

FBA Research Report

Masculinity crises and femininity struggles: Gendered lived experiences of environmental insecurity in a context of compounding crises in eastern DRC

July 2026

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This report presents findings from the FBA Research Project "1325 at the Grassroots: Women's Responses Facing Climate Insecurity" (2023-2026). The research team comprises Principal Investigator Dr. Johanna Malm and researchers Ali Bitenga Alexandre and Dr. Marie-Rose Bashwira.

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Cover photo: Pascal Bormann
Picture of the landscape close by Lubarika, a village located in the Ruzizi Plain.

Disclaimer

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Foreword

Today, many countries affected by armed conflict are also exposed to the impacts of climate change. Although there is no linear causal relationship, climate change can exacerbate vulnerabilities and reshape conflict, particularly in contexts marked by political marginalisation and low levels of socioeconomic development. This is why the Folke Bernadotte Academy (FBA) works to strengthen the integration of climate perspectives in conflict prevention and peacebuilding.

We know from both research and proven experience that the impacts of climate change are deeply gendered, with particularly severe consequences for women and girls. Thus, an important dimension of FBA's Climate, Peace and Security work is to strengthen inclusive and gender-responsive approaches to conflict prevention and peacebuilding. Yet, the links between gender, climate change and conflict are not well researched, and this is a crucial knowledge gap to fill. To deepen our understanding of these dynamics, FBA initiated a research project in 2023 under the leadership of Dr. Johanna Malm, FBA's Head of Research. Over the past three years, the research team has explored gendered lived experiences as they play out in a context of compounding crises, with eastern Democratic Republic of Congo as a case study. The results are presented in this report.

As the title suggests, the study sheds light on the struggles facing women in a context marked by climate change and other compounding crises, as well as the masculinity crises faced by men. The study shows in great empirical depth that environmental insecurity is a multifaceted challenge to peace and security. The study provides space for in-depth reflection around how compounding crises shape masculinities and femininities, and thus how men and women of affected societies respond to the multilayered crises that they face.

The study recommends actionable ways forward for practitioners working in regions across the globe affected by climate change and violent conflict. For example, the report recommends that decision makers, donors and practitioners working with Climate, Peace and Security should integrate a men and masculinities perspective in their work. Specifically, they should explore as part of gender analysis how climate change and environmental degradation affects men's livelihoods, vulnerabilities and mental health. This is important both because of men's rights to health and dignity, but also because of the link between men's mental health and levels of conflict within and between households and communities.

The knowledge generated by this study is important to several of FBA's expert areas and assignments, as well as to the work of Team Sweden and our partners more broadly. The research has been conducted in close and mutually beneficial collaboration with FBA's DRC country team and with FBA colleagues working with the implementation of the United Nations agendas on Climate, Peace and Security; Women, Peace and Security; and Youth, Peace and Security. As such, it is an illustrative example of how FBA integrates evidence into our operations.

I hope this report will be as informative and meaningful to readers as it has been to me.
May the voices and insights from the women and men of Bwegera, Makobola and Nyabibwe in
eastern Democratic Republic of Congo guide us as we together work for a more peaceful future.

A handwritten signature in black ink, appearing to read 'Per Olsson Fridh', with a stylized, cursive script.

Per Olsson Fridh
Director General, Folke Bernadotte Academy



About the Authors



Dr. Johanna Malm is Head of Research at FBA, thus responsible for FBA's evidence-based approach. Johanna manages FBA's Research Team, tasked with supporting research uptake across the agency. Johanna is also Principal Investigator for the FBA Research Project "1325 at the Grassroots: Women's Responses Facing Climate Insecurity" (2023-2026), the results of which are partly presented in this report. Johanna combines expertise in empirical research, development practice, management and steering, having worked as researcher at the Universities of Stellenbosch and Roskilde, Project Manager for FBA's assignment in DR Congo, Senior Auditor at the Swedish National Audit Office and Policy Advisor on Business and Human Rights at the NGO Diakonia. Johanna Malm holds a PhD in International Development Studies from Roskilde University in Denmark.



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Summary and recommendations

This study explores gendered lived experiences as they play out in a context of compounding crises in eastern Democratic Republic of Congo (DRC). The study centres around environmental insecurity, defined as *insecurity that is either caused by or exacerbated by climate change or environmental degradation, or both*. The study's definition of 'insecurity' draws on human security scholarship, referring to a condition where human life and dignity is challenged in different ways. Using this lens, the study captures a broad spectrum of insecurities as they manifest empirically in the lived experiences of our respondents, ranging from mental illness and financial distress to physical and sexual violence.

The report offers an empirically grounded and theoretically informed analysis of how environmental insecurity reshapes gender relations and conflict dynamics. The study's starting point is that environmental insecurity is not merely an ecological condition but a socially, politically, and historically embedded process that unfolds in everyday life through the interaction with socio-economic decline, governance crisis, entrenched patriarchal structures and armed conflict. Rather than treating environmental insecurity as a direct cause of insecurity, the report approaches it as a multidimensional phenomenon operating within a broader context where compounding crises reinforce one another.

The analysis is based on in-depth qualitative research conducted in three localities in South Kivu province in eastern DRC – Nyabibwe, Makobola, and Bweyera – selected because of their acute exposure to climate change, environmental degradation, conflict dynamics and socio-economic vulnerability. Fieldwork was carried out in two rounds between 2023 and 2025, combining focus group discussions, semi-structured interviews, key informant interviews and life-history narratives with women and men of different ages, ethnic backgrounds and socio-economic positions. By tracing how the respondents interpret, negotiate and respond to environmental insecurity in their daily lives, the study connects their lived experiences to the broader political and environmental processes that shape insecurity in eastern DRC.

A central contribution of the report lies in its multi-scalar analysis of gendered lived experiences, demonstrating that environmental insecurity transforms everyday life in deeply gendered ways at intra-household, within-community, and intercommunity levels. The study thus draws on one of feminist theory's most central tenets, namely the need to transcend the divide between public and private, to fully capture the realities of environmental insecurity, including the different forms of gendered everyday violence that occurs in a conflict-affected context.

At the intra-household level, environmental insecurity disrupts traditional livelihood systems based on agriculture, fishing and livestock rearing, undermining masculine-coded livelihood options, often forcing women to assume the main responsibility for household survival. Many men disengage from productive activity awaiting opportunities in the formal labour market, while women's economic activities remain largely confined to the feminine-coded, poorly remunerated informal sector. However, this reconfiguration of the gendered division of labour does not translate into greater empowerment for women. Instead, it intensifies gendered power relations, producing what feminist political economy describes

as a feminisation of responsibility without corresponding authority. Simultaneously, men experience a profound crisis of masculinity as they become unable to fulfil expectations of breadwinning, authority and social status, traits associated with being a *mwanume muzima* (Swahili for a complete man). This dynamic generates psychological distress, frustration and mental illness among men, and worsens domestic violence directed at women. Thus, this destabilisation of gender identities reproduces cycles of violence within intimate social spaces.

At within-community level, the study reveals that environmental insecurity intensifies gendered everyday violence in a context of compounding crisis. Rising levels of gender-based violence, transactional sex, theft, and gendered farmer–herder tensions emerge as interconnected outcomes. While recognising the severity of militarised sexual violence in conflict-affected areas, the study’s findings call into question dominant narratives that frame violence in eastern DRC as primarily driven by armed actors alone. Instead, the study demonstrates that violence exists on a continuum shaped by complex interactions between compounding crises as they are experienced in ordinary social relations.

At inter-community level, one of the report’s most significant contributions lies in its analysis of the relationship between environmental insecurity, gender and mobilisation into armed groups. While the study does show that environmental insecurity contributes to increased recruitment into armed groups, particularly among young men, it rejects deterministic accounts. Instead, the report identifies several interrelated mechanisms through which environmental insecurity and armed mobilisation interact. Environmental stressors such as crop failure and resource scarcity undermine livelihoods and aggravate grievances, making armed groups attractive sources of income, protection and social recognition. Young men are particularly vulnerable to recruitment into armed groups, in part because of the lack of masculine-coded livelihoods in the areas studied, as this leads to difficulties in performing masculinity through marriage and breadwinnership. Conflict-induced displacement and militarised resource extraction also accelerate environmental degradation, producing feedback loops in which violence and ecological destruction mutually reinforce one another, reshaping both landscapes and social relations. Thus, environmental insecurity functions as a risk multiplier rather than a direct cause of armed mobilisation, in processes that are always mediated by political, ethnic, and historical dynamics.

The study’s findings resonate strongly with masculinity studies and feminist security scholarship, emphasising that gender identities are relational, historically situated, and shaped by structural conditions. Environmental insecurity exposes the fragility of the ideal of the ‘complete man’ by revealing its dependence on economic and political stability. It also challenges simplistic portrayals of men as perpetrators by highlighting their vulnerabilities. Meanwhile, because of their increased breadwinning responsibilities, women demonstrate agency under constraint, thus challenging simplistic portrayals of women as passive victims. This dual focus on femininities and masculinities enriches existing literature on gender, climate change and conflict. The latter has often prioritised women’s vulnerability while neglecting the destabilising effects of environmental insecurity on men’s identities and the profound implications that this has for gender relations and for society as a whole.

