find in the communities. If you dump refuse on someone’s land, that person would tell you to evacuate the refuse and it has often resulted in tension.”

FGD with CBO members, Goni Kachalari

Access to land is particularly challenging for IDPs, minority tribe members, women, and youth. While unaffordability of land and the gap between the price of land and the economic status of the interviewed residents were reported as key barriers to access to land, particularly by men and members of majority tribes, the intersectional approach to the investigation uncovered additional identity-based factors, which are listed in the continuation of this section.

Not benefitting from inherited property in the city, which is the main reported pathway to ownership among the interviewed residents in the context of high property prices, IDPs are in a particularly precarious situation¹¹. Outside of government and NGO-operated camps, the IDPs seek rental properties or rely on the goodwill of private landowners to construct shelter.

“We came here not knowing anyone. When we first came, we stayed with some people that we didn’t know for like two, three weeks until a very good Samaritan offered us a place to live. He gave us a plot of land and asked all of us to build our tent on it. Someone used to farm on the land before, but he asked the person to please allow us to build our tents on it. That is how we got where we are living today.”

Displaced woman, Suleimanti

Landowners are reluctant to offer land to IDPs for temporary use as it remains unclear when and if the IDPs will return to their areas of origin¹². When private land for shelter is available, it often comes with limitations and IDPs struggle to secure quality housing. Specifically, respondents reported inability to construct latrines.

“Private landowners fear giving out their land because they don’t know when these displaced persons will leave. Imagine someone who has given his land in 2014 and it is 2021, and the people is still there, and we don’t even know when they will be able to go back. And there is this practice where when you stay on a land for a very long time, it is easy for you to one day come and claim that that land is yours. So, that’s something the landowners fear. Then it’s making them not to easily give out their land to displaced person to live on because they don’t know when they will get this land back.”

NGO staff, Maiduguri

“Land for latrines is a very big issue. Somebody can give you his land. ‘You can construct shelter, emergency or transitional shelter on the land, but you’re not allowed to dig latrines on my land’ – that instruction they will give you. They feel like digging latrines will reduce the value of the land to some extent. [...] I think that the problem is not about the value, because I don’t think most of them want to sell their land. It is more about the extra costs they must pay if they want to develop their land, because they have to decommission the latrines.”

NGO staff, Maiduguri

While members of majority tribes largely rejected ethnicity playing a role in accessing land, women members of a minority tribe believed the opposite: “If you’re not from the tribe of the seller he might decide not sell his land to you even if you have same amount as the other.” Another participant in the FGD shared her experience:

“I bought a land a while ago from someone and when he realized I wasn’t from his tribe he revoked it.”

FGD with minority tribe women, Goni Kachalari

Similar dynamics were described by an NGO worker. As they were implementing a project supporting farmers with tools and equipment, they noticed many respondents reported not having access to farming land, which would disqualify them for the assistance. Looking for a solution to assist them, they discovered “a lot of these people [were] minorities who have fled and when they settled in new places, they were having difficulty because the people didn’t want to give them their land because they [were] not from their place”, noted the NGO worker.

“ Apart from gender, of course there is an issue around ethnicity. Minority tribes face a lot of challenges in accessing land, especially now that it’s difficult to get land for farming. People prefer giving it to those they see as their own people. You know – their tribe.”

NGO staff, Maiduguri

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

Another NGO worker also mentioned that “tribe and religion matter” but believed that the situation “started to change reduce due to information and awareness. [...] Most people are now beginning to relax some of those ideas and restrictions.”

Women from both minority and majority tribes recognized gender being a major obstacle to accessing land and reported being dependent on men to purchase land.

“Even if you have your money, you will need a man – your husband or a trusted male relative – to guide you in anything related to buying land”.

FGD with displaced women, Goni Kachalari

“If a woman wants to buy land, she needs a man to even show that she is serious if not no one will take her seriously.”

FGD with displaced women, Goni Kachalari

In part, this is due to the Land Use Act from 1978, which allows only the head of household to apply for registration, limiting women’s access to ownership and titling.

“The truth here is that we don’t have equal access to land with our male counterpart. Even if you have you have same [full] amount of money, they will prefer to give that land to a man rather than give it to a woman.”

FGD with displaced women, Suleimanti

Research Advisory Board explained women were allowed to own land and houses but were usually asked probing questions and had to be backed by a male as guarantor because of cultural barriers. The traditional leader members of the Research Advisory Board believed that this was the due process to follow – an indication that patriarchal norms govern women’s ability to access land. Women are also not part of decision-making bodies and women we interviewed reported being absent from decision-making processes about access to natural resources or any or other development issues:

“Women are usually not involved in most decision making in this community. [...] We are not considered stakeholders at all and our suggestions or opinion as women don’t matter much to men.”

FGD with majority tribe women, Suleimanti



Photo: Kellie Ryan for IRC

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

The relationship between displacement, resource scarcity and gender-based exclusion remained unclear and other research indicates that the effects of displacement may vary. There is some evidence that displacement and violence have set in motion “changes to the rules, norms and processes that govern everyday life for women and for men in Northeast Nigeria”, with some women feeling that displacement increased their autonomy, while others believed that women on their own remained very vulnerable (Hartman, 2019).

Due to high rates of youth unemployment, it is very challenging for youth to buy land for housing in job and housing markets affected by displacement. Renting is their only option but is expensive and comes with its own challenges, especially for young families:

“Accessing land for the youth has become more difficult, as most of us cannot afford it ... For the youths, how can we afford land, when we don't have jobs? The only way out of this challenge is for the youth get an apartment to rent. But even renting hard – in the past was just one thousand Naira, but currently rent goes for 35 thousand Naira and above. Unfortunately, if you have plenty children and want to rent an apartment, because of the situation we are in today, owners are reluctant to rent their house to intending tenants with many children.”

Male host community member, Suleimanti

Youth unemployment and ‘idleness’ are widely recognized as a major problem in Maiduguri, leading to increased crime rates and possibly increasing risks of insurgent exploitation. Research Advisory Board members noted youth unemployment as a key factor for conflict vulnerability.¹³

Risk of Conflict

Tensions around resource scarcity can lead to interpersonal violence, but have not escalated to intergroup violence. Respondents didn't report an increase in violent intergroup conflict during the last few years due to the influx of IDPs, despite both Suleimanti and Goni Kachalari experiencing 3 of the 4 channels Reuveny (2007) referenced earlier that can spur conflict from migration. While they reported tensions around water and land, none of the respondents reported communal or intergroup violence because of resource scarcity. Land-related conflicts are primarily a result of fraudulent deals, where the same plot is sold to multiple buyers. Water related tensions are interpersonal or between families and sometimes they escalate to physical violence.

“There are no serious conflicts, let alone being violent. People here quarrel over fetching water, who goes before whom, that is the issue of queuing up...that is a minor quarrel they always have here about water, but it does not lead to violence.”

Female host community member, Goni Kachalari

“The growth in population has resulted in tension over water and land. There are frictions here but not frequently. Inadequate water supply leads to friction during attempts to access water. [...] this has led to prolonged tension between families. Some people have been insulted and labeled as witches during abusive exchanges at water points.”

Male host community member, Suleimanti

While no intercommunal conflict was detected and most respondents, including IDPs and minority tribe members, reported peaceful coexistence, there are apparently instances where people act on grievances that are identity-based, as exemplified by an incident involving youth described by an NGO worker:

“There were a lot of people at the water point fighting to get water. At some point, some aggressive youths got violent and destroyed the solar panel. We've seen instances where the solar panel has been broken because they believe the minority group denied them their right in terms of getting water. So, they decide to break the solar panel!”

NGO worker, Maiduguri

Relationships formed through extended co-habitation may contribute to mitigating the risk of violent of conflict. Advisory Board Members credited peaceful coexistence between host communities and IDPs to co-habitation in urban communities¹⁴. Since the displacement crisis started in 2014 and led to a situation of protracted displacement, IDPs and host community members “formed family ties through inter-marriage”, as noted by a traditional leader in Suleimanti. This was echoed by an NGO worker:

“The reasons behind [conflict not escalating to violence] is that these people have been here for several years, 5 or so, so they already have a friendship or good relations.”

NGO Worker, Maiduguri

While not explicitly mentioned by the interviewed respondents, the peaceful cohabitation between host and IDP communities might in some cases also be credited to shared ethnic affiliation and existing family ties.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Insufficient consultation of communities impacted by urban development interventions can lead to tensions between communities and the authorities.

As the population of Maiduguri has grown, urban planning has not met demand. Many poor households have been driven to take housing in flood-prone areas along drainages. As explained by a State Government official, the current administration is focused on regulating unplanned areas, including Suleimanti and Goni Kachalari, to ensure developments comply with city and state plans, and is “paying special attention that properties haven’t blocked the natural flow of water”. At the time of data collection (June - July 2021), respondents living and operating in the researched neighborhood were concerned about potential demolitions. Residents without formal land titles, including IDPs, are particularly disadvantaged because they do not qualify for compensation. An NGO staff person recorded complaints from residents who were forced to settle on flood-prone areas and noted there is “fear among people” but also resistance, which in some cases escalated to violent confrontations between residents and state officials:

“We’ve seen resistance from community, people have now become aggressive towards the agency – whenever anyone from the BOGIS [Borno Geographic Information Service] is moving through the community they must go with strong security. There was a recent episode of stoning from the community. Also, detention is raising [in response]. [...] If the situation continues as it is now, it may lead to a crisis and possibly loss of life and property.”

NGO worker, Maiduguri

Formal and informal governance structures and approaches to manage natural resources and mitigate conflicts

This section is organized by resource type and narrated through the key findings that emerged from the individual and group interviews at the neighborhood level, the city level, and the relationship between the two. Adopting a systems lens, it discusses how and to what extent approaches adopted jointly, independently, or in response to one another among actors involved in the provision, management and utilization of natural resources, respond to the needs of the communities, enhance their resilience, and mitigate the risk of violent conflict. In doing so, it also identifies limitations to the responsiveness of the structures and to the inclusiveness and sustainability of the approaches employed by the actors involved.

Water Management

Respondents largely recognized the Government, NGOs, and private individuals as the main providers or enablers of access to water. While several individuals reported improvements, despite the multiple actors involved in water provision, access to water remained variable and insufficient in many areas.

“The Government has helped greatly. The boreholes they provided have helped in easing the water scarcity. For the NGOs, they have helped in providing handpump boreholes, which is helping the community access water. The individuals have also tried in making water available through their private boreholes. The efforts have helped use immensely, but all of these are still not enough.”

Male host community member, Suleimanti

NGOs are crucial for water provision, but limited coordination with the government, traditional authorities, and communities can result in unsustainable solutions.

Boreholes serve as the main source of water for the people living in both neighborhoods. Boreholes require maintenance and have high operating costs. The local government authority increasingly struggles to manage, maintain, and repair their boreholes due to high operation costs and lack of staff, as explained in an interview with a government official: “The lack of personnel is because of the problems with hiring people due to low salaries.” The way INGOs and Government provide and manage these water services offer short- and medium-term relief but fall short of providing sustainable, long-term solutions. While not explicitly mentioned by government respondents, the clustering of international NGOs with competitive salaries in conflict and crisis-affected contexts often leads to the transition of government staff to the non-governmental sector, further eroding the capacity of local government agencies.

To improve the functioning of the boreholes, some NGOs have installed solar-powered pumps. The solar panels are made from aluminum, which makes them a valuable item to steal, and theft is very common. The submersible pumps which are used in the boreholes are prized too and are often stolen. Unlike government boreholes, which are supposed to be managed on site, the NGO drilled boreholes are not manned, which makes them even more susceptible to theft and vandalism.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

“Getting water with is a hardship because of the breakdown of boreholes drilled by government and another one drilled by an NGO has also been vandalized, the pump stolen. The community appealed to the NGO to replace the pump, which they did, but it was stolen again for the second time in 4-5 months now. We buy water at high cost due to this problem [...] The government drilled only one borehole and is not pumping water regularly. If it is vandalized, they hardly repair it on time. We are at the mercy of commercial water vendors only.”