Moreover, the study finds that in a context of compounding crises, environmental insecurity is also a driver of innovation. Women and men actively develop coping strategies, renegotiate gender roles and mobilise social networks to respond to ecological and economic pressures. In highlighting this, the report contributes with a nuanced understanding grounded in the practices through which women and men sustain life under conditions of uncertainty.

The findings also align with feminist political ecology, highlighting how environmental insecurity produces gradual yet pervasive forms of harm that are often overlooked in conventional security analyses. By foregrounding everyday violence, including economic, social and psychological dimensions, environmental insecurity emerges not as an external shock but as a structural condition that reorganises social relations, redistributes vulnerability, and amplifies existing inequalities in ways that are lived, interpreted, and negotiated in gendered everyday practices.

Ultimately, the report shows that environmental insecurity in eastern DRC is deeply gendered and inseparable from the broader dynamics of compounding crises. Environmental insecurity amplifies existing inequalities, destabilises gender roles, and fuels cycles of violence that extend far beyond armed confrontation. Sustainable peace, therefore, cannot be achieved through technocratic climate adaptation or security interventions alone. Instead, conflict-sensitive and gender-transformative interventions are needed, addressing structural inequalities, political exclusion, and environmental degradation simultaneously.

Recommendations

Because the findings of this study carry relevance far beyond the DRC, the study's recommendations are directed at the global community of decision makers, donors and practitioners working on peace and security, including actors working in the DRC. Successful implementation of these recommendations depends on sustained engagement and support from international donors, regional organisations and development partners. Addressing the interconnected challenges of conflict, environmental degradation and gender inequality requires coordinated action across local, provincial, national, regional and international levels, with strong partnerships between state institutions, civil society, communities and other external stakeholders.

1. Integrate a men and masculinities perspective in Climate, Peace and Security work

Decision makers, donors and practitioners working with Climate, Peace and Security should integrate a men and masculinities perspective in their work. Specifically, it is imperative to explore, as part of gender analysis, how climate change and environmental degradation affect men's livelihoods, vulnerabilities and mental health. This is important both because of men's rights to health and dignity, and because of the link between men's mental health and levels of conflict within and between households and communities. In contexts where there are policy frameworks around positive masculinity, such as UN Women's HeForShe initiative or the International Men's Day, Climate, Peace and Security work can draw on these. However, efforts to address men's vulnerabilities must be embedded within a gender-transformative approach that does not divert attention or resources away from persistent inequalities faced by women and girls.

2. Peace processes should be inclusive and connected to local environmental dynamics

The insecurity dynamics observed in this study are linked to regional security dynamics. The study recommends that broader peace processes should be linked to local mediation initiatives that cater for environmental dynamics and other local grievances. In the specific DRC context, this recommendation is directed at the African mediation initiative, the UN, US, Qatar, and the EU. Moreover, environmental protection should be mainstreamed within provincial and national peacebuilding frameworks because ecological sustainability is a foundational pillar of long-term stability. Coordinated regional security initiatives are also necessary to disrupt armed actors' control over land, forests and mining zones. Lastly, to address broader structural drivers of conflict, national and provincial authorities, peace-building actors and civil society organisations are recommended to provide support to accountable local administrations, land governance institutions, and public service delivery regarding justice, security and dispute resolution.

3. Cater for gender-specific social recognition needs in processes to reintegrate former combatants

The study shows that a lack of masculine-coded livelihoods in areas affected by environmental insecurity leads to difficulties in performing masculinity through marriage and breadwinnership. This is one of the key drivers of mobilisation into armed groups, particularly among young men. Thus, the study stresses the need to cater for gender-specific social recognition needs in processes to reintegrate former combatants. Decision makers, donors and practitioners are therefore recommended to consider psychological dimensions related to sustainable male-coded livelihoods and the performance of masculinity. The study also recommends the UN to include this dimension in future revisions of the UN Integrated Disarmament, Demobilisation and Reintegration Standards (IDDRS), in particular module 5.30 focused on Youth and DDR.

4. Support agricultural livelihoods as part of efforts to prevent violence and reintegrate former combatants

In many rural, conflict-affected contexts, agriculture is the livelihood option that has the most potential as a locally grounded income-generating opportunity. Supporting such livelihoods is important both to prevent recruitment into armed groups and for sustainable reintegration of ex-combatants into rural communities. The study shows that particularly among young men, the decline in masculine-coded livelihoods within the agricultural sector is one of the drivers of mobilisation into armed groups, because it leads to difficulties in performing masculinity through marriage and breadwinnership. Thus, decision makers, donors and practitioners should support agricultural livelihoods and agri-food value chain transformation, tailoring support to local environmental conditions and taking specific gendered practices around crop selection into account.

5. Strengthen civilian protection mechanisms and integrate a gender perspective in their work

In rural, conflict-affected areas, the security risks facing mainly women en route to fields, water wells and markets are aggravated in context-specific ways by climate change and environmental degradation. Thus, civilian protection mechanisms in such areas should be strengthened and a gender perspective integrated in their work. This can be done either through training and deployment of United Nations protection of civilians actors or security sector personnel, or through funding and training of community groups that protect civilians. The latter may be a conducive option in a context of mission drawdown. Such mechanisms should engage men and boys through a gender-transformative approach, fostering shared responsibility for community safety, and challenging the gender norms that underpin insecurity and unequal access to resources and protection.

6. Offer psychological support in contexts affected by climate change and environmental degradation

In contexts of compounding crisis where livelihood loss is aggravated by climate change and environmental degradation, international and local actors alike should consider providing gender-sensitive psychological support, using formats adapted to the context. Depending on the configuration of gender relations in the specific region and in the target group, women may need support for example in coping with an increase in labour burdens and increased gender-based violence. Men may need support in addressing experiences of status loss, frustration, and identity crises. The latter support is of particular importance as it can mitigate risks of domestic violence, substance abuse and mobilisation into armed groups.

7. Consider the gendered aspects of herder-farmer tensions

When designing interventions focused on herder-farmer tensions and conflicts around land, donors and civil society organisations alike are recommended to consider that conflicts around pasture and land are often gendered. To address both farmer-herder tensions and land disputes, locally embedded mediation mechanisms should be strengthened, with particular focus on their capacity to address gender inequalities and ensure meaningful participation of women in deliberative processes.

8. Strengthen youth economic empowerment and climate-resilient livelihoods

The study identifies gendered patterns of livelihood deterioration as a key driver of domestic violence, mental illness, harmful coping strategies such as transactional sex and mobilisation into armed groups, the latter particularly for young men. Therefore, the study recommends national authorities, donors, peacebuilding actors, civil society organisations and to the private sector to expand access to vocational training, climate-resilient agriculture, entrepreneurship support and financial services for young women and men. Particular attention should be paid to conflict-affected and displaced youth, ensuring equal access for women and men. Programmes should be linked to local market opportunities and environmental restoration initiatives to create sustainable employment while reducing incentives for participation in conflict economies.

9. Strengthen and mainstream environmental protection as peacebuilding measure

Responsible ministries, conservation institutes, international donors, development banks and environmental NGOs should consider the following. Climate-smart agricultural extension services and training in agro-processing should target women and men farmers alike. Sectors of relevance to both women and men should receive investment, while avoiding reinforcing traditional gender roles. Conservation and livelihood needs should be balanced through the establishment of community-managed protected forest zones. Reforestation initiatives should be scaled up, enforcing anti-deforestation regulations and promoting sustainable land-use planning. Charcoal production should be regulated at the appropriate level and the transition to alternative energy sources accelerated. Fisheries governance should be strengthened by enforcing fishing regulations, banning illegal and small-mesh nets, and improving monitoring systems to protect breeding stocks and sustain aquatic ecosystems. Lastly, because reliable climate data is necessary for climate change monitoring, adaptation and research, local meteorological stations should be supported.

10. Promote gender-transformative programs in climate-change affected communities

The study identifies a need for facilitated community engagement around evolving gender roles, particularly regarding breadwinning, economic autonomy and caregiving. International and local civil society groups could facilitate community dialogues to this end, engaging both women and men of different age groups and customary authorities, with the ultimate goal of ensuring that existing legal frameworks concerning women's rights are implemented in a context of customary power. The dialogues should challenge rigid patriarchal norms, while acknowledging men's vulnerabilities and the role of women in upholding patriarchal structures. To protect girls' education during environmental and conflict-related shocks, practical support to families in the form of fee waivers, scholarships and school feeding programmes is needed, as well as engagement to change norms that prioritise boys' education over that of girls.

11. Strengthen prevention and response to gender-based violence in climate-change affected communities

The study recommends responsible ministries, along with donors and civil society organisations, to scale up community-based initiatives to prevent gender-based violence, addressing the full continuum of violence, from domestic abuse to militarised sexual violence. It is key to engage men of all ages as allies, promoting non-violent masculinities and confronting harmful masculinities, while acknowledging the importance of addressing structural drivers such as livelihood deterioration. In contexts where there are policy frameworks around positive masculinity, such as UN Women's HeForShe initiative or the International Men's Day, work to prevent gender-based violence can draw on these. Legal gaps related to gender-based violence need to be closed and access to survivor-centred, holistic medical, psychological, socio-economic and legal assistance for women and men affected by gender-based violence ensured. Alcohol and substance-harm reduction interventions should be introduced, particularly targeting men. Women and girls in particular should be safeguarded from transactional sex through structural poverty reduction strategies and safe income alternatives.