FGD with male host community members, Goni Kachalari

While INGOs are critical for providing water to vulnerable host and displaced populations, they tend to drill boreholes with limited consultation with the government or the traditional authorities. The management and maintenance of the boreholes is not sufficiently coordinated with the government, which affects their sustainability, perpetuates dependency on INGO-led solutions, and does not contribute to strengthening local government capacities, hindering access to water in the long run.

[There is a] challenge with the boreholes constructed by the NGOs. I think because there is no proper collaboration with the Ministry of water resources, some of these boreholes breakdown and no one fixes them, except when there is community effort or the NGOs return to fix the boreholes. [...] Sometimes when such boreholes develop a fault that is the end of it because it will get to a point that they are even vandalized.”

Traditional leader, Suleimanti

Some NGO initiatives have reportedly tried to empower the community to manage their own water resources through strengthening community capacities and forming water management committees to respond to operational issues. However, the lack of financial resources and the lack of effective coordination measures between government, INGOs, and communities hindered the results of those initiatives.

Prominent individuals fill critical gaps in water provision, but with limited reliability.

In response to unmet demand, prominent individuals with boreholes on their land provide access to water. While this practice helps to meet the needs of residents and is an essential, and often only, way to access water, depending on water from private boreholes is not a reliable or systemic solution as some of the experiences described by the respondents below highlight:

“There is one man that has a private borehole. He usually starts his generator to power the borehole and he has channeled the water to a reservoir which the people access water free of charge. He has been very helpful”.

FGD with CBO members, Goni Kachalari

“Private individuals play a vital role in giving us water. There’s a particular man in this society that is very influential, he was the one that influenced the government through the Bulamas to get us this water [from the borehole] we are enjoying now. Some wealthy individuals also have boreholes in their houses, and they give us water sometimes. Before this bore hole was provided, we used to go and beg them for water, and they sometimes chased us away like dogs but thank God all that is over now.”

FGD with IDP women leaders, Goni Kachalari

“We face challenges with some practices in the community. The owners of boreholes sometimes fuel their power generators to pump water for their personal use and turn off the borehole as soon as they have met their water need for that moment. This compounds the scarcity problem because people cannot access water from such points”.

FGD with CBO members, Suleimanti

Communities respond to fill in the gaps in water provision directly and indirectly, through advocacy, mediation, and using media to demand government responsiveness. Communities cannot afford to wait and proactively address the challenges with the boreholes and provision of water. CBOs, traditional leaders, elders, and private individuals step in to ensure communities are provided with water.

“People contribute money to buy fuel for generators to power the boreholes. The government provide fuel for the generator from time to time, but when it finishes, it takes a while to be replenished. I remember someone who once repaired a faulty borehole and even gave his phone number for the community to call him when a need to fix the borehole arises. I learnt he is a rich man.”

Male host community member, Suleimanti

“There was a time the borehole broke down and our Association [Suleimanti Elders Association] had to engage commercial water tankers to distribute water to houses”

FGD with CBO members, Suleimanti

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

“As the Suleimanti Youth Development Association we make a lot of contributions to ensure access to water. Sometimes we contribute money to replace broken water pipes and replace such pipes ourselves without waiting for government.”

FGD with CBO members, Suleimanti

In addition to chipping in directly, communities rely on elders and traditional leaders to advocate with the government on their behalf, but this is not always successful.

“The elders and traditional leaders have at several points paid visit to government agencies responsible for managing government boreholes to come to the aid of the community. They specifically requested gasoline to power the boreholes and the government obliged. When there is breakdown of the borehole, the elders contact the government to intervene. Government and NGOs often render assistance when the elders request for assistance to make water accessible.”

FGD with CBO members, Suleimanti

“We can't have access the government, we can only channel our problems to traditional leaders. They are trying though, but they can't influence government decisions.”

Male host community member, Goni Kachalari

One of the traditional leaders also mentioned the option of reaching out to democratically elected Councilors, who can take the community complaints to the Chairman of the local government. If this doesn't work, “the community members mobilize a few members who would go to the Commissioner of water resources and directly complain to the officials”, a traditional leader from Suleimanti explained. However, this option was not highlighted by the interviewed residents, who predominantly reported relying on channeling their claims through traditional leaders, community groups, and NGOs.

CBOs advocate for the needs of their communities too, as pointed out by a member of a youth-led CBO:

“Sometimes we support or encourage those with private boreholes to make the water available even though they charge money for access. There was a time we held a meeting with the water vendors to address the issue of charging as much as 300 Naira per water cart. We told them that since the wash boreholes owners have not increased their cost of water, the vendors should not increase the cost too. We agreed that the charges for a cart should be 200 Naira only.”-

FGD with CBO members, Suleimanti

The communities appear to sometimes use media successfully to put pressure on the government to address their needs, usually after other options have been exhausted. Several respondents specifically mentioned the Dandal Kura Radio station, which is open for callers to air out their problems:

“When it [the problem] is [discussed] on the media it will get the attention of the governor who would ask the commissioner about the issue and appropriate action would be taken.”

Traditional leader, Suleimanti

However, this only leads to short-term fixes and does not result in long-term change.

Land Management

In contrast to problems with access to water, where different responses to improve this access were mentioned, land access challenges appear to be more intractable. These challenges can put communities, especially those most impacted by conflict and crisis, at odds with the government, and options to secure tenure or housing are limited.

“[There has not been] any help or intervention concerning land from anywhere. Instead, the government has even come to mark some houses for future demolition.”

Female host community member, Suleimanti

Government-led expansion of the security perimeter around the city to improved access to farming land.

To help urban residents access farming land on the outskirts of the city, which are otherwise under threat from the insurgency, in 2021 the Borno State government announced they would push back the security perimeter to 25km around the city in some of the Local Government Administration areas during the farming season. According to one of the interviewed NGO workers, the military forces were expected to provide safe passage and security in these areas. This government-led initiative, which appears to have been at least partially launched in response to advocacy from humanitarian NGOs, was expected to considerably improve access to farming land and did not go unnoticed by urban residents:

“This year the government has announced that all those who want to go and farm at the outskirts of the town around that Molai area where the insurgents attacked often can go and farm because the government has mobilized the soldiers to watch over the people as they farm. That is what they said but we don't know how that will go yet. I plan to go and farm there too.”

Displaced woman, Suleimanti

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

NGOs work with landowners and the government to improve access to land and housing for IDPs. NGOs are the main actors working on improving access to land and housing for IDPs living in urban areas. In addition to advocating against demolition and in support of expanding access to farming land, NGOs liaise with landowners and employ specific strategies to increase security of tenure for IDPs, if only just temporarily. An NGO worker in Maiduguri who provides HLP (Housing, Land & Property) assistance mentioned the following strategies:

- **Strengthening land titling systems:** to motivate landowners to offer their land to IDPs for shelter, the NGO works in partnership with relevant government agencies to review and regularize their titling documentation where the land is under the local government authority, registering their customary certificates of occupancy with the state land registry managed by BOGIS.
- **Offering legal help to landowners:** in partnership with the Ministry of Land, the NGO facilitates the signing of a formal agreement of temporary land use – usually 2 years – between the landowner and the IDP to provide peace of mind to landowners who are concerned about IDPs claiming ownership based on prolonged land occupancy.
- **Increasing land value:** The NGO compensates the landowners who allowed the use of their land by constructing a fence around the land or by constructing a borehole on their land, under the condition that the community can continue using the service. The NGOs also offer to decommission latrines so as not to decrease the land value.

Conflict Management

Traditional structures, especially the Bulama, are key actors in conflict mitigation and management.

Almost uniformly, the respondents credited the Bulama as key conflict mitigation and resolution actors, both for land and water related conflicts. They deescalate tensions and if conflict arises, they mediate among the parties involved.

“Misunderstandings are resolved before they get bad. The Bulamas have been helpful in this regard. They intervene timely before such situations get out of hand.”
NGO worker, Maiduguri

“Sometime there are fights at water points, but the Bulama is proactive in resolving the problem to prevent the escalation of tension.”
Male host community member, Suleimanti

“The traditional leaders have been very useful in this regard. They intervene to resolve conflicts that usually occur over water. The parties involved are invited by the traditional leaders and the issue is discussed and resolved.”

Male host community member, Suleimanti

While respondents from organizations mentioned the importance of the Lawan, the ward level traditional leaders, communities consistently highlighted the role of the Bulama as their primary point of contact, noting that they would escalate issues to the Lawan and Aja if needed.

“We rely on our Bulamas to solve issues, except if it goes too bad the police get involved.”

FGD with women leaders, Suleimanti

“We all have different Bulamas that take care of our cases, but when the issue is bigger than what he can handle, the Bulama transfers the case to the Lawan.”

FGD with women leaders, Goni Kachalari

The Bulama reportedly show strong leadership and fairness; they advocate with the government for their communities and as a result enjoy a great degree of trust and respect within the communities. Overall, the respondents describe a well-functioning and responsive traditional governance system.

In informal IDP camps, the IDP camp chairman, who usually reports to the Bulama representing the neighborhood where the camp is located, plays a similar role. In Goni Kachalari, for example, traditional leaders of host and IDP communities regularly meet to proactively discuss issues that affect both communities to reduce potential tensions.

“If we have any problems among ourselves, we go to our [IDP camp] chairman and if the chairman cannot handle it, he takes the issue to the Bulama.”

FGD with women leaders, Suleimanti

Community elders play a role in conflict resolution too. When the conflicts cannot be resolved by the Bulama, the police get involved or they are escalated to the Lawan, or the courts.

The Bulamas are tasked with checking the authenticity of land title documents - an official document that would carry the stamp of the *Lawan*, the district level traditional leader - in land transactions. However, in some communities, traditional leaders may be involved in fraudulent schemes.

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

“The Bulama have been very helpful in ensuring that those who want to buy land do not fall into the hands of bad people who sell land without genuine papers. Most times, people rely on the Bulama to help them authenticate the genuine land before buying such land. This has helped reduced conflict over land in the community.”

Male host community member, Suleimanti

“What you see in some communities is that the community leader is selling the same piece of land to multiple people.”

State government official, Maiduguri

“[T]here was even a time one traditional leader [Lawan] was removed from office, but not in this community. It doesn't happen here because even if you acquire a land and you approach us for authentication, we will contact the traditional leader to check his record.”

Traditional leader, Goni Kachalari

There are other limitations, too. Women tend to report issues to the women leaders, who in turn communicate these challenges to the Bulama. But a female respondent noted that other actors, such as NGOs, might be better equipped to deal with sensitive issues as the Bulama tend to hold traditional views that might not respond to the challenges of all victims equally:

“If you ask me, the NGOs do it better because there are confidential things that are happening that the Bulama does not know. [...] The NGOs have been successful in addressing problems in this regard.”

FGD with women residents of Suleimanti

Religious leaders, teachers, CBOs, and NGOs help prevent conflict through awareness raising, guidance, and dialogue.

Other actors that are important for conflict prevention include religious leaders who preach about peaceful coexistence during sermons. Members of the Research Advisory Board noted that teachers of primary and secondary school play a role in reducing quarrels at water points through counselling and by providing guidance to children and adolescents.¹⁵ Respondents also credited NGO efforts in conflict mitigation and awareness raising activities.

“[Conflicts] have reduced [in the past 5 years]. This is because of the effort of our traditional leaders and religious leaders in preaching unity and the NGOs efforts in encouraging peaceful coexistence.”

Male host community member, Suleimanti

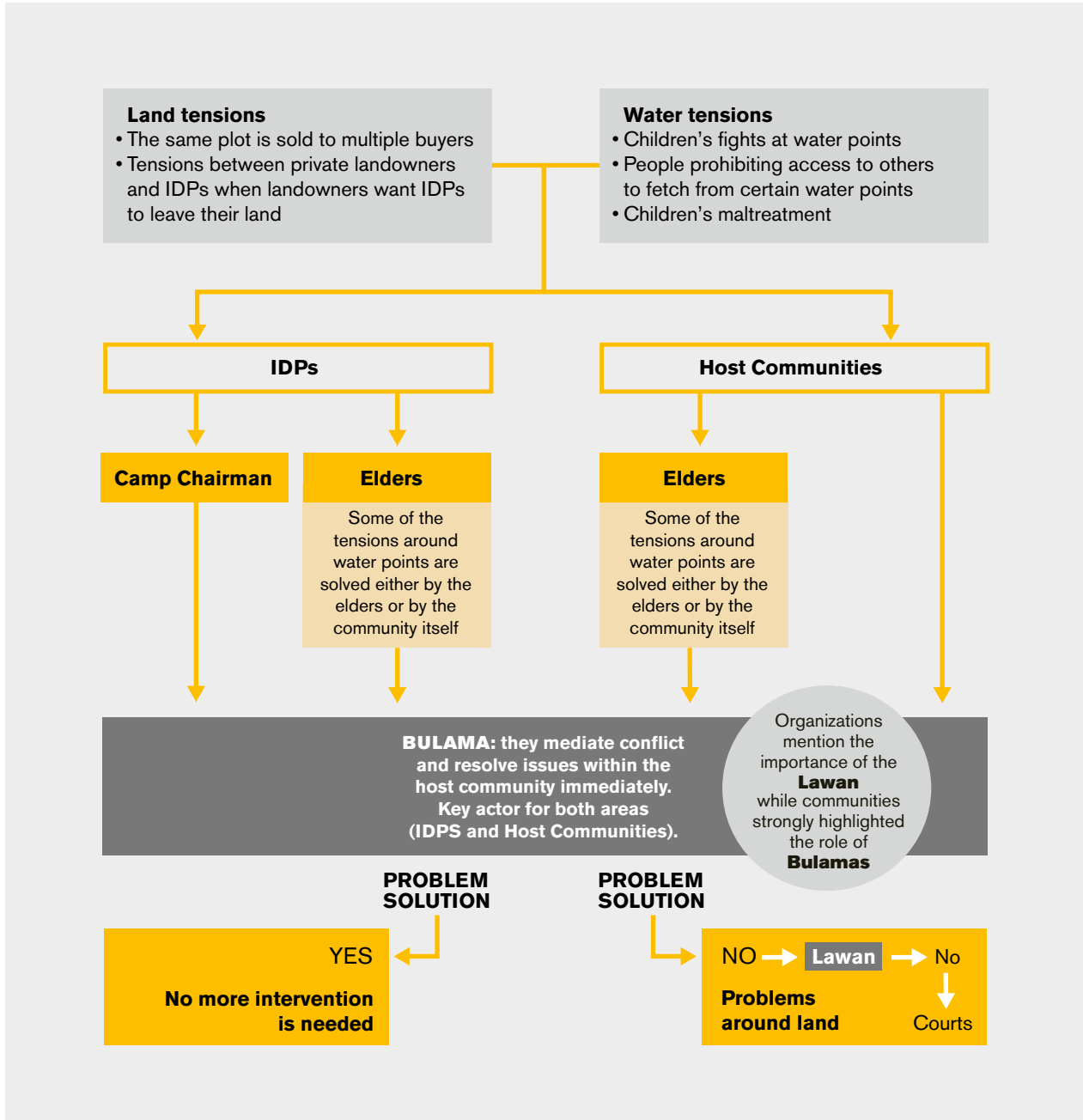
Youth associations and youth-led CBOs are also an asset for their communities as they are involved in addressing tensions that arise in their neighborhoods. A youth from Suleimanti offered the following example:

“There was a time when because of the scarcity of water, serious disagreement ensued between community members and water vendors, such that it got to a point that they were told to leave or stop selling water in the community. It was we the youth that drew that attention of the Bulama and we both intervened to resolve the misunderstanding and tension.”

Youth host community member, Suleimanti

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

FIGURE 3 CONFLICT RESOLUTION PATHWAY AT THE NEIGHBORHOOD LEVEL IN MAIDUGURI



**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

Photo: Fairphone



BUKAVU, DRC

4.2 BUKAVU, DRC

Effects of displacement on access to and competition over natural resources and pre-existing vulnerabilities

As in Maiduguri, the increase in population in Bukavu has put significant strain on services and resources in the two studied neighborhoods and the city, and particularly on land. Similarly to Maiduguri, while the increase in population has contributed to scarcity of resources, this has not resulted in violent identity-based or intergroup conflict between host and IDP communities in the studied neighborhoods of Panzi and Ciriri. Tensions around land and water in these areas do, however, escalate to interpersonal violence, and killings have been reported as a result of land conflicts.

In contrast to Maiduguri, where the nature of the population influx was both sudden and sizable, in Bukavu the population has been growing steadily with conflict-induced rural-urban migration occurring since the 1990s. Weak urban governance and poor land and infrastructure

management, rather than displacement itself, more directly emerged from discussions with respondents as factors affecting access to, and availability of, natural resources. The problems accentuated by displacement, which are described in this section, can hardly be disentangled from governance and urban planning.

In general, both in Panzi and Ciriri, interviewees mention money as the main element that defines accessibility to resources, both water and land. While some interviewees, primarily men, respondents residing in Panzi, and host community members, tended to claim there are no differences or discrimination in access to water or land, identity-based differential access was noted for IDPs/migrants.

Organized by type of resource, this section starts by describing the nature and drivers of land and water conflicts in Panzi and Ciriri. It then elaborates how displacement, compounded by weak governance and management of urbanization, affected the availability, accessibility, and affordability of water and land in the two researched areas in Bukavu.

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

Access to Land

Land scarcity and unaffordability contribute to substandard housing, poor sanitation, exposure to environmental hazards, and adverse health outcomes.

Bukavu was originally planned for a population of 300,000 inhabitants but has experienced significant growth from the 1990s due to conflict-driven displacement and a pattern of rural-urban migration. The population is now estimated to be over one million (Nyenyezi Bisoka & De Herdt, 2021). As explained by a local scholar:

“[Bukavu is affected] by the absence of an urban plan, the high price of land, the limited land market in relation to a very high demand, the disorder in the services involved in the process of access to land and the influx of people.”

Local scholar, Bukavu

As a result, the price of land is high, inhibiting access for residents, unless they have the necessary financial means or acquire land through inheritance. The pressure on land leads to anarchic construction and construction in hazard-prone areas, increasingly smaller and fragmented plots, and housing lacking services such as toilets. Waste disposal is problematic, and cases of homelessness have also been reported.

In Panzi, land scarcity as a result of population influx pushes the price of land up, as well as rent prices. The main challenges to access land in Panzi are related to the lack of space, difficulties with issuing the necessary documents, the quality of the land to be bought, and the price of the land.

“Following the rural exodus, the plots of land are in great demand. They are no longer affordable; houses are condensed because everyone wants to have a house.”

Woman, resident of Panzi

“Finding land for housing is no longer possible and this causes several pieces of land to be broken up because of overpopulation in the area, for waste each one manages in his own way due to lack of space, for economic activities the same thing, no more space and the state does not want to expand the city”

Man, resident of Panzi

Erosion, landslides, and poor waste management are among the main environmental and health problems related to pressures on land.

“There is no more empty space, neither for economic activities nor for agriculture nor for housing nor for waste.”

Man, resident of Panzi

“In Panzi we don’t have space to manage the waste. During the dry season the sun burns their waste, and during the rainy season they put it in a bag and use it as a buffer against the erosion at home, as a supporting wall.”

Woman, resident of Panzi

“When it’s a plot of land on a slope, there are always problems, especially with landslides.”

Woman, resident of Panzi

“Not enough space to have transit dumps, no access roads with easements. Waste is evacuated in open spaces: gutters, ravines, water collectors. There is also a cultural problem, people find it difficult to subscribe to waste management services, which is perceived as a luxury expense. The displaced people (with the village mentality) do not understand how one can pay for waste disposal, they do not understand certain ways of living appropriate to the city which leads to diseases. This waste situation affects the water by causing water pollution.”

Local scholar, Bukavu

Interviewees in Ciriri agree that changes in land accessibility are related to scarcity of land, which leads to increase in price and uncontrolled construction. As in Panzi, they establish a clear relationship between these changes and rural to urban population growth. They identify new settlers as one of the reasons for the increase in land pressure.

“The lack of land for waste management is a serious problem in our neighborhood because people throw their waste everywhere and this exposes us to diseases.”

FGD with male community leaders, Ciriri

“We are also witnessing the construction of toilets next to standpipes, which results in the deterioration of the quality and pollution of water.”

FGD with male community leaders, Ciriri

In peri-urban areas, characterized by hybrid governance of government and customary systems, migrants and IDPs are ‘othered’ and experience differential access to land and water.

While most respondents mention lack of resources/money as one of the main barriers to accessing land in Ciriri, migrants and IDPs originating from other areas, referred to as ‘*les venants*’ or ‘newcomers’, appear to be at a disadvantage. Some long-term residents mention the arrival of IDPs as an explanation for what led to difficulties in accessing land. Host community members – referred to as ‘natives’, ‘indigenous’, or ‘autochthone’ - have easier access to land

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

because of inheritance, while for newcomers the only option is to purchase or rent, which is expensive¹⁶.

“What hinders is that the natives here have the possibility to have land because they inherited from their parents and the land was still accessible, but we who came from elsewhere cannot have it because to get there it requires a very large amount of money, and also there is less space now.”

Displaced man, resident of Ciriri

“In Ciriri we have two categories of plots; one category for the natives who inherit and the other category for the refugees that we call “les venants”.

FGD with majority tribe women, Ciriri

While overt discrimination in access to land based on displacement was only hinted at in one FGD, and was not corroborated by other residents, an NGO worker confirmed access was more challenging in Ciriri:

“In Panzi, the procedure for accessing land is the same for everyone. In Ciriri, on the other hand, non-natives have difficulty accessing land. They are forced to negotiate with both the first occupant and the traditional chiefs.”

NGO staff, Bukavu

Unlike Panzi, which is a completely urban district, Ciriri is a peripheral district, both urban and rural in nature, and land management is largely hybrid - a combination of customary and government procedures which are based on the 1973 law. This hybridity sometimes causes overlapping of authority between traditional leaders and authorized state services, which might contribute to differential treatment of IDPs and migrants.

“In Ciriri, access to land has been governed for a very long time by customary rules; that is to say that there are landowners who have large areas and they can sell according to customary methods. They make contracts that are completely customary. Some people choose to transform these customary titles into formal titles by conforming to what the law provides.”

Local scholar, Bukavu

During the validation workshop, members of the Research Advisory Board pointed out this practice existed when Ciriri was attached to the territory of Kabare, which is a traditional and rural entity, but this was no longer the case. Since Ciriri is now attached to the Commune of Bagira, buyers no longer need to negotiate with traditional leaders. They emphasized that if the applicants had money, they will

have easy access to land: “Access to land is conditioned by money and not by the origin of the applicant.”¹⁷

However, reports on differences in access to water may point to a pattern of differential access to natural resources for IDPs in Ciriri. IDPs reported that water point managers demonstrate preferential treatment towards ‘the natives’ and discriminate against the ‘newcomers’. No such practices were reported in Panzi, where both displaced men and women agreed they “all have equal access”, as mentioned in an FGD with displaced women in Panzi and they are not identified by their neighbors as IDPs.

“[IDPs] are not identified. Everyone is considered to be living in Panzi for a long time, we do not know who was displaced and who is not.”

FGD with displaced men, Panzi

“In Ciriri, different groups of people have access to water with the same tariffs, but not with the same conditions, the locals are more privileged; compared to the visitors.[...] The native can draw, for example, five to ten cans, but I, who moved here, can only draw two cans, maximum three.”