01 Introduction

This report explores gendered lived experiences as they play out in a context of compounding crises in eastern DRC. The report centres around environmental *insecurity*, defined as *insecurity that is either caused by or exacerbated by climate change or environmental degradation, or both*. Indeed, eastern DRC is markedly affected by climate change¹ and environmental degradation,² even though popular imagery of those matters in Africa often centres around the Sahel region and the Horn of Africa. Indeed, tangible impacts of a changing climate have been noted in eastern DRC. Over the past 30 years, annual temperature averages have increased with 0,3-0,5°C in eastern DRC and are expected to continue increasing over the period 2020-2050. Significant disturbances in rainfall pattern have been recorded in the form of sudden heavy rains, delayed rains and dry spells during rainy seasons. This leads to environmental degradation in the form of slow-onset events such as soil depletion, lower yields and, in combination with widespread deforestation, also erosion and sudden-onset disasters such as landslides and floods.³ Currently, the DRC ranks as the fifth most vulnerable country globally to climate change and other related challenges.⁴

However, it is not the impact of environmental insecurity that makes headlines across the world concerning the DRC. It is the fact that the region has been mired in violent conflict and civilian suffering for three decades. Since the start of the first Congo war in 1996, different iterations of domestic and foreign armed entities, rebel groups as well as regular armies, have fought on Congolese soil, sowing unspeakable intergenerational suffering. Millions of Congolese have been killed by direct fighting, disease and malnutrition and millions more have been displaced, many of them several times over.⁵ Gender-based violence, a structural problem in Congolese society predating war, has been aggravated in a context of armed conflict and is committed by military and civilian actors alike.⁶ Eastern Congo is currently suffering from a multitude of conflicts. Of these, the incursion by the Rwandan-backed rebel group M23, which has seized control of the province capitals Goma and Bukavu in eastern DRC as well as extensive areas in both North and South Kivu, is the most well-known internationally.⁷ As we shall see in the literature review below and throughout this report, the link between these well-known gendered conflict patterns on the one hand and environmental insecurity on the other is complex and often indirect. Yet, the link is there, and this report sheds light on it through its investigation into gendered lived experiences as they play out in a context of compounding crises.

1 The study defines 'climate change' in line with the United Nations Framework Convention on Climate Change: "climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods" (UN 1992).

2 Andersson, 2023; Mudinga et al., 2024; NUPI & SIPRI, 2023; Seyuba, 2025; Vinke et al., 2023

3 AFP, 2022; Amani et al., 2022; Balasha et al., 2023; Batumike et al., 2022; Bele et al., 2014; Cirimwami et al., 2019; Kabumba Rubega, 2023; Katcho Karume et al., 2018; Muvundja et al., 2014; Radio Okapi, 2022

4 Notre Dame Global Adaptation Initiative, 2023

5 E.g. Stearns, 2021

6 Baaz & Stern, 2009; Bitenga Alexandre et al., 2021; Freedman, 2015

7 Verweijen et al., 2025

Another matter that currently generates a great deal of interest in relation to eastern DRC is minerals, often referred to as ‘critical’ or ‘conflict’ minerals.⁸ Certainly, the role that minerals do (and do not) play in eastern DRC’s conflict dynamics, and the gendered dimensions thereof, are important to understand.⁹ However, this is not the focus of this study, although we touch upon it in the sense that dwindling mining related livelihoods is part of the web of compounding crises in our research sites, as we shall see.

Environmental insecurity through the prism of compounding crises

This report uses the term ‘environmental insecurity’ to denote that the environmentally related issues facing women and men living in eastern DRC are broader than those induced just by climate change. As noted, impacts of climate change are indeed observed in the area. Although these impacts are severe in and of themselves, they are compounded by unsustainable coping strategies that lead to human-made environmental degradation. Notably deforestation and unsustainable farming- and construction practices, in combination with climate change impacts, increase the risks of mortal landslides that destroy agricultural lands, and erosion that reduces or altogether destroys soil quality. Thus, the environmentally related insecurities facing the population in this area result from a complex interplay of climate change and environmental degradation. To capture this, we use the term ‘environmental’ insecurity.

Not only is environmental insecurity a considerable challenge in this context, it also has significant gendered dimensions. This study approaches these gendered lived experiences of environmental insecurity through the prism of compounding crises. Thus, it understands environmental insecurity as but one of several interlinked crises in eastern DRC, *inter alia* socio-economic decline, governance crisis and protracted cycles of violent conflict. We use this framework because it is not possible to verify empirically whether each gendered lived experience is causally linked to environmental insecurity. Instead, as we shall see, our focus groups, interviews and secondary data show a complex and interwoven reality. Environmental insecurity, armed conflict, the general economic decline in the DRC and the long-standing structural failures of the state are not isolated phenomena but rather overlapping and mutually reinforcing processes. Economic deterioration in eastern DRC began well before the current cycles of armed conflict, but has been further compounded by them. Moreover, environmental insecurity undermines agricultural productivity and reduces access to natural resources, producing market disruptions and destabilising traditional livelihood systems, thus intensifying chronic poverty and food insecurity. In combination with weak governance and persistent patriarchal norms, this can increase mobilisation into armed groups, as we shall indeed see in this report.

8 Baskaran, 2025; Vogel, 2022

9 Bashwira & van der Haar, 2020

In sum, these are feedback loops where each crisis often deepens the other. As a result, the gendered lived experiences of communities cannot be neatly separated using environmental, economic, or conflict-related categories. Instead, they form part of a larger, interconnected web of structural instability that shapes everyday survival in eastern DRC. This is why the study approaches environmental insecurity through the prism of compounding crises. Using this framework means endeavouring, throughout the report, to demonstrate empirically how gendered lived experiences of environmental insecurity intersects with, and is exacerbated by, other crises.

In sum, this report provides a cross-sectional picture of gendered lived experiences in eastern DRC. In so doing, it deepens existing knowledge in two main ways. First, it provides unique case study evidence based on systematic qualitative research on how, in the ontologies of women and men in the communities studied, environmental insecurity affects life, and how such insecurity is compounded by and compounds other crises in the area. Second, the report is the first to demonstrate the need to take all levels of human interaction into account to fully capture gendered lived experiences of environmental insecurity as they manifest empirically in a context of compounding crises. As we shall see in more detail below, this study's framework structures the empirical observations at three different levels of human interaction: intra-household level, including individual experiences; within-community level (social relations within villages); and inter-community level (relations between villages and between population groups from other areas). No previous contribution has thus demonstrated the need to draw on one of feminist theory's most central tenets, namely the need to transcend the divide between public and private,¹⁰ to allow for full empirical capture of gendered lived experiences of environmental insecurity in a context of compounding crises, including the different forms of gendered everyday violence that occurs in a conflict-affected context.

As part of its investigation into gendered lived experiences, the report sheds light on the impact that environmental insecurity has 'on' the lives of women and men in a context of compounding crises, as well as the 'responses to' environmental insecurity that women and men deploy. As argued by MacGregor¹¹ and Ide et al.,¹² existing literature has mainly explored the passive aspects, focusing on the impact that environmental insecurity has 'on' women and gender relations in the developing world. Indeed, the population in our research sites is vulnerable because it is exposed to compounding crises and have limited protective resources.¹³ However, as we shall see substantial evidence of in this study, the population actively exercises agency through everyday practices of self-protection and survival aimed at adapting to and mitigating risks. Women and men affected by environmental insecurity in eastern Congo should thus not be depicted solely as victims, as they exercise agency in adapting to a broad range of pressures. Attending to these gendered dynamics reveals how

10 E.g. Pateman, 1983

11 MacGregor, 2010

12 Ide et al., 2021

13 C.f. Cardona et al., 2012, p. 69

community members contribute to addressing environmental insecurity and shaping solutions. In attributing equal importance to 'responses to', the report avoids inadvertently strengthening what Fröhlich and Gioli term 'the victimization fallacy'.¹⁴

Researching 'insecurity'

As regards the term 'insecurity', the report uses it instead of 'conflict' to approach the subject matter in a holistic and exploratory manner. It refers to a condition where human life and dignity is challenged in different ways. This 'insecurity' approach is inspired by several bodies of scholarly work. Most prominently, research on climate change and human security, particularly the contributions by Adger et al.¹⁵ and Scheffran et al.¹⁶, have inspired us to think broadly about 'security' and thus how to understand 'insecurity'. In their 2014 IPCC chapter, Adger et al define human security in the context of climate change as "a condition that exists when the vital core of human lives is protected, and when people have the freedom and capacity to live with dignity".¹⁷ Thus, for this study, 'insecurity' refers to a condition where human life and dignity is challenged in different ways. By analysing 'insecurity' instead of 'conflict', we seek to capture a broad spectrum of insecurities as they manifest empirically in the lived experiences of our respondents. We deem the 'insecurity' lens adequate to capture what feminist security studies terms 'everyday violence', defined by Shepherd as "the violences of the in-between times that international politics recognises neither as 'war' nor 'peace'".¹⁸ As we shall see in the empirical analysis below, the insecurities recorded range from mental illness and financial distress to physical and sexual violence.