FGD with displaced men, Ciriri

Combined, this paints a picture that appears to be consistent with previously conducted research by Van Overbeek and Tamas (2018) in peripheral areas of Bukavu, which uncovered that migrants suffered from discrimination, intimidation, and exclusion linked to ethnicity at the hands of the autochthone population, along with increasing ethnic violence and segregation stemming from conflicts over access to land. The expansion of the city into previously rural areas has created an uncertain mixture of land allocation mechanisms using a combination of statutory and customary law. The authors believe this hybridity has created uncertainty for both newcomers and multigenerational residents. In Bukavu’s periphery, which absorbs the highest amount of migrant arrivals, migrants are seen as a source of concern as they are perceived to harm their communities, further exacerbating their sense of tenure insecurity.

Access to Water

Expansion of water infrastructure has not kept pace with population growth. Population growth and displacement have put pressure on water availability. The water infrastructure and provision systems are not enough for the existing demand. Many of the issues around water accessibility and availability in the city are due to poor urban planning that has not kept pace with population growth.

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

“Displacement has caused a shortage of water and many families go to the river to fetch water.”

FGD with male community leaders, Panzi

“With the increase in population we have seen a great deterioration in the management of the system and the distribution of water, which results in several households not being served.”

Man, resident of Panzi

Availability and quality of water depend on the water source and the neighborhood. Regideso, the State company, does not provide enough water to Ciriri and the quality in Panzi is poor. Where available, the government-owned and managed water infrastructure requires maintenance as it experiences leakage and water loss and is susceptible to contamination.

“Water is not always available. There are too many cuts and deficiencies at the tap that lead us to wake up at 4am to get water elsewhere. It is difficult to have a large quantity for all activities.”

Man, resident of Panzi

Water from Regideso is usually identified as dirty and non-drinkable, and not substantially better than spring water. In Panzi, interviewees mention that a lot of problems with water supply are related to a poor management of water points and a deterioration of the distribution system.

“In creating the Panzi district, no thought was given to the water supply, so there was an increase in the population, the new population had to be connected to the existing pipes and this caused a problem not only in Panzi but in other parts of the city. As a result, the population found itself digging wells to get drinking water, and this caused several problems, many of them suffer from water-borne diseases, as it is easy to find a well next to a septic tank.”

Local scholar, Bukavu

“Mercy Corps’ water is of good quality compared to Regideso’s water, which sometimes comes dirty because their pipes are already worn out and there are insects in them.”

Woman, resident of Panzi

In Ciriri in particular, one of the main problems in terms of water accessibility is related to a decrease in the quantity of available water. Availability of water also varies seasonally. During the dry season there is less availability, which represents significant challenges. Many interviewees mention that their priority is cooking and hygiene, but that they do not have water to do all the things they would need to.

“During the dry season we have 1 bottle a day and sometimes the water doesn’t come at all.”

Woman, resident of Panzi

“Sometimes we don’t eat because of the lack of drinking water.”

FGD with male community leaders, Panzi

“In the community some people go 5 days without washing.”

Man, resident of Ciriri

Residents in both neighborhoods resort to unsafe water sources, such as untreated spring water and rivers. One of the main consequences of poor-quality water are water-borne diseases that affect the community who cannot access treatment.

“There are places where people only consume water from the Ruzizi River and this creates illnesses such as diarrhea, infection, and typhoid fever”

FGD with civil society representatives, Panzi

“Many families have registered water-borne diseases and do not have the possibility to get treatment.”

Man, resident of Panzi

Unpredictable price fluctuation and quantity limits affect water affordability and accessibility. Water

is perceived as somewhat affordable, although there are considerable differences in price depending on the provider. And while many respondents considered water to be affordable, this is not always the case especially for everyone. Shortages in water also cause the price to increase, which puts a huge burden on families. Arbitrary price hikes are also common, both by Regideso, the state provider, or managers of water points. Some mention Regideso as making capricious decisions around water price. Where Regideso distributes water, the bills are highly contested by the population because of arbitrary prices compared to the service provided, which is of poor quality. In addition, families sometimes also encounter restrictions in water accessibility due to limitations imposed by the managers of water taps.

“It’s money that gives access to water [...] because water is a business here.”

FGD with minority tribe women, Ciriri

“The price of water varies according to the will of the Regideso agents who collect the bills.”

Man, resident of Panzi

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

“Sometimes the hydrant managers wake up and tell us that each family is only entitled to 3 bottles and we comply with all these whims.”

Man, resident of Panzi

“We are witnessing several caprices on the part of the hydrant managers, sometimes they deprive us of access to water.”

Man, resident of Panzi

In areas served by the public water system, property ownership facilitates access to water, and access can be extended to tenants, but often is done at an increased fee charged by property owners. Owners of properties connected to the public water system and a subscription to Regideso have a leg up over residents who buy water from public water points. In addition to the obvious benefit of having home access to piped water, the property owners appear to charge extra for tap water to their tenants. It appears common for those with connection to the public water system to share their access with the neighbors – for a fee. Connection to the public grid provides an additional source of revenue to the property owners.

Owners of properties connected to the public water system and a subscription to Regideso have a leg up over residents who buy water from public water points. In addition to the obvious benefit of having home access to piped water, the property owners appear to charge extra for tap water to their tenants. It appears common for those with connection to the public water system to share their access with the neighbors – for a fee. Connection to the public grid provides an additional source of revenue to the property owners.

“I as a tenant pay 1500fc to have access to water. But those who have their own houses are subscribers.”

Woman, resident of Ciriri

“No [people don’t have equal access to water here]. The one who has access to water in quantity is the person who has a tap at home, because he can draw as many jerry cans as he wants and at any time. But when I want to draw from his tap, if I don’t have the 100fc to pay, there is no water for me.”

FGD with minority tribe women, Ciriri

Property owners can subscribe to Regideso through a connection request. After they pay the cost of opening the case and other associated costs, Regideso agents connect the property to the main duct. A water meter is installed, and property owners are then charged by cubic meter consumption. There are also subscribers who do not have meters and, in this case, Regideso charges a flat rate. Bills are paid monthly. Proximity to existing water distribution pipes and the ability to pay for the costs of connection seem to be key for property owners to secure a Regideso subscription.

Insufficient water infrastructure and restricted availability result in opportunity costs for women and children, and exposes them to risks of sexual and physical violence. Even when water is available, it is not necessarily easy to access. Long distances to standpipes, queues, and lengthy wait times at water points, along with

time restricted collection, are some of the main barriers for access to water in both neighborhoods.

“We use water from the Regideso and to access it you have to wake up at 4am.”

Woman, resident of Panzi

“So much time is spent at the tap, and at the risk of coming back without water, housework is delayed and one can even spend the night without eating or washing for lack of water.”

FGD with male community leaders, Ciriri

While limited availability of water affects the whole family, fetching water is an activity strongly defined by gender and women are usually in charge of water collection. Thus, it is primarily women and children who bear the costs of insufficient water infrastructure. Due to time restricted availability of water at the taps and distance to water points, women and children, predominantly girls, get up and walk to collect water early in the morning when it is still dark and often unsafe.

“The children went there [to the water source] this morning at 6am. It’s 10am now, they haven’t come back yet.”

FGD with minority tribe women, Ciriri

They are victims of sexual violence – rape is common – and abuse, including physical violence and extortion, at the water points. Water collection is not only unsafe – it is also very time consuming, and women and children bear the brunt of system inefficiencies, at the expense of other activities they could perform.

“People of bad faith take advantage of raping our girls when they get up early to fetch water.”

FGD with women community leaders, Panzi

“There is also the presence of young boys with bad intentions who bully girls and children at the water source by forcing them to pay a sum of money in order to get water from the source. If the latter resist them, they will be beaten up.”

FGD with male community leaders, Ciriri

Risk of Conflict

There were no intergroup conflicts reported related to land, but fraudulent sales and boundary disputes may lead to interpersonal violence. Respondents reported that property rights are precarious due to a combination of land speculation, alleged corruption, non-transparent tariffs of cadastral documents, and lengthy and costly procedures to obtain land titles. In this context,

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

land conflicts are increasingly frequent. They are usually caused by boundary conflicts, plot measurement disputes, or fraudulent sales – either owners selling the same plot of land to multiple parties, one of the owners selling property that is co-owned without coordination with the other owners, or by people selling the land using fake documents and pretending to be the landowners or land registry officials.

“It happens many times that the same owner sells a single plot to two or three people.”

Woman, resident of Ciriri

“Often there are crooks who pretend to be the owners and they are the ones who usually deliver the false documents and create conflicts in the community.”

Man, resident of Panzi

“Overcrowding creates conflicts between neighbors because when you don’t have space for your needs, you will be forced to exceed the boundaries of your plot.”

FGD with women community leaders, Panzi

In Panzi and Ciriri, interviewees linked scarcity and limited availability of land with violence as tensions can result in episodes of violence between neighbors and even amongst members of the same family. Some interviewees highlight

the regularity of these events. The periods when tensions increased varies across people interviewed, but they are usually linked to new people coming into the neighborhood and/or population growth. Some blamed tensions on poor land management rather than new arrivals.

“The increase in population that is at the root of these conflicts. Everyone wants to have access to land and but there is land shortage.”

Woman, resident of Panzi

“Sometimes [the conflict] is between neighbors over boundaries, sometimes it is between brothers over inheritance, sometimes it is between husband and wife when the husband has sold without informing his wife, and often the person who bought loses his money and it becomes a conflict until he puts the money back.”

Man, resident of Ciriri

“People even kill each other in the community because of the plots.”

Woman, resident of Panzi

“Poor management of land registry services leads to conflicts in the community because people argue.”

FGD with community leaders, Panzi



**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

Interviewed local scholars attribute the challenges to poor urban planning, broadly crediting this to the inability of the State to fully implement the 1973 Land law and, for Bukavu specifically, the lack of an urbanization strategy that would expand the urban limits of the city.

No intergroup conflicts were reported due to water access, but arbitrary pricing, preferential treatment, and street level corruption create tensions which can escalate to interpersonal violence. In Panzi, tensions are related to the availability of water, particularly during dry seasons, as well as to its affordability. There are tensions between neighbors when they try to fetch water at the sources, but tensions also arise when people have to pay their bill and they can't afford to, or when they've suffered price increases.

“Especially during the dry season [fights] are frequent because water is not really in abundance.”

Man, resident of Panzi

“When there is a rise in the price of bills, the population rises up”

FGD with women community leaders, Panzi

In Ciriri, tensions over water are related to its availability, and particularly the amount of water someone can fetch. Most of the events take place at the water sources, where the interviewees identified situations of violence and fights between those who fetch water, generally women. Interviewees mention that these situations are managed by the managers of the water points. However, the water managers are also directly involved in these fights as they are sometimes responsible for inequalities in water provision. Interviewees say that the managers give priority to certain users – according to the Advisory Board members, this typically includes themselves as managers and their family members, especially when water is scarce¹⁸, and discriminate against others. Some interviews mentioned corruption such as water managers accepting bribes and allowing people to skip the line as the source of tensions at water points.

“Conflicts arise over water when the person in charge of the standpipe accepts that the person who has just arrived can draw water before the person who arrived very early in the morning because he will pay, for example, 500fc per can instead of 100fc.”

Man, resident of Ciriri

“Women fight when one seeks to draw before the other who has come before the time; Often it is the person

who receives the money [the water point manager] who causes this by accepting corruption.”

Man, resident of Ciriri

“It is the acceptance of corruption that exacerbates tensions.”

Man, resident of Ciriri

“What hinders it is the discrimination that exists at the hydrant favored by the managers. There are those who draw up to 10 cans and the others have the right to only two cans.”

Man, resident of Ciriri

Formal and informal governance structures and approaches to manage natural resources and mitigate conflicts

This section is organized by resource type and narrated through the key findings that emerged from the individual and group interviews at the neighborhood level, the city level, and the relationship between the two. Adopting a systems lens, it discusses how and to what extent approaches were adopted jointly, independently, or in response to one another among actors involved in the provision, management, and utilization of natural resources. It also discusses how the approaches respond to the needs of the communities, enhance their resilience, and mitigate the risk of violent conflict. In doing so, it also identifies limitations to the responsiveness of the structures and to the inclusiveness and sustainability of the approaches employed by the actors involved.

Water Management

Access to water is managed by a plethora of actors – government agencies, including Regideso, the public water utility company in charge of water provision, and others (Ministry of Energy, Ministry of Planning, Ministry of Health, Ministry of Environment coordinated through the National Action Committee on Water, Hygiene and Sanitation at the Provincial level), Local Development Committees, local and international NGOs (they install standpipes), the church through parishes (develop wells for communities), and traditional/community leaders (who give permission to install standpipes and check on the status and quality of water), and Water Management Committees, which are set up by communities.

With a system built for 300,000 people and the population of Bukavu surpassing 1,000,000 nowadays, Regideso cannot fulfill the demand of the current population of

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Bukavu. In this context, NGOs and private sector providers play a critical role in providing water in both neighborhoods where the research was conducted. Water provision actors are not the same in Panzi and Ciriri. Mercy Corps plays a key role in Panzi. In Ciriri, respondents mentioned several organizations, including SYKAHS and Asili, with Asili being the most prominent one.

A public-private partnership between a state water company, an INGO, and a business enterprise as a promising model to improve water accessibility and quality. In coordination with Regideso, Mercy Corps is implementing the IMAGINE (Integrated Maji Infrastructure and Governance Initiative for Eastern Congo), a pioneering program that established a public-private partnership between an INGO and Chinese state-owned enterprises. The goal is to improve water infrastructure, promote behavior change, reinforce market systems for water and sanitation services, and improve governance and community accountability of these systems. Panzi is one of the areas served.

The project is very well received in the community and is credited with bringing about positive change. Respondents in Panzi reported Mercy Corps have had a significant positive impact in water provision. The standpipes installed through IMAGINE have helped to expand water provision, improve water quality, reduce water borne diseases, and reduce the time needed to travel to fetch water. The presence of Mercy Corps also seems to have forced Regideso to provide a better service and put a cap on its tariff/decrease the price of water.

“The arrival of Mercis Corps has positively affected the whole community. The can that used to cost 100fc at Regideso now costs 50fc at Regideso.”

Man, resident of Panzi

“Since the presence of Mercy Corps, Regideso has also had a fixed price. This presence has brought positive changes in the community”

Man, resident of Panzi

Before, we had to walk for miles to access to water, but the presence of Mercy Corps has solved some of the problems in the community.”

Man, resident of Panzi

At the time of data collection (August 2021), the reach was still limited, and residents reported water access not yet being sufficient to meet the needs of the community.

For-profit water provision can improve availability of water, but requires regulation and oversight to ensure affordability and quality. In Ciriri, respondents credited Asili as improving access to water. It is a business launched with an initial injection of startup capital and is intended to become self-sustaining by operating at a profit. However, as in Panzi, even though Asili has provided several standpipes, the expansion is not enough to satisfy the demand in the context of continued rapid population growth in Ciriri.

“In 2019 when Asili came [water availability improved], but as the population increases, and the years pass, especially during the dry season the amount of water decreases. We don't have the same amount that we used to have before [in 2019].”

Woman, resident of Ciriri

Respondents also criticized the quality of water provided by Asili as dirty and not drinkable because it is not treated.

“Water of ASILI is private, but the owner does not even care about its quality because it is not of good quality, we feel it by its smell and sometimes the earth is visible.”

FGD with majority tribe men, Ciriri

While companies and NGOs involved in providing water require authorization by government, government regulation and oversight are lacking, which affects both quality and affordability of the water provided, as explained by a local scholar:

“The government, which should be in charge of price regulation, plays no role [in water provision] and leaves the decision to the distributors who set the price of a can of water as they see fit. This is the case, for example, of ASILI, which sells a can of water at 100 CFA francs, while others sell it at 50 CFA francs per can, or even three cans at 100 CFA francs. There is an absence of state authority.”

“The role of the government remains ambiguous and normally the State should play the leading role. It is important for the government to put in place mechanisms and strategies to manage water sources and channel them to the new settlements. The state would have a very important and central role in providing social services but unfortunately, the reality brings us back to pessimism because we do not see the role of the state.”

Local scholar, Bukavu

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Water committees are a key mechanism for women’s participation in decision-making at the community level, but their responsiveness, inclusivity, and accountability could be improved. At the community level water is often managed by water committees. These structures, which typically have a president, a secretary, a treasurer, and a technician, are usually initiated and financed by NGOs. Managing staff are selected by the residing population and they are responsible for setting the price of water at the communal taps. Respondents recognize water committees as a helpful entity.

“The water committee organizes itself and sets the price, in my opinion they are reasonable because the 1000fc we pay each month times the number of members does maintenance on the standpipes, and in case of breakdowns, either pipes or mouths they arrange to bring a technician so that we can have access to water.”

Woman, resident of Ciriri

Often representing the majority of water committee members, women are included in decision-making and have an important role in water management. Women report being involved in water committee policy development and in finance functions. It is often women who set the price of water at the tap.

“It is 90 percent women who manage the water in the hydrant committees”

FGD with majority tribe men, Ciriri

“During the surveys we were contacted and our proposals were taken into account, even for the price fixing we were the ones who fixed it.[...] Even to charge for water in standpipes, it is us mothers who collect the money”

FGD with majority tribe women, Panzi

However, an IDP woman in Ciriri, where differences between host and displaced communities are more pronounced than in Panzi, mentioned IDPs were “not represented in the committee” (FGD with minority women, Ciriri). They were also not involved in decision-making about access to water reportedly because they were not present at the creation of the water tap, and, consequently, it appears, the set-up of the committee. This lack of representation of minorities on water committees might lead to the lack of responsiveness of the committees to the needs of IDPs, or other residents with less financial resources. It might also contribute to the previously noted

discrimination of IDPs in accessing water in Ciriri by water managers at the tap, particularly in cases where the water managers are also members of the water committee, as is the case with Sykash in Ciriri¹⁹.

“If I don’t have money, I can’t have water. I don’t have a subscription because the subscription fee is too much for me. Even though there is a tap, I often go 2km from here to “manimani” [a spring] to draw water [for free].”

FGD with minority women, Ciriri

Operated by residents connected to the public water system, a sub-subscription mechanism fills the void in water provision, but can be pricey. Many interviewees mention that they don’t directly subscribe or access water service providers, but rather access water through their neighbors. Neighborhood residents ‘sub-subscribe’ to those with a primary Regideso subscription.

“To access Regideso you have to be a subscriber or a sub-subscriber. When you are a subscriber, you pay by invoice and when you are a sub-subscriber it’s 100fc per can.”

Man, resident of Panzi

Some share costs, others pay the price dictated by the neighbor. Sub-subscribers pay more than subscribers and during water shortages, the price is even higher.

“I don’t have a tap at home, I get it from my neighbor and then we divide the bill.”

Woman, resident of Panzi

“If you don’t have a tap at home, you have to buy water from your neighbor. We pay 100fc per can and sometimes 200fc when there is a shortage.”

FGD with women leaders, Panzi

Land Management

The respondents from Panzi and Ciriri did not identify any approaches, mechanisms, or initiatives, either government or NGO-led, that would help residents of these neighborhoods access land, which many cannot afford to purchase. Instead, what emerged was a narrative of non-transparent land administration practices.

Government officials as ‘salesmen’ and land administration as the business of government.

Respondents mentioned the price of land titles being cost-prohibitive for less affluent residents and should be reduced “so that they are accessible to all regardless of social rank”, as noted in an FGD with male residents of Ciriri.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

“The land registry certification services are not free and not accessible to everyone. To certify one’s parcel at the land registry, one needs sufficient means and patience since it is not automatic.”

FGD with male residents of Ciriri

Some of the challenges stem from lack of technical capacity and resources, for example, poorly trained staff or lack of management tools. But they might also be attributed, at least to some extent, to corruption in government agencies, which some respondents directly, others indirectly alleged to, as indicated by the following quotes:

“They [the government] have not been useful because they manage to be manipulated by corruption”

Woman, resident of Panzi

“There is a kind of merchandising of the documents of the plots, the services of the state were transformed into service salesmen of the spaces even unsuitable for the construction. Today, to get a building permit, you can get it even without going to the office or the field. You pay 500\$ and they give you a receipt for 100\$. Clearly, the state services have become illegal fundraisers from the poor citizens who are not informed about the procedures. For example, an 8mx8m parcel will be divided up and the state service would issue the titles, even though it is clearly stated in the land legislation that these kinds of spaces cannot be divided up.”

Local scholar, Bukavu

Conflict Management

Embedded in their communities, neighborhood and avenue chiefs are trusted problem solvers, but only if representative of all residents. In Panzi and Ciriri, people first try to solve problems at the community level, between families or neighbors. If necessary, they resort to formal authorities – first the neighborhood or avenue chiefs, as well as the land registry office in the case of land conflicts. Going to court is seen as a last resort and yet, the courts are saddled with urban and rural land dispute cases.

“The head of the district takes care of it [conflicts]. In case of disagreement, the judiciary takes care of it”

Man, resident of Ciriri

Residents of Panzi and Ciriri highlight the role of neighborhood and avenue chiefs as problem and tension solvers if the disagreements cannot not be solved between the parties involved. When conflicts arise, the neighborhood chiefs mediate between the conflicting parties and find solutions through dialogue, bringing in the relevant authorities as needed.

“The chief of the district proceeds by dialogues with the two parties in conflict, in the event of disagreements, he makes the service of the land registry intervene to come to make the raid and that everyone exhibits his documents.”

Man, resident of Panzi

Trust in these leaders appears to be strong and helps to de-escalate conflict around resources. As explained by the Research Advisory Board members, the source of trust lies in the proximity of the neighborhood chiefs with the citizens – they collaborate with the heads of avenues and cells and, as residents of the neighborhoods they represent, they, reportedly, “understand the real problems of these neighborhoods”²⁰ and enjoy a sense of closeness and belonging with the population.

However, the situation is more complicated in Ciriri, where grassroots leaders noted in an FGD that there is a lack of trust in the neighborhood chief among some community members, allegedly due to a “leadership conflict”. This could be explained by group relations in Ciriri being often strained between host community members, who reportedly run the district “with its ambiguous legal status and customary tendencies”, and migrants “who are frustrated with not being involved in the management of their district”, as noted by a local government representative.

In contrast to the respect enjoyed by community-level leaders, trust in the government agencies appears to be limited, indicating a divide between the communities and the government. Some respondents blamed land conflict resulting from the increase in population on the government’s failure to manage the growth. Others mention corruption or abuse, as expressed by the respondent below.

“The conflicts have their origins in the increase of the population. It brings overcrowding. This is due to the lack of a managerial spirit on the part of the government authorities.”

Man, resident of Panzi

“People from the commune, the police, are considered as criminals in our country because they come just for money, we don’t know if they are sent by the state or how because often they don’t come with a mission order.”

Woman, resident of Ciriri

Community-level committees help resolve water related conflicts. Quarrels that arise during water collection are usually resolved on spot by water point managers, through dialogue, with the conflicting parties being temporarily suspended from collecting water. Some

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

respondents mentioned the heads of avenue getting involved too. If the conflict cannot be resolved on the spot, it is escalated to the water committees.