Our data has indeed been gathered in an area affected by protracted cycles of violent and sometimes armed conflict. Yet, the situation in the area may not on a year-on-year basis meet the requirements in terms of battle-related deaths to be classified as 'conflict'. In the most commonly used definition from the Uppsala Conflict Data Program, 'conflict' implies at least 25 battle-related deaths per year in state-based- or non-state conflicts.¹⁹ We instead use the term 'conflict-affected' to denote an area that has been affected by armed conflict of some kind during the past five years. It can be conflicts involving armed groups, but also other kinds of violent conflicts such as land- and family conflicts. The methodology section below contains more on the sampling of specific conflict-affected research sites.

We are also inspired by feminist political ecology in our interrogation of the link between gendered power structures and environmental insecurity, including what Nixon terms slow violence, 'the attritional lethality of environmental degradation'.²⁰ Building on the broader premises of political ecology, this perspective emphasises that environmental insecurity is not a neutral or purely ecological condition but is produced through political, economic and

14 Fröhlich & Gioli, 2015, p. 145

15 Adger et al., 2014, p. 759

16 Adger et al., 2014, Scheffran et al., 2012, UNDP, 1994

17 Adger et al., 2014, p. 759

18 Shepherd, 2009, p. 208

19 UCDP, 2024

20 Nixon, 2013

historical power relations. It draws attention to how gender, alongside class and other social hierarchies, shapes access to resources, exposure to environmental harm, and capacities to respond. Feminist political ecology further highlights the politics of knowledge, showing how women's and marginalised groups' environmental knowledges are often overlooked in policy and practice. At the same time, it underscores agency by examining how affected populations actively negotiate, resist, and rework environmental governance in contexts of slow and uneven violence.²¹ As noted by Adger²² and Barnett and Adger,²³ because the impact of climate change and environmental degradation on human security varies with a range of societal factors, evidence pertaining to both social and environmental processes is needed to understand it.

Case selection: the Democratic Republic of Congo

Because of the broader analytical lens used, this study does not directly engage scholarly debates around the link between climate change and conflict.²⁴ As we shall see, the study certainly does provide novel insights in terms of how environmental insecurity fuels gendered forms of insecurity in conflict-affected areas, including mobilisation of young men into armed groups. However, the analytical focus is to shed light on the complexities involved, rather than on making causality claims. That said, the key tenets of the literature on climate change and conflict have motivated the selection of the DRC as a case study. In broad terms, it emerges from that literature that climate variability and change have affected conflict over the past century, however mainly in combination with factors such as low levels of socioeconomic development and political marginalisation.²⁵ Additional climate change is likely to amplify this risk, but the link is complex and indirect. As a direct driver for conflict, the influence of climate change is relatively minor compared to other drivers. It can – but need not do so in a deterministic sense – function as a risk multiplier, adding strain to already difficult situations, thus triggering latent conflicts or worsening existing ones. However, it is important to note that other factors, more directly related to politics and the breakdown of it, are more influential conflict drivers.²⁶

One important conflict driver identified in the literature is lacking state capacity.²⁷ In times of environmentally induced hardship, state accommodation is important to prevent groups from resorting to violence.²⁸ If state institutions are not able to manage user rights to land, land conflicts can be accentuated when the climate changes.²⁹ Moreover, non-state armed groups generally benefit from the withdrawal of the state, and violent attacks from such armed groups cause displacement that in turn can disrupt food production, leading to food shortage or even

21 Dianne Rocheleau et al., 1996

22 Adger et al., 2014, p. 760

23 Barnett & Adger, 2007, p. 641

24 Buhaug, 2015; Solow, 2013; von Uexkull & Buhaug, 2021

25 Hsiang et al., 2013

26 Burke, Hsiang, and Miguel 2015; Cold Ravnkilde and Ba 2022; Gleditsch 2012; Koubi 2019; Mach et al. 2019; Theisen 2017

27 Mach et al., 2019

28 Fjelde & von Uexkull, 2012

29 Funder et al 2012

famine.³⁰ Vice versa, conflict causes long-lasting environmental harms³¹ and make societies more vulnerable by producing refugee flows that in turn often lead to environmental degradation.³² Buhaug and von Uexkull consider such complex societal vulnerability aspects in their ‘vicious circle’ argument, urging scholars to consider how violence and vulnerability can further exacerbate or be exacerbated by climate change.³³

In eastern DRC, many of these conflict drivers are present, including lacking state capacity, significant refugee flows, a general inability to manage user rights to land and protracted armed conflict, involving a multitude of active armed groups.³⁴ It is therefore motivated to study environmental insecurity in this context, especially since there is limited systematic scholarly research pertaining to these issues as they play out in eastern DRC. Von Uexkull et al³⁵ explore the links between drought exposure, resilience and support for the use of political violence using household survey data from North Kivu province. They find that less resilient respondents who report drought exposure are more likely to support the use of political violence. While this is an interesting finding, more research would be needed to uncover the extent to which such support for the use of violence translates into actual conflict behaviour in this specific context. In addition, the sample only features 14 percent female respondents, and the study does not shed light on gendered dimensions.

The most elaborate contribution to date is the work of Mudunga et al on the link between climate change and conflict in the Ruzizi plain in South Kivu.³⁶ Based on comprehensive field work, the study situates climate related security risks for local communities in a broader historical, socioeconomic and political context. This study draws on Mudunga et al’s findings as we shall see, and deepens the analysis by also catering for gendered dimensions.

Studying gendered lived experiences of environmental insecurity

It is crucial to study the gendered lived experiences of environmental insecurity because, as convincingly demonstrated also in existing scholarly literature on non-conflict affected areas, gender relations condition lived experiences of environmental insecurity.³⁷ Certainly, gender is not the only factor to take into consideration. Existing literature demonstrates that in addition to gender, lived experiences of environmental insecurity vary significantly depending on socioeconomic status, age, ethnicity and functional status. Population groups disproportionately affected by climate change – apart from women – are children, indigenous populations, the elderly, and marginalised, low-income groups.³⁸ This study’s focus on the gendered lived experiences of environmental insecurity does not imply that gender always takes theoretical

30 Cold Ravnkilde & Ba, 2022

31 Krampe et al., 2025

32 Dutta, 2023

33 Buhaug & Von Uexkull, 2025

34 Hoffmann et al., 2016; Mathys & Vlassenroot, 2016; Mudunga & Wakenge, 2021; OCHA, 2025; Sweet, 2020

35 von Uexkull et al., 2020

36 Mudunga et al., 2024

37 Eg Barnett & Adger, 2007; IPCC, 2022; Kinnvall & Rydstrom, 2019; Nagel, 2016; Neumayer & Plümper, 2007; Tanyag & True, 2019

38 IPCC, 2022

precedence. Rather, the study focuses on gender because it stands out as the variable that, relatively more than others, condition lived experiences of environmental insecurity because of its significance for the majority of the population. Indeed, among those disproportionately affected by climate change as cited above, ‘women’ constitutes the only majority group. Even within those groups identified as vulnerable, there are gendered differences.

As a result, gender-blind analyses can only partially account for communities’ lived experiences, and as such risk leading to ineffective or even counterproductive peacebuilding interventions.³⁹ It emerged clearly during discussions in FBA-organised workshops in Bukavu, DRC during 2023-2024 with key stakeholders including customary authorities, civil society actors and scholars that the impacts of environmental insecurity are indeed gendered.⁴⁰ However, no scholarly contribution has to date explored gendered lived experiences of environmental insecurity in eastern DRC.⁴¹ This paucity of research gendered lived experiences of environmental insecurity is indeed broader than just the DRC. While there is scholarly consensus that this intersection is crucial to address, the body of scholarly research to date mainly consists of contributions that investigate the matters in pairs: gender and climate change; gender and conflict; and climate change and conflict. There is a dearth of research exploring the triple nexus systematically.⁴²

Key case study contributions to date include Ensor, who has conducted research on the case of South Sudan,⁴³ and Omolo who has researched the Kenyan case.⁴⁴ These contributions deepen our understanding of gendered dimensions of environmental insecurity in conflict-affected areas in important ways: highlighting that there is a complex connection between evolving masculinities, environmental insecurity and armed mobilisation; that women breadwinners lacking formal land tenure are vulnerable; and that gendered norms pertaining to appropriate livelihood strategies for women and men evolve in a context of environmental insecurity. As we shall see, these themes recur in this study as well. In addition to these scholarly contributions, there are a number of contributions in the form of grey literature where international organisations, NGOs and consultants report interesting insights from baseline studies and proven experience pertaining to the gendered dimensions of environmental insecurity in conflict-affected areas.⁴⁵ While these observations are of great value, it is difficult to engage them in scientific dialogue because the published accounts are short with little information about methodology and data. In sum, thus, existing literature only contains limited evidence from systematic case study research as to how gendered lived experiences of environmental insecurity play out in conflict-affected areas.

39 Cf DPPA, 2022, p. 11

40 Andersson, 2023; Seyuba, 2025

41 In addition to the present research project, two FBA funded projects are underway focusing on these dynamics: “Gender, Climate Change and Conflict in practice: Adaptation, Resilience and Sustainable Peace in the Africa Great Lakes Region” (Principal Investigator Maria Martín de Almagro Iniesta); and “Environments of demobilization: the gendered intersections between climate, security, and DDR” (Principal Investigator Judith Verweijen).