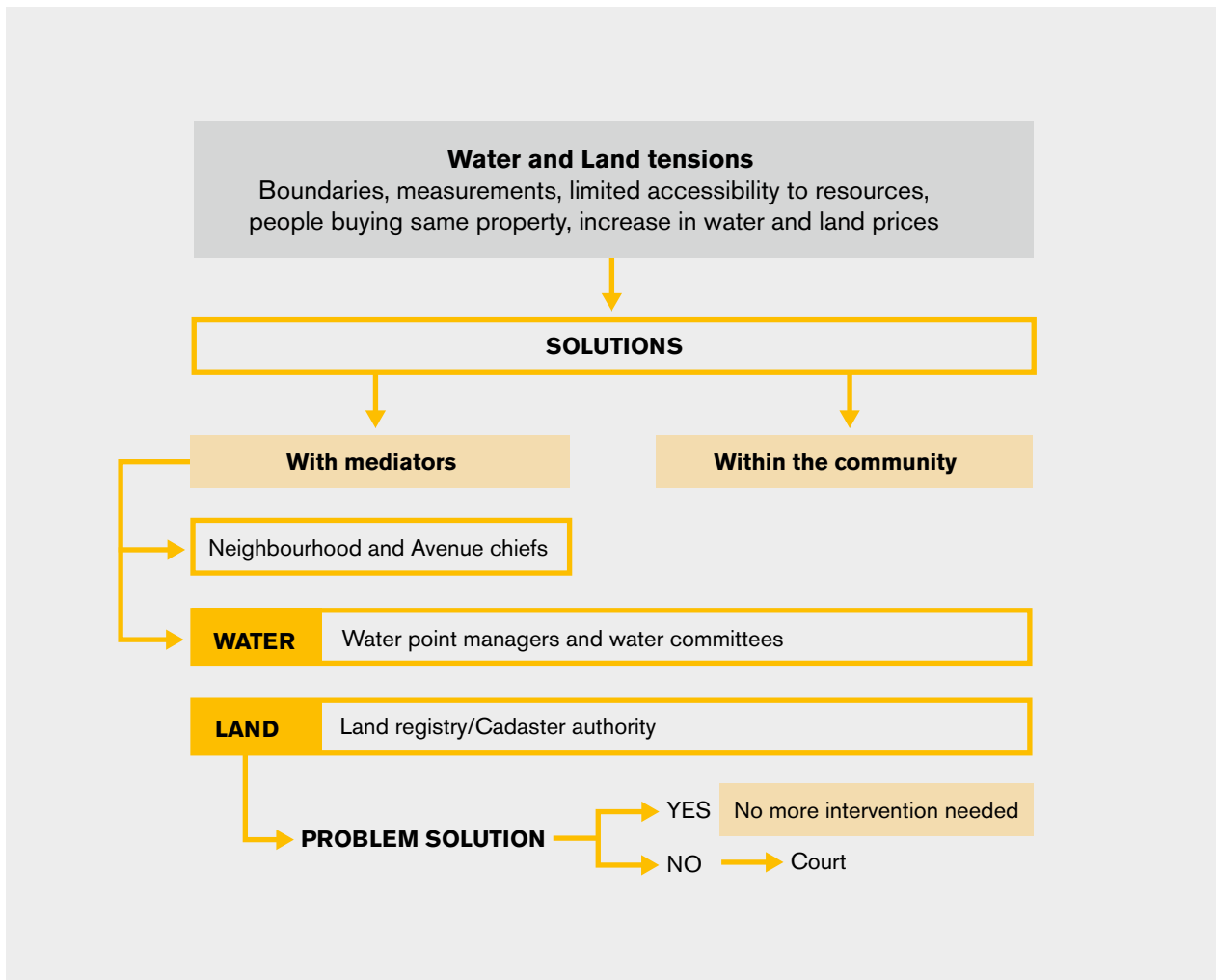
Committees at the neighborhood level help to manage distribution and solve disagreement through mediation. In Ciriri, for example, the Local Development Committee has set up a Peaceful Conflict Resolution Commission, which “listens to the two parties separately to find a middle ground in case of conflict and then draws up a reconciliation act signed by the two parties.” (FGD with male community leaders, Ciriri).

If the committees fail with mediation, they refer conflicts to formal authorities.

“There is a committee called **SADERU** which is in charge of crisis and/or conflict management; but if they don't succeed, they appeal to the hierarchy, as was the case last time when the burgomaster intervened to help resolve the conflict thanks to a general assembly which brought together all the stakeholders and in which everyone was made to understand that water is a common good and belongs only to the State”.

FGD with male community leaders, Ciriri

FIGURE 4 CONFLICT RESOLUTION PATHWAY AT THE NEIGHBORHOOD LEVEL IN BUKAVU



5. CONCLUSIONS

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

The following section synthesizes findings that were consistent across both contexts and situates it with relevant aspects of the literature review.

Displacement to urban areas due to conflict and climate may decrease the accessibility and affordability of land and water, but these effects do not necessarily lead to violent conflict.

As expected, the increase in population in Bukavu and Maiduguri puts significant strain on resources in the researched urban and peri-urban neighborhoods. As in similar urban areas and consistent with the problems identified in the literature review, land for rent or purchase is scarce and unaffordable, forcing host and displaced communities with less resources to settle in disaster-prone areas. Water is often in short supply, expensive, unsafe, and inaccessible. Water-borne diseases are common resulting from limited waste management and sanitation.

Both migrants and longtime residents are affected by outdated urban planning that is inadequate for managing urban growth. They are also affected by limited representation and accountable leadership at the city level, and, for minorities and IDPs, sometimes at the neighborhood level too. In the face of limited government regulation, residents are subject to compounding vulnerabilities and exclusions. Urban residents in these neighborhoods face challenges when engaging with the stakeholders they depend on for accessing natural resources at multiple levels – from the ‘street-level’ (as is the case with preferential behavior of water managers in Bukavu or the arbitrary price hikes by water vendors in a context of limited alternatives in Maiduguri) to government officials in Bukavu (where respondents stated there was corruption in land administration). Women and children in underserved urban areas are particularly affected, disproportionately bearing the costs of water scarcity and limited infrastructure and experiencing ‘everyday insecurity’.

Tensions around natural resources were reported in both contexts. However, despite the presence of multiple factors that were identified in the literature on migration as conducive to conflict (such as increased competition for scarce resources in host cities with underdeveloped property rights, migrants being of a different ethnicity than their urban neighbors, and the existence of socioeconomic fault lines which increased competition for jobs or land), no violent intergroup conflict between displaced and host communities was reported in the researched areas (Reuveny, 2007).

In Maiduguri, the presence of an effective, vertically integrated traditional system that communities can access at the neighborhood level was found to be helpful. Advisory Board members and some respondents suggested the lack of violent conflict between host and displaced communities can also be credited to the establishment of relationships between long-term residents and new arrivals. Other, more cynical explanations, identified in the literature review, are possible too – narratives around access to land, in particular, have not been politicized or instrumentally framed and deliberately connected to broader conflict dynamics at national levels by conflict entrepreneurs to mobilize people and promote their agenda (Lombard and Rakodi, 2016; Van Leeuwen and Van Der Haar, 2016). As the study did not explore political dynamics, this can only be hypothesized and research of the relevant aspects of the local political economy would add valuable depth and complementarity to this study. Less hypothetically, the research findings indicate IDPs in both contexts face exclusions and differential treatment, and, consistent with Null’s and Herzer’s (2016) observations for climate migrants, they are marginalized and weak, thus less likely to cause social unrest.

Over the long-term, urban governance, rather than displacement and migration, might have a larger effect on exacerbating vulnerabilities and risk of violent conflict

While tensions around increased pressures on urban land and water did not escalate to intergroup or identity-based conflict in the researched neighborhoods in Bukavu and Maiduguri, exploitative, speculative, arbitrary, preferential, and other non-transparent practices in the management of urban resources may cause situations that can lead to interpersonal violence, such as the killings over speculative land sales and boundary conflicts reported in Bukavu. Consistent with previous observations on internal climate migration, for example, the World Bank’s 2018 Groundswell report, in the contexts researched it appears it is not the scarcity of resources that leads to tensions, but the way these resources are governed and administered (Rigaud et al., 2018).

In the researched areas, while some of the exclusions in access to resources are identity-based and the observed potential fault lines for violent intergroup conflict were to some extent horizontal (between communities), a divide was observed between government authorities and communities, as non-government respondents (residents, NGO workers, scholars) expressed concern about the impacts

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

government actions might have on urban residents already experiencing resource gaps (for example, complaints over non-transparent land administration in Bukavu). While host community members expressed frustration with increased pressure on resources due to displacement, their responses also highlighted expectations of the government to effectively manage urban growth and of accountability of powerholders, recognizing the efforts of the government to address their challenges (for example, noting the efforts of the government in Maiduguri to expand access to land for farming by expanding the security perimeter).

It is not uncommon for governments and communities to have diverging understanding of an urban problem and to be at odds over approaches to manage unplanned urban growth, as is often the case with planned demolitions of informal settlements. The inhabitants of low-income communities are sometimes conceived as a problem, rather than a group needing development policies, and thus are denied recognition of rights or any recourse to secure tenure, as highlighted in the literature review (Satterwaite et al., 2007; Lombard & Rakodi, 2016). While in some cases the recognition of informal settlements as permanent might be less tenable, as is the case with settlements in flood-prone areas, there are principles and practices that can be followed to support and protect the rights of low-income residents of informal urban settlements. Local community members must be consulted (Moser & McIlwaine, 2014). Lombard (2012) argues that poor residents of informal urban settlements should have their rights supported and protected through formal integration into the existing urban space in the short term, and long-term protection of land rights. For land tenure reform, these include rapid tenure appraisals, engagements with investors and with governments, taking into account customary tenure agreements, developing property rights claims registries, and providing compensation in any attempt at land tenure reform. Landholder input in urban planning and participatory planning generally consolidated locally are also recommended (Bruce & Boudreaux, 2013).

The nature of displacement might generate different expectations of communities from the authorities. If, like in Maiduguri, the displacement was sudden and the crisis recent, displacement itself might be seen as the problem. If, however, displacement is an ongoing phenomenon and can hardly be disentangled from rural-urban migration, residents might be more likely to shift the blame towards the

authorities for not responding to displacement adequately, as opposed to blaming the displaced populations. This might have implications for responses to rapid displacement, such as that caused by conflict, and for responses to displacement caused by slow-onset events, such as climate change, requiring governments and NGOs in crisis and conflict-affected areas to focus on long-term planning to avoid exacerbating conflict in urban areas.

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 pressures, but 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. 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 and this appears to be the case with the partnership between an INGO, a government agency and a Chinese SEO to support water administration in Bukavu too (Tillett et al., 2020).

Investments in responsive and inclusive urban planning are critical to improving access, availability, and quality of urban natural resources and decreasing the likelihood of conflict. An evidence review of the effects of providing technical support to city governments, and facilitating joint engagement with residents, conducted by the IRC identified the following key factors and best practices to consider when implementing such programs: i) the need to establish strong local support when undertaking inclusive planning and program implementation ii) the need for interventions to be highly localized, attuned to the political and cultural environment, and have local capacity and available resources iii) the importance of recognizing that less official modes of entry can be as effective as formally recognized approaches, and iv) the importance of also focusing on the needs and preferences of host populations (IRC 2018).

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Community-level structures are key to managing conflict and play a role in access to natural resources, particularly water, and their effectiveness can be further improved by promoting inclusiveness

A number of approaches were observed targeting access to water, but only a handful of strategies dealing with land access were identified, and these were only to offer IDPs temporary access to land. Land scarcity appears to be a more intractable problem than limited access to water. Access to land appears to be constrained by the realm of politics and speculation, whereas access to water is primarily constricted by technology, finance, and environmental limitations. Management of water might be an easier entry-point for conflict prevention and mitigation at the neighborhood level.

In the researched urban areas, 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 (water committees, groups), 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 – the Bulama in Maiduguri, the avenue and district 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 when needed and may also provide additional accountability. 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. There are, however, limitations as traditional authorities may not be sufficiently responsive to the needs of women and minorities and neighborhood level governance structures may also not be representative of all residents, as might be the case for IDPs in Ciriri. Water committees were reportedly not inclusive and responsive to IDP needs in some areas of Bukavu but strengthening their skills might help, as it reportedly did with traditional leaders for conflict resolution in Maiduguri.

The findings of this study should be interpreted with limitations in mind. While similarities were found between the two case studies, especially the important role played by local leaders and structures in managing conflict, it is important to note there are limitations to generalizability of findings in a case study design and contextual factors play an important role in every setting. The study also does not attempt to make causal inferences, but rather aims to contribute to an understanding of dynamics around displacement and natural resource management in destination areas. The study focused on the lived experiences of the host and displaced residents in selected urban and peri-urban areas and did not explore local politics or assess organizational capacities. To provide additional nuance to the dynamics presented in this report, additional research should be conducted to better understand the contextual and organizational challenges faced by state and non-state actors to inclusively manage natural resources in urban areas affected by displacement in fragile and conflict-affected settings.

6. RECOMMENDATIONS

**CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION:
MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER
IN FRAGILE CONTEXTS**

6.1 RECOMMENDATIONS FOR PRACTITIONERS AND POLICYMAKERS

City Leaders

- Reinforce and/or establish effective and inclusive community engagement mechanisms and feedback and complaints mechanisms to understand how residents are experiencing access to water and land.
- Establish inclusive coordination and problem-solving forums at the city and community-levels with representation of government, civil society, and communities to problem-solve and develop solutions to natural resource management challenges.
- Establish or strengthen participatory urban planning processes, with an emphasis on long-term water and land management.
- Strengthen existing water and/or land management departments to engage in disaster risk reduction and climate adaptation planning.
- Explore public-private partnerships to enhance the availability and affordability of water.

Community Leaders

- Strengthen inclusion of women, displaced people, and marginalized groups in community leadership structures and decision-making to represent all residents of the community.
- Strengthen leadership skills in inclusive and accountable management of water and land disputes.
- Establish advocacy mechanisms to government and civil society organizations to channel feedback of residents and capacity strengthening and support in water and land management.

Donors

- Invest in strengthening long-term urban planning from the start of a displacement shock as an anticipatory measure for the situation becoming protracted.
- Invest in destination cities as part of climate strategies.
- Invest in strengthening existing informal governance structures to help with preventing the escalation of tensions and mitigates the risk of violence in fragile and conflict affected contexts.
- Establish systems to monitor for any negative impacts or unintended consequences of aid on conflict in urban areas.

Civil Society Organizations

- Conduct thorough context analysis informed by tools such as Political Economy Analysis, Conflict Analysis, Gender

and Social Inclusion Analysis, and Urban Context Analysis to identify entry-points for programming.

- Proactively engage formal and informal governance actors in the planning and design of activities going beyond securing approvals to establishing equal partnerships on areas of shared interest in a principled way.
- Align interventions in land and water natural resource management to long-term plans of the city. If no plans exist, then prioritize development of joint plans at city and/or community-levels.
- Strengthen creation of inclusive coordination and problem-solving forums at the city and community-levels with representation of government, civil society, and communities to problem-solve and develop solutions to natural resource management challenges.
- Partner with women-led and migrant-led organizations in the design and implementation of projects.
- Facilitate participatory disaster risk reduction and climate adaptation planning in urban areas to enhance urban resilience, especially risk of flooding and heatwaves.
- Explore public-private partnerships in water resource management to enhance the availability and affordability of and sustainable access to water.
- Prioritize land use planning interventions in partnership with national/local government as both a humanitarian and development approach. Focus on participatory and community-level land registration procedures, to assure long term sustainability and to diminishing the barriers women, IDPs and ethnic minority groups have in accessing land.

6.2 RECOMMENDATIONS FOR FUTURE RESEARCH

This study provides a broad overview of issues that emerge at the intersection of natural resource management, hybrid governance and conflict in urban areas in fragile contexts. Following studies should focus on in-depth exploration of specific topics and testing of models and approaches to deal with key challenges and leverage opportunities to contribute to inclusive, sustainable and conflict-sensitive natural resource management in fragile and conflict-affected urban areas.

Increase understanding of contextual and organizational constraints of city-level state and non-state actors in fragile contexts

- Research should be conducted to better understand the contextual and organizational challenges faced by state and

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

non-state actors and structures at the city and community level to inclusively manage natural resources in urban areas affected by displacement in fragile and conflict-affected settings, along with the identification of strategies to address these.

Innovation and learning in inclusive city planning in fragile contexts

- Explore, design and test partnership modalities between non-governmental humanitarian, development, and peacebuilding actors, including CBOs, with state and municipal authorities for inclusive land management. Specifically, this could focus on participatory, community-level land registration procedures that bridge customary and state institutions in urban areas affected by conflict and displacement and in disaster-prone areas.
- Explore, design and test partnership modalities between private sector, non-governmental humanitarian, development, and peacebuilding actors, including CBOs, with state and municipal authorities for conflict-sensitive, inclusive and sustainable management of water resources. Specifically, this could focus on identifying strategies to leverage local private sector actors to improve availability and quality of water in a sustainable and affordable way, including technologically innovative ways.
- Role of NGOs in promoting more inclusive and equitable societies and potential pitfalls in hybrid urban governance contexts
- The role of NGOs in contexts of hybrid urban governance in FCAS, particularly their impact on local power dynamics and potential pitfalls, including exacerbation and/or mitigation of identity-based exclusion and other impacts of conflict and crisis. This could focus on the identification of approaches that can be employed to improve inclusiveness and responsiveness of indigenous structures to the needs of marginalized groups, particularly women and LGBTQI individuals, without diluting their effectiveness in managing conflict.

REFERENCES AND ENDNOTES

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

References

- Adamo, S. (2010). Environmental migration and cities in the context of global environmental change. *Current Opinion in Environmental Sustainability*, 2 (3), 161-165. <https://doi.org/10.1016/j.cosust.2010.06.005>
- Barrios, S., Bertinelli, L., Strobl, E. (2006). Climatic change and rural-urban migration: The case of sub-Saharan Africa. *Journal of Urban Economics*, 60 (3), 357-371. <https://doi.org/10.1016/j.jue.2006.04.005>
- Bell, M. and Starc Card, K. (2021). Maiduguri City Scoping Paper. African Cities Research Consortium. https://www.african-cities.org/wp-content/uploads/2021/12/ACRC_Maiduguri_City-Scoping-Study.pdf
- Bergholt, D., & Lujala, P. (2012). Climate-related natural disasters, economic growth, and armed civil conflict. *Special Issue on Climate Change and Conflict*, 49 (1), 147-162. <https://doi.org/10.1177%2F0022343311426167>
- Boas, I., Farbotko, C., Adams, H., Sterly, H., Bush, S., van der Geest, K., Wiegel, H., Ashraf, H., Baldwin, A., Bettini, G., Blondin, S., de Bruijn, M., Durand-Delacré, D., Frohlich, C., Gioli, G., Guaita, L., Hut, E., Jarawura, F., Lamers, M., Lietaer, S., Nash, S., Pigué, E., Rothe, D., Sakdapolrak, P., Smith, L., Furlong, B., Turhan, E., Warner, J., Zickgraf, C., R, Black, M, Hulme. (2019). Climate migration myths. *Nature climate change*, vol. 9 (11), 901-903. <https://doi.org/10.1038/s41558-019-0633-3>
- Bolton, L. (2020). Water infrastructure in fragile- and conflict-affected states. K4D Helpdesk Report 912. Brighton, UK: Institute of Development Studies.
- Buhaug, H. (2015). Climate-conflict research: some reflections on the way forward. *WIREs Climate Change*, 6 (3), 269-275. <https://doi.org/10.1002/wcc.336>
- Büscher, K. (2018). African cities and violent conflict: The urban dimension of conflict and post conflict dynamics in Central and Eastern Africa. *Journal of Eastern African Studies*, 12(2), 193–210. <https://doi.org/10.1080/17531055.2018.1458399>
- Bruce, J., & Boudreaux, K. (2013). Land and Conflict: Land Disputes And Land Conflicts [Issue Brief]. Land Links at USAID. <https://www.land-links.org/issue-brief/land-disputes-and-land-conflict/>
- Cattaneo, C., Beine, M., Fröhlich, C., Kniveton, D., Martínez-Zarzoso, I., Mastrorillo, M., Millock, K., Pigué, E., Schraven, B. (2019). Human Migration in the Era of Climate Change. *Review of Environmental Economics and Policy*, Association of Environmental and Resource Economists, vol. 13(2), pages 189-206.
- Dos Santos, S., Adams, E. A., Neville, G., Wada, Y., de Sherbinin, A., Mullin Bernhardt, E., & Adamo, S. B. (2017). Urban growth and water access in sub-Saharan Africa: Progress, challenges, and emerging research directions. *Science of The Total Environment*, 607–608, 497–508. <https://doi.org/10.1016/j.scitotenv.2017.06.157>
- Earle, L. (2016). Addressing urban crises: Bridging the humanitarian-development divide. *International Review of the Red Cross*, 98(1), 215–224. https://international-review.icrc.org/sites/default/files/irc_97_901-13.pdf
- Githira, D., Wakibi, S., Njuguna, I. K., Rae, G., Wandera, S., & Ndirangu, J. (2020). Analysis of Multiple Deprivations in Secondary Cities in Sub-Saharan Africa (Analysis Report EMIT 19061). Ministry of Foreign Affairs of the Netherlands. <https://www.unicef.org/esa/reports/analysis-multiple-deprivations-secondary-cities-sub-saharan-africa>
- Goldman, M. (2011). Speculative Urbanism and the Making of the Next World City. *International Journal of Urban and Regional Research*, 35(3), 555–581. <https://doi.org/10.1111/j.1468-2427.2010.01001.x>
- Gooijer, G., & Thomasson, F. (2006). Water and Urban Conflict. Discussion on issues and a review of Sida projects. SIDA. <https://www.alnap.org/help-library/water-and-urban-conflict-discussion-on-issues-and-a-review-of-sida-projects>
- Hartman, A. (2019) The HLP Rights of Conflict-Affected Women in Northeast Nigeria. Norwegian Refugee Council. <https://www.nrc.no/resources/reports/the-hlp-rights-of-conflict-affected-women-in-northeast-nigeria/>
- IMPACT Initiatives (2020). Understanding the Humanitarian and Service Delivery Related Needs of the Population in Three Vulnerable Neighborhoods In Maiduguri, Nigeria.
- International Rescue Committee. (2017). The Right to the City for Urban Displaced: A Review of the Barriers to Safe and Equal Access to the City for the Displaced Residents of Dar es Salaam. International Rescue Committee (IRC). <https://www.rescue-uk.org/sites/default/files/document/1289/therighttothecityforurbandisplacedweb.pdf>
- International Rescue Committee. (2017). Violence in the City: A Systematic Review of the Drivers of Violence against Displaced Population in Urban Crisis and Post-crisis settings. International Rescue Committee (IRC). <https://www.rescue-uk.org/sites/default/files/document/1290/violenceinthecityweb.pdf>
- International Rescue Committee. (2018). Inclusive City Planning Intervention review. Unpublished.
- Jacobs, C., Milabyo Kyamusugulwa, P. (2018). Everyday Justice for the Internally Displaced in a Context of Fragility: The Case of the Democratic Republic of Congo (DRC). *Journal of Refugee Studies*. 31 (2). Pages 179–196, <https://doi.org/10.1093/jrs/fex025>
- Lombard, M. (2012). Land tenure and urban conflict: A review of the literature (Working Paper No. 8). Global Urban Research Centre. http://hummedia.manchester.ac.uk/institutes/mui/gurg/working_papers/GURC_wp8_000.pdf
- Lombard, M., & Rakodi, C. (2016). Urban land conflict in the Global South: Towards an analytical framework. *Urban Studies*, 53(13), 2683–2699. <https://doi.org/10.1177/0042098016659616>
- Mach, K.J., Kraan, C.M., Adger, W.N. et al. (2019). Climate as a risk factor for armed conflict. *Nature* 571, 193–197. <https://doi.org/10.1038/s41586-019-1300-6>
- Magigi, W., & Drescher, A. W. (2010). The dynamics of land use change and tenure systems in Sub-Saharan Africa cities; learning from Himo community protest, conflict and interest in urban planning practice in Tanzania. *Habitat International*, 34(2), 154–164. <https://doi.org/10.1016/j.habitatint.2009.08.004>