42 Cf Fröhlich & Gioli, 2015; Ide et al., 2021; Smith, 2022; Smith et al., 2021; Yoshida et al., 2021

43 Ensor 2022

44 Omolo 2010

45 Notably the contributions in DPPA, 2022; but also UNEP et al., 2020

Defining 'gender' and 'masculinities'

This study defines 'gender' as a concept that extends beyond biological differences between men and women. Drawing on Butler and Shepherd, we define 'gender' as the social meaning ascribed to our bodies, whereas 'sex' is understood as the biological, anatomical facts of the body.⁴⁶ 'Gender' refers to the socially constructed roles, behaviours, responsibilities, and expectations that societies assign to individuals as either male or female depending on their sex.⁴⁷ Gender is socially constructed, context specific and ever-changing.⁴⁸ With de Beauvoir's classic tenet as starting point, and inspired by Arnfred's research on gender relations in Mozambique, we argue that because one is not born but becomes a 'woman' or a 'man', gender relations cannot be assumed, but must be investigated.⁴⁹ Studying gender therefore means investigating what West and Zimmerman term 'doing gender' – how 'women' and 'men' are socially constructed in relation to one another as part of everyday interactions.⁵⁰ Gender evolves over time, in tandem with gradual social and structural change.⁵¹ Certainly, gender can be performed in a myriad of ways. Non-binary persons, locally described as PEDE, 'dike-dume' (female-male) and lesbians, exist in eastern DRC and are sometimes visible in urban centres such as Bukavu and Goma. Their presence is far less public in rural areas where the risks of social exclusion, stigmatisation and possible sanctions from heterosexual community members significantly constrain their ability to express themselves openly. As a result, many individuals adopt strategies of concealment to navigate everyday life. Indeed, gendered lived experiences of environmental insecurity from a non-binary perspective would have been interesting to explore. Yet, we have not done so in this specific study. Because of the limited time that the research team was to spend in the field, delimitations were necessary. The focus was therefore gender relations explored through a heterosexual prism.

Environmental insecurity hits right at the heart of the matters that condition the configuration of gender relations globally, namely the relation between paid employment, informal work and the division of household labour.⁵² As environmental insecurity impacts on livelihoods, this alters the configuration of gender relations, including masculinities and the lived experiences of men and boys – in an African context generally, and in the DRC.⁵³ Indeed, in rural eastern DRC, the population largely relies on rain-fed agriculture and livestock breeding as their livelihoods. Formal employment in the state and in the private sector features to some extent, notably historically. In a society permeated by patriarchal structures, these livelihoods are gendered in context specific ways, with crops, animals and employments coded as feminine and masculine respectively. In combination with compounding crises – recurring cycles of violent conflict, protracted economic crisis and state decay – environmental insecurity fundamentally alters the preconditions for these livelihoods.⁵⁴

46 Butler, 1986; Shepherd, 2010

47 West & Zimmerman, 1987

48 Fröhlich & Gioli, 2015

49 Arnfred, 2011; de Beauvoir, 1949

50 West & Zimmerman, 1987

51 Deutsch, 2007

52 Crompton 1999; Coltrane 2000; Lam et al 2012

53 Anyidoho, 2020; Freedman, 2015

54 Freedman 2015; Angélique et al. 2022; Jacobs et al. 2020; Bele et al. 2014

In this context we argue, drawing on Ahmed and Dery,⁵⁵ that it is necessary to also pay attention to men's risks and vulnerabilities. In line with Khan et al.,⁵⁶ we find that it is important to devote analytical interest to femininities and masculinities alike to fully understand the implications of environmental insecurity, because the latter challenges men's ability to fulfil their socially prescribed roles. In a recent contribution, Francis posits that the performance of masculinity should be incorporated as a potentially crucial intervening variable in analyses of whether the impacts of climate change cause political violence.⁵⁷ While interesting and novel, Francis stops at positing the concept of 'thwarted masculinities' as a possible intervening variable. Francis does not examine empirically the link between climate change, political violence and thwarted masculinities in the two case study countries Syria and Tunisia.

Heeding the call of these scholars, this report assigns analytical importance to femininities and masculinities alike, positing that masculinities and the impact of environmental insecurity on men and boys, including their vulnerabilities, are important to explore to fully understand gendered lived experiences of environmental insecurity. A focus on 'women' alone risks neglecting how environmental insecurity, through a complex interplay between socio-cultural, political and economic vulnerabilities, compound existing hardships and create new sources of instability for affected communities. Indeed, for these reasons, calls to include men, boys and masculinities in operational work on Women, Peace and Security have recently been made also in policy discussions.⁵⁸

Because we view gender from a relational point of view, we also approach masculinity as contingent and situationally defined. In Connell's seminal definition, masculinities are socially constructed configurations of practice through which individuals enact and negotiate what it means to be a man in a given context.⁵⁹ Masculinities are multiple rather than singular, shaped by class, race, sexuality and history. Because they emerge from social relations and institutions, masculinities are dynamic and open to change over time. Masculinities exist in hierarchical relations, with hegemonic masculinity occupying a dominant position that legitimises gendered power. Even though only a minority of men are able to fully perform hegemonic masculinity, most nevertheless orient themselves toward its ideals.⁶⁰ This is the hegemonic property of the masculine ideal – it is sustained mainly through cultural complicity, institutional endorsement and everyday social acceptance, rather than through overt violence.⁶¹ The hegemonic masculine ideal takes different shapes in different contexts, yet often encompasses the characteristics breadwinnership, successful claims to authority, physical force and family patriarchy, including the subordination of women and non-binaries.⁶² As we shall see throughout this report, these properties also recur in the hegemonic masculinity ideal in eastern DRC that most men strive for, yet struggle to perform.

55 Ahmed & Dery, 2022

56 Khan et al., 2023

57 Francis, 2024

58 Baldwin, 2026

59 Connell, 1995, pp. 77–78

60 Connell & Messerschmidt, 2005, p. 832

61 Connell & Messerschmidt, 2005

62 Connell, 1995; Trujillo, 1991

Scholars have critiqued the concept of hegemonic masculinity for obscuring the multiplicity and contradictions of masculine practices, particularly in contexts where socio-economic instability renders hegemonic masculinities difficult to achieve. Myrntinen et al argue that relying too heavily on the concept of hegemonic masculinity oversimplifies men's experiences in conflict by focusing primarily on militarised or dominant male roles and overlooking the diversity of masculinities that emerge in such contexts.⁶³ They show that even men who are marginalised or positioned outside dominant masculine ideals can enact violence, thereby unsettling assumptions about who holds power and complicating the very boundaries of what counts as 'hegemonic'. Consequently, Myrntinen et al call for more nuanced and context-specific analyses that move beyond rigid hierarchies of masculinity to better capture how men navigate and produce violence, care and authority in shifting conflict environments. Hollander's ethnography from Kiliba in eastern DRC also illustrates this clearly: war-induced economic collapse left many men unable to meet normative expectations – feeding their families, paying school fees for their children, or demonstrating economic authority – thereby revealing the limits of the hegemonic masculinity framework in situations marked by precarity and conflict.⁶⁴ For this reason, we approach masculinity in eastern DRC as a fluid, historically situated, and context-dependent process, shaped as much by colonial legacies as by the contemporary situation of compounding crises. As we shall see in this report, as compounding crises in eastern DRC make it gradually more difficult for men to perform hegemonic forms of masculinity, men draw on a broad range of behavioural repertoires to navigate their situation: some respond through frustration, substance abuse, idleness and violence, others through creativity and improvisation.

Context and structure of the report

The report presents findings from the three-year FBA Research Project "1325 at the Grassroots: Women's Responses Facing Climate Insecurity" (2023-2026)" exploring the gendered dimensions of environmental insecurity in eastern DRC. Led by Principal Investigator Johanna Malm (first author of this report), the project has been implemented together with Ali Bitenga and Marie-Rose Bashwira (second and third authors of this report). As the first output of this research project, the report provides a birds-eye view of its findings. As such, the report presents findings pertaining to a range of different themes, each of which could indeed be linked up to a broader literature and explored in greater depth. The research team intends to do this in forthcoming peer-reviewed publications. The aim of this specific report is to present the study's observations to a broader audience as the first step in disseminating the results, thus laying the groundwork for later publications that will develop the implications of these findings in greater theoretical and empirical detail.

63 Myrntinen et al., 2025

64 Hollander, 2014

The report is structured as follows. The next chapter provides an overview of the research methods used: case selection, sampling strategies, interview questions and practical field work methods. Subsequently, chapter three and four sets the scene for the study through background analyses of gender relations and conflict dynamics in eastern DRC. Although the report's empirical analysis addresses gender relations, conflict dynamics and environmental insecurity as a triple nexus systematically, the background chapters consider gender relations and conflict dynamics separately in order to introduce each subject matter in sufficient depth.

Subsequently, our empirical analysis of the gendered dimensions of environmental insecurity in a context of compounding crises are presented in three chapters. Each covers a different level of human interaction: chapter five covers the intra-household level (including individual experiences); chapter six covers the within-community level (focusing on social relations within villages); and chapter seven covers the inter-community level (relations between villages and between population groups from other areas).⁶⁵ Finally, chapter eight closes the report with a concluding analysis.

In terms of the three-level structure used to analyse the findings, we argue that it is necessary to systematically take different levels of human interaction into account and fully capture the gendered dimensions of environmental insecurity as they manifest empirically. We thus draw on one of feminist theory's most central tenets, namely the need to transcend the divide between public and private, to fully capture of the gendered dimensions of environmental insecurity, including the different forms of gendered everyday violence that occurs in a conflict-affected context.⁶⁶

Although this report distinguishes analytically between levels, this distinction should not be understood as reflecting neatly separable empirical realities. In practice, many of the dynamics observed—such as violence, resource competition, or mobility—cut across these levels and unfold simultaneously within and between communities. The categories are therefore best understood as heuristic tools that help structure the analysis, rather than as rigid boundaries. To enhance clarity, this report assigns phenomena to a given level based on where social interactions are primarily structured (i.e., within a shared locality or across different localities). However, where relevant, it explicitly recognises the multi-scalar nature of certain processes, acknowledging that they are shaped by interconnected dynamics operating at multiple levels of human interaction.

65 We understand 'community' not as a fixed or homogeneous social group, but as a set of social relations situated within a locality. This relational perspective shifts the focus away from bounded groups and avoids assumptions of unity, shared interests, or fixed boundaries (c.f. Marchais et al., 2020; Strønen, 2023).

66 E.g. Pateman, 1983

02 *Methods*

Nyabibwe, Makobola, and Bwegera are three locations in South Kivu in eastern DRC where the compounded impacts of environmental insecurity is particularly acute, making them suitable case studies for the study. In Nyabibwe, landslides, frequent floods and the maladaptation of crops, such as the declining viability of coffee and banana cultivation, undermine local livelihoods, heightening competition over scarce resources in a context already marked by armed groups activities. Makobola, situated along conflict-prone corridors in Uvira territory, faces recurrent flooding, soil degradation, and the depletion of fish stocks in Lake Tanganyika, all of which displace populations and exacerbate tensions between farming, fishing, and pastoralist communities. In Bwegera, declining agricultural productivity, coupled with recurrent local and land conflicts and the enduring presence of armed actors, continues to destabilize rural life, forcing repeated displacement and increasing women's and girls' exposure to sexual violence. Together, these sites capture the intertwined dynamics of climate change, environmental degradation, violent conflict and gender-based violence in eastern Congo, highlighting how ecological shocks not only erode material security but also reverberate through the gendered fabric of community life, deepening cycles of vulnerability and insecurity.

The field work was composed of two rounds of research, of which one took place in November-December 2023 (round I) and the other in December 2024-January 2025 (round II). While the research sites were accessible for visits by the research team at the time of the research, they are engulfed in insecurity at the time of writing (June 2026). All three sites at the time of writing controlled by Rwandan-backed rebel group M23.

The map displays the Democratic Republic of the Congo (DRC) with its provinces and major cities. Neighboring countries include the Central African Republic, South Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia, Angola, and the Republic of Congo. The Atlantic Ocean is to the west. An inset map in the top left corner provides a detailed view of the study area in the northeast, highlighting the locations of Nyabibwe, Bwegera, and Makobola. A yellow circle on the main map indicates the region around Goma, Bukavu, and Kinshasa.

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Figure 2. Sampling of research sites

The three research sites were selected using purposive sampling. Four criteria guided the sampling process:

- **Criterion I: Exposure to environmental insecurity.** Meteorological data was used select sites that have been exposed to environmental insecurity in the form of rising temperatures, erratic weather patterns, prolonged droughts, floods and landslides. This assessment was complicated by the scarcity of reliable meteorological data, which limited the ability to compare current climatic conditions with those of previous years to systematically measure changes in weather patterns. All territories of South Kivu province have experienced the effects of climate change, but we concluded based on available data that Kalehe and Uvira territories have been the hardest hit.⁶⁷
- **Criterion II: Exposure to insecurity.** Sites were selected that had been affected by insecurity during the five years preceding the field work: conflicts involving armed groups, intracommunity conflict between ethnic groups, conflicts with neighbouring communities, land conflicts or family conflicts. Fizi, Uvira, and Kalehe were identified as the territories most severely impacted by insecurity.⁶⁸
- **Criterion III: Researcher safety.** Sites that were safe and accessible for the research team were selected. A visit to Fizi territory was ruled out because of the security situation in the area. However, certain respondents from the part of Makobola that is located in Fizi joined interviews and focus groups on the Uvira side of Makobola.
- **Criterion IV: Distance from province capital Bukavu.** The research team sought to avoid the 'streetlight effect' whereby researchers select study areas based on convenience, including cultural affinity, practical considerations like language, data availability, and perceived safety.⁶⁹ Therefore, relative distance to Bukavu, capital of South Kivu province, was taken into consideration when selecting the three research sites in Uvira and Kalehe. All three are located several hours' drive from Bukavu.

⁶⁷ Weather & Climate, 2025

⁶⁸ UNICEF, 2025

⁶⁹ Hendrix, 2017

A decolonial approach

Much of the scholarship on the DRC has historically been produced by Western academics. Congolese researchers, by contrast, are often relegated to the ‘on-the-ground’ dimensions of research—data collection, community engagement, and the logistical work of fieldwork—stemming from a persistent perception that they occupy a lower epistemic status. Meanwhile, Western scholars are commonly positioned as the architects of research design, presumed to possess stronger theoretical training and superior academic writing skills.⁷⁰ This artificial division of labour has long marginalised the voices of Congolese scholars within knowledge-production processes.⁷¹ This pattern recurs in conflict studies more generally⁷² and has contributed to the expansion of what Mudimbe termed the ‘colonial library’, namely the extensive corpus of Western-authored texts and discourses that represent Africa and Africans in ways that foreground Western thought while diminishing or excluding other epistemic perspectives.⁷³

The dominance of Western scholars in research on gender-based violence – and on many other topics concerning Africa – largely reproduces epistemic hierarchies and asymmetrical power relations in knowledge production. Yet, in such situations, what Mignolo and Walsh describes as ‘colonial cracks’ emerge from the tensions and disruptions that arise when dominant Western frameworks are confronted with local realities, critiques, refusals and alternative ways of knowing.⁷⁴ In this sense, colonial cracks are produced not by dominance itself, but by its limits when it encounters resistance and lived realities. These moments of contestation can open space for alternative modes of collaboration and more plural, decolonial forms of knowledge production.

In this project, to counter the persistent colonial practices discussed above and widen the ‘colonial crack’, we have intentionally adopted a decolonial stance. The first author has collaborated throughout the project on equal terms with the second and third authors, both Congolese researchers. Their situated knowledge and contextual expertise, combined with their theoretical expertise and scholarly experience, contributed insights that would not have been possible for the first author to produce alone as a Western scholar. The key tenet management wise has been to make a concerted effort to decolonise relations within the research team and strive towards genuine co-ownership. We have worked in close partnership from the earliest stages of research design, including specific measurements and data collection strategies, through data gathering, analysis, writing, and co-publication. Beyond inclusion and decolonisation, we also deem this approach the best to secure research excellence.

70 Bitenga Alexandre, forthcoming

71 Nyenyezi et al., 2020

72 Eriksson Baaz & Utas, 2019

73 Mudimbe, 1988, p. 160

74 Mignolo & Walsh, 2018

Furthermore, we have sought to foreground the voices of women and men in impoverished rural settings in eastern DRC, whom we consider to be epistemic agents in their own right – individuals capable of producing vital knowledge about the environmental insecurities they navigate in their everyday lives.

Ethical review, data gathering and analysis

After ethical review, the project was approved by the Swedish Ethical Review Authority and the South Kivu Provincial Ethics Committee in the DRC. All respondents were provided with oral information in the language of the community around the purpose of the study and around anonymisation of respondents, thus establishing the formal basis for a trustful relationship. Oral informed consent was obtained from all participants, who were also assured of their right to skip questions, guaranteed anonymity through the use of pseudonyms, and informed about their rights in terms of personal data protection under GDPR. Great care was taken to ensure a safe environment for focus groups and interviews to maintain privacy and confidentiality. The respondents were offered in-kind compensation for the time spent participating in interviews and focus groups.

During both rounds of field work, the research team consisted of two Congolese researchers (second and third authors of this report), one female and one male, both experienced in conducting research pertaining to sensitive issues in rural communities in eastern DRC. Prior to the first round of fieldwork, reconnaissance visits were conducted in October 2023 by the second author of this report. During these visits, contacts with local facilitators and leaders were established and information about the forthcoming research visit was disseminated across different ethnic groups.

Data collection involved focus group discussions, key participant interviews and life story interviews, all conducted using semi-structured interview guides developed jointly prior to field work by all three authors of this report. Women and men from diverse ethnic backgrounds volunteered to participate and interview appointments were organised through the local facilitators. Respondents were recruited with the help of the facilitator through a combination of purposive sampling – targeting individuals with direct experiences of environmental insecurity – and referral sampling, where additional respondents were identified by means of recommendations from existing respondents during interviews. Ethnicity was also considered during the sampling process. The sample included the following ethnic groups residing in each of the sites: bafuliiru, barundi, banyamulenge, bashi and bambuti in Bwegera; bavira, babembe, banyindu, bafuliiru and bashi in Makobola; and bahavu, banyarwanda (hutu) and batembo in Nyabibwe. The research team deemed the inclusion of a broad range of ethnic groups in sample a necessity in order to understand evolving conflicts and community dynamics.