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

- Moser, C. O. N. (2004). Urban violence and insecurity: An introductory roadmap. *Environment & Urbanization*, 16(2). <https://gisf.ngo/wp-content/uploads/2014/09/0381-Moser-2004-Urban-Violence-and-Insecurity-An-Introductory-Roadmap.pdf>
- Moser, C. O. N., & Rodgers, D. (2005). Change, Violence and Insecurity in Non-Conflict Situations [Working Paper]. <https://www.brookings.edu/wp-content/uploads/2016/06/200503moser.pdf>
- Moser, C. O. N., & Mcllwaine, C. (2014). New frontiers in twenty-first century urban conflict and violence. *Environment and Urbanization*, 26(2), 331–344. <https://doi.org/10.1177/0956247814546283>
- Krampe, F. & Nordqvist, P. (2018). Climate Change and Violent Conflict: Sparse Evidence from South Asia and South East Asia , SIPRI. <https://www.sipri.org/publications/2018/sipri-insights-peace-and-security/climate-change-and-violent-conflict-sparse-evidence-south-asia-and-south-east-asia>
- Null, S., & Herzer Risi, L. (2016). Navigating Complexity: Climate, Migration, and Conflict in a Changing World [Discussion Paper]. Woodrow Wilson International Center for Scholars. <https://www.wilsoncenter.org/publication/navigating-complexity-climate-migration-and-conflict-changing-world>
- Nyenyenzi Bisoka, A. & De Herdt, T. (2021). Bukavu: City Scoping Study. African Cities Research Consortium. https://www.african-cities.org/wp-content/uploads/2021/12/ACRC_Bukavu_City-Scoping-Study.pdf
- Organisation for Economic Co-operation and Development (OECD). (2016). States of Fragility 2016: Understanding Violence. <https://doi.org/10.1787/9789264267213-en>
- Payne, G., Piaskowy, T., & Kuritz, L. (2014). Land Tenure in Urban Environments. LandLinks. <https://land-links.org/issue-brief/land-tenure-in-urban-environments/>
- Pech, L. & Lakes, T. (2017). The impact of armed conflict and forced migration on urban expansion in Goma: Introduction to a simple method of satellite imagery analysis as a complement to field research. *Applied Geography*, 88(2017), 161-173. <https://doi.org/10.1016/j.apgeog.2017.07.008>
- Pieterse, E. (2014). Filling the void: An agenda for tackling African urbanization. Parnell, S. and Pieterse, E. (Ed.), *Africa's Urban Revolution*. London: Zed Books.
- Podesta, John. (2019). The climate crisis, migration, and refugees. Brookings. <https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees/>
- Reuveny, R. (2007). Climate change-induced migration and violent conflict. *Political Geography*, 26(6), 656–673. <https://doi.org/10.1016/j.polgeo.2007.05.001>
- Satterthwaite, D., Huq, S., Pelling, M., Reid, H., & Romero Lankao, P. (2007). Adapting to Climate Change in Urban Areas: The possibilities and constraints in low- and middle-income nations. No. 1; Human Settlements Discussion Paper Series. International Institute for Environment and Development (IIED). <https://pubs.iied.org/10549IIED/>
- Mobjörk, M., Gustafsson T., Sonnsjö, H., van Baalen, S., Dellmuth, L.M & and Bremberg, N. (2016) Climate Related Security Risks: Towards an Integrated Approach. Stockholm International Peace Research Institute (SIPRI). <https://www.sipri.org/sites/default/files/Climate-related-security-risks.pdf>
- Stark, J., Mataya, C., & Lubovich, K. (2019). Climate Change, Adaptation, and Conflict: A Preliminary Review of the Issues. USAID. <https://www.climatelinks.org/resources/climate-change-adaptation-and-conflict-preliminary-review-issues>
- Tillett, W. Trevor, J, Schillinger, J & DeArme, D (2020): Applying WASH systems approaches in fragile contexts: A discussion paper. https://washagendaforchange.org/wp-content/uploads/2020/10/WASH-Syst.-Str_Fragile-Contexts_Final.pdf
- Turley, R., Saith, R., Bhan, N., Rehfuess, E., Carter, B. (2013). Slum upgrading strategies involving physical environment and infrastructure interventions and their effects on health and socio economic outcomes. Cochrane Database of Systematic Reviews. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010067.pub2/full>
- UNHCR. (2020). World Cities Day: Cities lead the way in protecting forcibly displaced against impact of COVID-19. Press Release. <https://www.unhcr.org/uk/news/press/2020/10/5f9c01704/world-cities-day-cities-lead-way-protecting-forcibly-displaced-against.html>
- UNHCR. (2020). Forced Displacement in 2020. <https://www.unhcr.org/flagship-reports/globaltrends/>
- USAID. (2014). Water & Conflict: A Toolkit For Programming. United States Agency for International Development (USAID). <https://www.globalwaters.org/resources/assets/water-and-conflict-toolkit-programming#:~:text=Explores%20the%20relationship%20between%20water,USAID%20and%20development%20community%20experiences>
- Van Overbeek, F., & Tamas, P. (2018). Autochthony and insecure land tenure: the spatiality of ethnicized hybridity in the periphery of post-conflict Bukavu, DRC. *Journal of African Studies*, 12(2), 290-309. <https://research.wur.nl/en/publications/autochthony-and-insecure-land-tenure-the-spatiality-of-ethnicized>
- Van Leeuwen, M., & Van Der Haar, G. (2016). Theorizing the Land–Violent Conflict Nexus. *World Development*, 78, 94–104. <https://doi.org/10.1016/j.worlddev.2015.10.011>
- Viala, E. (2017, August 25). What is Water Security? <https://www.climatelinks.org/blog/what-water-security>
- Rigaud, K., de Sherbinin, A., Jones, B., Bergmann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S., Midgley, A. (2018). Groundswell: Preparing for Internal Climate Migration. World Bank, Washington, DC. World Bank. <https://openknowledge.worldbank.org/handle/10986/29461> License: CC BY 3.0 IGO."
- Yanda, P., & Bronkhorst, S. (2011). Climate change and conflict: Conflict-sensitive climate change adaptation in Africa. (Policy & Practice Brief No. 014; Knowledge for Durable Peace). ACCORD: The African Centre for the Constructive Resolution of Disputes. https://www.files.ethz.ch/isn/137666/policy_practice14.pdf
- Yin, R. (2003). Case Study Research: Design and Methods. Thousand Oaks, Calif: Sage Publications.

CITIES AT THE FOREFRONT OF CONFLICT AND CLIMATE MIGRATION: MITIGATING THE RISKS OF CONFLICT OVER URBAN LAND AND WATER IN FRAGILE CONTEXTS

Endnotes

- 1 Environmental degradation and competition for scarce resources, including land, are not all driven by climate change. But climate change can compound existing environmental issues, such as overpopulation and poor agricultural practices.
- 2 “IDP” OR “internally displaced” OR “refugee” OR “migrant” OR “returnee” OR “asylee” OR “displaced”
AND “marginalized groups” OR “low-income communities” OR “urban population”; “vulnerable urban population” OR “slum residents” OR “residents of informal settlements”
AND “sub-Saharan Africa” OR “Goma” OR “Maiduguri” AND “urban”
AND “environmental change” OR “climate change” OR “resource scarcity”
AND “fragile” OR “FCAS” OR “conflict” OR “war” OR “disaster” OR “intergroup violence”
AND “natural resource management” OR “NRM” OR “governance” OR “conflict prevention” OR “conflict mitigation” OR “conflict management” OR “resilience” OR “intergroup competition” OR “land management” OR “access to land” OR “access to water”
AND “impact evaluation” OR “contribution analysis” OR “outcome evaluation” OR “theory-based evaluation” OR “process tracing” OR “outcome mapping” OR “outcome harvesting” OR “qualitative comparative analysis” OR “realist evaluations” OR “realist synthesis” OR “case study” OR “outcome evaluation”
Not all databases allow for Boolean operators or unlimited combinations of search terms. Each search was therefore curated to the particular resource. Note also the original search included ‘Goma’, which was one of the originally selected cities.
- 3 Actors involved & their role; Mechanisms underlying forced displacement to access to natural resources; Factors which exacerbate or mitigate risk of violent conflict over natural resources; Factors which exacerbate or mitigate unequal/exclusive access to/distribution of natural resources; Types/formation of governance structures addressing natural resource management (NRM); Social effects of governance structures addressing natural resource management (NRM); Types/formation of governance structures addressing conflict mitigation; Social effects of governance structures addressing conflict mitigation; Promising governance & NRM approaches that enhance resilience and mitigate risk of violent conflict; Promising interventions in these contexts that enhance resilience and mitigate risk of violent conflict.
- 4 Cities Alliance: <https://www.citiesalliance.org/>
- 5 <https://displacement.iom.int/nigeria>
- 6 Kamta, F.N., Schilling, J., Scheffran, J. (2020). Insecurity, Resource Scarcity, and Migration to Camps of Internally Displaced Persons in Northeast Nigeria. *Sustainability*.12 (17): 6830. doi:10.3390/su12176830
- 7 Due to the small size of the Suleimanti 1, 2, 3 and 4 neighborhoods and to facilitate comparability with the peripheral neighborhood in terms of population size, the whole Suleimanti area was considered a unit of analysis.
- 8 Thill, M. (2019). A system of insecurity: Understanding urban crime and violence in Bukavu. Rift Valley Institute. Nairobi, Kenya.
- 9 Bele, M. Y., Sonwa, D. J., & Tiani, A. M. (2014). Local Communities Vulnerability to Climate Change and Adaptation Strategies in Bukavu in DR Congo. *The Journal of Environment & Development*, 23 (3), 331–357. <http://www.jstor.org/stable/26197934>
- 10 Until recently, Ciriri was a cell in the Kasha district hence the difference in the estimated population size between Panzi and Ciriri.
- 11 At the time of the validation workshop with the Maiduguri Advisory Board members (November 2021), the situation in Suleimanti had further deteriorated. The state government closed three large IDP camps within the city, including Bakassi, which was in proximity to Suleimanti. This has led to the community absorbing more people, additionally straining access to land and water in the neighborhood.
- 12 One of the interviewed experts noted that in accessing land and securing tenure, IDPs are doubly vulnerable. When they decide – or are forced to – return their area of origin, they may find that their homes and land have been occupied by someone else. As land in rural areas is regulated by customary tenure and many of the IDPs have lost documentation of their land titles, they have no way to prove their ownership, especially in places there were destroyed by the conflict and later rebuilt.
- 13 Validation workshop with Maiduguri Research Advisory Board members, November 2021
- 14 Validation workshop with Maiduguri Research Advisory Board members, November 2021
- 15 Validation workshop with Maiduguri Research Advisory Board members, November 2021
- 16 The Advisory Board members noted the use of the term ‘indigenous’ is problematic and that the term ‘resident’ should be used instead. They also suggested that after a certain time, “for example, 5 years”, displaced people and migrants become residents too. The researchers agree with this but find the proposed period arbitrary and believe the respondents should be able to self-identify. The distinction between host and IDP does not appear to be relevant for Panzi, where respondents report distinctions have blurred. The general term ‘resident’ is used in the quotes, except in cases where noting the identity as displaced/migrant is useful for clarity. As an alternative, the terminology used by Tamas and van Overbeek (2018) – “newcomers” and “early settlers” –, is helpful as both populations can be understood as sub-categories of “residents”.
- 17 Validation workshop with Bukavu Research Advisory Board members, January 2022.
- 18 Validation workshop with Bukavu Research Advisory Board members, January 2022.
- 19 In some cases, water managers are members of water committees, and in others, they are not. In contrast to Sykash, the water network supported by Asili, the water managers are not part of committees.
- 20 Validation workshop with Bukavu Research Advisory Board members, January 2022