This first round of data collection included a higher proportion of female respondents because the focus of the original research project was women as a group. Focus groups were held separately with female farmers, traders, housewives, male community members and mixed groups consisting of men and women with knowledge of key events related to environmental insecurity (age span 25-70). A total of 15 focus groups (five per community) were conducted, each involving 5–6 participants. Additionally, 6–7 key participant interviews were conducted

in each community, of which at least one was a lifestory interview, including interviews with male as well as female leaders, teachers and other community members affected by natural hazards such as floods or droughts.

The selection of themes was based on a semi-structured interview approach, with core questions prepared in advance drawing on existing literature of relevance to the study of gendered lived experiences as they play out in a context of compounding crises, namely, as cited throughout this report, scholarly literature on gender, climate change, environmental degradation, violent conflict, governance crises and socio-economic decline. These pre-established questions guided discussion around shifting rainfall patterns, droughts, temperature changes and their gendered impacts, while allowing space for new themes to emerge from participants' accounts.

This combination of prior thematic framing and adaptive questioning ensured theoretical comparability while retaining openness to emic perspectives. The terms 'climate change' and 'environmental change' were introduced in Swahili as *mabadiliko ya mazingira* (shift of the environment) and *mabadiliko ya hewa* (shift of the weather), which participants recognised and could relate to their lived experiences (see more below on the use of Swahili language during interviews).

Photo:
Pascal Bormann

Focus group discussion
at the Health Center
in Bwehira with
researchers Marie-
Rose Bashwira and
Ali Bitenga.



During the first round of fieldwork, the interview questions focused on gender relations and participants' lived experiences of environmental insecurity. We probed perceptions of shifting rainfall patterns, droughts, and changes in temperature over time, as well as the gendered impacts of environmental stress on agricultural production and livestock keeping. The interviews also addressed the broader socio-economic effects of climate change across multiple scales, ranging from the household to interpersonal relationships and wider community dynamics. Furthermore, we examined perceived links between environmental change and emerging patterns of insecurity, including armed mobilisation, sexual violence, and women's adaptive responses to climate-related challenges. Emerging inductively from the first round of inquiry was a complex interplay between environmental insecurity and gender relations, with women and men experiencing differentiated impacts at multiple levels – from the intimate domain of the household to the wider social fabric of village life.

Ahead of the second round of data collection, the research team made a major adjustment in the analytical focus, namely to focus on male experiences with a majority of male respondents. The decision to focus on male respondents was informed by insights gained during the first round of fieldwork, namely that men, too, are profoundly affected by environmental insecurity. It influences their roles as fathers, sons and community members in significant ways, with notable implications for insecurity and for gender-based violence. Thus, a more targeted interview guide was developed for the second phase, which retained many of the original thematic concerns but shifted analytical focus toward masculinities, specifically how men are affected by and respond to environmental insecurity within their sociocultural and political contexts, and how this impacts on gender roles in the communities.

Thus, during the second round of data collection, male community dwellers in different age groups (aged 20-70) and with various professional statuses were consulted in all three research sites. In order to apply an intersectional lens, the sample included a range of different categories of respondents. At least twelve focus groups were conducted in each site with various male groups, including elderly men, male farmers, male herders, small-scale traders working from home in the village, men identifying as *ambulants* who travel to other regions for business, motorcycle taxi drivers, unemployed men or those without clear occupational status, educated men, young men (aged 20-45), male mineral diggers in Nyabibwe, and male fishermen in Makobola. In addition, two focus groups with female respondents were organised: one with women and one with single girls. Each focus group comprised at least five participants. In addition, 8-9 in-depth interviews were conducted in each research site with members of Wazalendo groups, a constellation of local armed groups that emerged to protect communities from other armed actors (see the background section on conflict dynamics below). Interviews were also conducted with polygynous men (2-3 in each setting, depending on availability) and at least one interview with a young man referred to as a *célibataire endurci* (a man delaying marriage, often due to financial constraints). Additionally, at least three key informant interviews per research site were conducted with local leaders, including neighborhood chiefs and religious leaders.

Interviews and focus groups lasted 1-2 hours and were carried out in Swahili, the region's main language of communication. In the study areas, linguistic diversity is notable. Communities in Makobala and Bwegera commonly speak Kivira, Kifuliru, Kibembe and Kirundi, while in Nyabibwe, Kihavu, Mashi and Kitembo are prevalent. Despite this multiplicity of vernaculars, Swahili operates as a shared *lingua franca*, enabling everyday interactions across ethnic boundaries. All of our respondents were fluent in Swahili.

All interviews were audio-recorded, transcribed verbatim and translated from Swahili into French. The accuracy of the translations was verified through a double-checking process conducted by both the second and third authors of this report. Subsequently, the French language transcripts were analysed by all three authors of this report using thematic analysis. In addition, field notes were taken to capture observations and informal conversations as well as to enrich the data by highlighting 'rich points' during interviews and focus group discussions. Citations from the French language transcripts were translated into English for the purposes of this report.

During data analysis, themes were identified through a combination of inductive and deductive approaches, grounded in the original research questions, the questionnaires and the empirical materials, including interview transcripts and fieldnotes. Each author began by carefully reviewing the transcripts and fieldnotes, generating initial codes and themes inductively. The data were then revisited in multiple iterative rounds, during which thematic categories were refined individually by each of the three authors of this report. A series of deliberative meetings allowed the authors to reach consensus on the overarching themes presented in this report.

The findings outlined below reflect a rigorous process of thematic mapping and conceptual definition. Throughout the analysis, all authors collaborated closely to ensure that emergent themes remained grounded in the empirical materials. This process followed the principles of reflexive thematic analysis as articulated by Braun and Clarke, including constant comparison and iterative refinement.⁷⁵

75 Braun & Clarke, 2006

03 *Background: Gender relations in eastern DRC*

Gender relations in eastern DRC are shaped by persistent patriarchal norms. Men are typically regarded as heads of the family and primary decision-makers, while women are expected to fulfil domestic duties, care for children and support their families through subsistence activities.⁷⁶ The 1987 Congolese Family Code designated the husband as the sole head of the household, requiring the wife(s) to obey him, live with him and ask his permission to work or travel. Recent reforms in 2006 have improved the legal status of women by bringing greater equality, granting women the right to work and manage their own finances without their spouse's consent. However, implementation remains a challenge, and traditional gender hierarchies continue to shape contemporary social organisation in eastern DRC.⁷⁷ Extending beyond decision making in the household, this also includes matters such as land ownership, inheritance practices and household decision-making. Women face many barriers to access land rights, reflecting the control of men over economic resources and productive assets.⁷⁸ Women's access to education, employment opportunities, and leadership positions is also limited, reinforcing a cycle of dependency and inequality.

Contemporary masculinities in eastern DRC also need to be understood in a historical context. Belgian colonial rule imposed rigid patriarchal norms, Christian moral discipline and a wage-labour economy that reconfigured masculine ideals around productivity, household authority, and obedience to the colonial state, producing expectations of male provision and control that continue to structure the moral and social terrain in which men negotiate their identities today.⁷⁹ However, the influence of customary law and traditional authority, systems that predate colonial intervention, are also part of the explanation as to why patriarchal structures persist. Traditional chiefs continue to have significant influence over gender norms and practices, often reinforcing conservative interpretations of appropriate gender roles.⁸⁰ Chiefs also play crucial roles in mediating disputes, approving marriages, and determining inheritance arrangements. These authorities are highly respected and feared, as they are seen to be in direct communication with the ancestors – the 'Gods'.

76 Lauro, 2020

77 Hilhorst & Bashwira, 2014; Mudinga, 2013; Sheria Nfundiko, 2015

78 IUCN, 2022; Mudinga, 2013; Seff et al., 2021

79 Cuvelier, 2014

80 Seff et al., 2021

However, traditional patriarchal norms are not merely imposed, but also sustained through daily practices and cultural beliefs that normalise male dominance and female subordination. As such, women also take part in maintaining the traditional system as they are in charge of children's education.⁸¹ Social expectations regarding appropriate behaviour for men and women are reinforced through community sanctions, family pressures, and internalised beliefs about natural gender differences.⁸² Women who challenge traditional expectations often face social exclusion and criticism.

Due to persistent gender norms and lack of opportunity, most women in eastern DRC are active economically in the agricultural sector or in the informal economy. Women's income-generating activities have traditionally been considered as supplementary to male breadwinning rather than as equal economic contributions. However, as we shall see in this study's empirical analysis, in a situation of compounding crises where men have been killed, displaced, recruited into armed groups or lost their formal jobs, many women have been forced to assume breadwinner roles. This has led to gradual shifts in gender roles even within otherwise traditional communities, however, as we shall also see in the empirical analysis below, mostly without women gaining equivalent decision-making power.

Gender relations in South Kivu province are also shaped by ethnicity. The DRC is home to diversity of ethnic groups with distinct cultural traditions that shape gender practices. Ethnic communities in South Kivu include the Bashi, Barega, Bavira, Bafulero, Babembe, Banyamulenge, Bafuliiru, and Bahavu peoples. Each group maintains their own practices around marriage and inheritance, contributing to the diversity of gender meanings across the province. Women's experiences may also vary significantly depending on their ethnic group, some communities offering greater opportunities for female participation in decision-making, others maintaining stricter patriarchal control.⁸³ Some ethnic groups with pastoralist livelihoods have specific gender roles related to cattle-keeping and seasonal migration. Among agricultural communities, gender roles are typically organised around farming activities, with women primarily responsible for food crop production while men focus on cash crops and livestock management. However, as insecurity and economic decay bring about migration in search of new livelihoods, individuals and communities encounter different approaches to gender relations through intermarriage and social interaction.

Indeed, marriage and family relationships remain central to understanding gender meanings in South Kivu, as they reflect and reproduce gender hierarchies. Marriage practices differ significantly among ethnic groups and socio-economic contexts, with variations in bride price practices and marriage varying significantly.⁸⁴ In some communities, bride price is primarily symbolic and relatively modest, while in others it can involve substantial payments in cash, livestock or goods. In conflict-affected settings, bride price practices have also been reshaped by

81 Hilhorst & Bashwira, 2014; Mudinga, 2013

82 Chesley, 2011

83 Ibanda G. et al., 2021; Mudinga, 2013; Sheria Nfundiko, 2015

84 IUCN, 2022; Mudinga, 2013



Photo:
Pascal Bormann

Focus group discussion
at the Health Center
in Bwegera with
researcher Ali Bitenga.

poverty, insecurity, and changing gender relations,⁸⁵ as is reflected also in this study's empirical analysis. The bride price practices for example reinforces gender hierarchies as reproductive and productive capacity is being transferred to male-dominated family units. This pattern is particularly pronounced in situations of earlier marriage where young wives have limited power within their household and face restrictions on their mobility, education, and economic activities.

Another type of marital relationship found in South Kivu, particularly in rural areas is polygamy, specifically polygyny, when a man marries more than one wife. Polygyny remains socially accepted and legally recognised in many communities, although economic constraints have traditionally limited its practice to men with sufficient resources to support multiple wives and children.⁸⁶ Polygynous marriages create complex gender dynamics, as they can provide women with support networks and reduced domestic burdens, but also increase vulnerability through competition for property rights and inheritance. The practice reinforces male privilege by allowing men multiple sexual and reproductive partners, while expecting women to remain monogamous and faithful. As we shall see in this study's empirical analysis, in a context of compounding crisis, environmental insecurity has prompted changes in this practice, where certain men now use polygyny as a livelihood strategy.

Armed conflict has had significant impact on gender relations in South Kivu. For decades, the province has experienced waves of violence conflict and insecurity that have fundamentally altered social structures, disrupted traditional gender ideology, and created new forms of gender relations, exacerbating gender-based violence and marginalisation. Armed groups have systematically employed rape and sexual assault to terrorise communities, punish perceived enemies, and assert dominance over territory and populations.⁸⁷ The widespread use of sexual violence has created a climate of fear that constrains women's mobility, limits their economic activities, and reinforces male protection narratives that can strengthen patriarchal control. However, sexual violence is not merely a manifestation of conflict, but is deeply embedded in social practices that draw from more than a century of colonial brutality, patriarchal gender systems, weak institutional protections, discriminatory legal frameworks and normalisation of sexual violence across society.

⁸⁵ Jean-Bouchard, 2014

⁸⁶ IUCN, 2022; Mudinga, 2013

⁸⁷ Bitenga Alexandre et al., 2021

Also, sexual violence continues long after periods of crisis due to the continued presence of armed groups and the profound disruption of social relations.⁸⁸ This strategic use of sexual violence has profound implications for how gender is understood and practiced in conflict affected communities, as it reinforces male dominance while creating lasting trauma and social destabilisation. Indeed, militarisation has reinforced certain masculine ideals. As we shall see in this study's empirical analysis, some young men, facing limited economic opportunities, are drawn to armed groups where they can gain social status by performing violent forms of masculinity, thus perpetuating cycles of violence.⁸⁹

Although men also face a range of difficulties in the current context as we shall see in this study's empirical analysis, the situation exacerbates women and girl's marginal positions also beyond the sexual violence aspect, as they face other forms of violence such as modern slavery, violence in the domestic sphere, economic marginalisation, and discrimination regarding access to schooling and political participation.⁹⁰ Traditional protection mechanisms have proven inadequate in this situation, challenging assumptions about male protective capacity.⁹¹ Facing this situation, some communities respond by restricting women's activities as a protective measure, while in others women are forced to assume greater economic and social responsibilities, changing traditional gender roles.

Despite the persistence of traditional patriarchal structures and the devastating impact of conflict, South Kivu is experiencing gradual but significant changes in gender dynamics that reflect broader social transformations. These changes are driven by multiple factors, including legal developments facilitating educational expansion for women and girls, economic necessity that opens opportunity for women, successful advocacy by women's organisations, and generational shifts in attitudes toward gender equality.⁹² Understanding these contemporary dynamics requires recognising both the constraints imposed by traditional structures and the emerging opportunities for challenging established gender norms.⁹³

88 Allouche et al., 2023; Bitenga Alexandre et al., 2021; IUCN, 2022; Thulin et al., 2022

89 Bitenga Alexandre et al., 2021; Thulin et al., 2022

90 Lwambo, 2013

91 Allouche et al., 2023; Bitenga Alexandre et al., 2021; Thulin et al., 2022

92 Hilhorst & Bashwira, 2014; Sheria Nfundiko, 2015

93 IUCN, 2022; Knowledge Success, 2024

04 *Background: Conflict dynamics in eastern DRC*

The roots of insecurity in eastern DRC extend well beyond the current context of environmental insecurity. The country's conflict dynamics are shaped by a complex interplay of historical and contemporary factors: colonial legacies, fragmentation of state authority, interethnic tension, struggles over land, resources and customary power, and the enduring impact of regional wars involving neighbouring countries, not least Rwanda and Burundi. As we shall see in the empirical analysis further down in this study, environmental insecurity interacts with these dynamics in complex ways.

Competing explanatory frameworks

The 'conflict minerals' approach to understanding the root causes of conflict in eastern DRC is influential, notably among Western policy makers and the Western public. It emphasises regional geopolitics and the political economy of resource extraction, highlighting minerals such as coltan, gold and diamonds as central to the persistence of the region's conflicts. In this view, sustainable peace remains unattainable as long as the extraction and trade of these resources remain embedded within global supply chains, thus sustaining rebel economies.⁹⁴

While effectively drawing attention to the global entanglements of local violence, the 'greed thesis' obscures the interconnections between local economies, community survival strategies, and the implications of state fragmentation. Indeed, most armed groups do not extract minerals themselves, but rather finance their operations through informal taxation and systematic looting, and violence mostly does not take place in close proximity to mining sites.⁹⁵ Moreover, as shown by Vogel, artisanal mining is not merely a site of conflict, but a vital livelihood for many, constituting a foundational pillar of local economies and social life, including providing families with food, education fees and other essential needs.⁹⁶ Lastly, challenging dominant interpretations, Autesserre has called for a 'local turn', arguing that enduring violence in eastern Congo is less about transnational geopolitics and more deeply rooted in state failure and local struggles over land and power.⁹⁷

Scholars have also shown that colonial legacies and the manipulation of identity continue to shape contemporary conflict dynamics. Indeed, the roots of violent governance and exploitative extraction can be traced back to the brutal regime of King Leopold II, that left a legacy of trauma and state violence.⁹⁸ Moreover, the Belgian colonial policy of indirect rule, which involved governing through existing or newly appointed chiefs and so-called traditional authorities, deepened ethnic divisions by artificially codifying ethnic identities and privileging certain groups over others.⁹⁹ For example, the ethnic groups Banyarwanda and Barundi were settled in Congolese territory during the colonial period as part of labour migration policies. In the postcolonial era, both groups have in vain sought recognition as a distinct ethnic

94 Collier & Hoeffler, 2004; Vlassenroot & Raeymaekers, 2009

95 Chang & Christensen, 2023; Laudati, 2013

96 Vogel, 2022

97 Autesserre, 2010

98 Vlassenroot & Huggins, 2004

99 Hoffmann, 2021; Vlassenroot et al., 2004

community with their own *chefferie* in South Kivu.¹⁰⁰ This lack of customary recognition reflects in contemporary contestation between the Barundi and the neighbouring groups such as the Bafuliiru, Banyamulenge and Babembe over legitimacy, land, and political representation.

The Congo Wars and their aftermath

An oft-cited profound turning point for the configuration of violence across central and eastern Africa is the 1994 genocide against the Tutsi in Rwanda, which had far-reaching consequences for the DRC, lasting until this day. After the genocide, over one million Hutu refugees, among them militias implicated in the genocide, fled into neighbouring DRC (then Zaire).¹⁰¹ In response to attempts by those militias to destabilise the new Rwandan government, the latter launched a military intervention into the DRC claiming to neutralise threats along its borders and protect Congolese Tutsi populations (referred to as Banyamulenge above). This intervention ultimately catalysed the first Congo War (1996–1997), extending beyond the eastern provinces all the way to the capital Kinshasa, where President Mobutu Sese Seko was overthrown. This inaugurated a protracted cycle of regionalised conflict that continues to shape the sociopolitical landscape of eastern DRC to this day.¹⁰² After gaining power, the new President Kabila expelled foreign troops from Congolese soil and in response, Rwanda and Uganda sponsored proxy insurgencies within the DRC. This externalised internal Congolese power struggles, transforming the DRC into a theatre for competing regional ambitions and escalating into the Second Congo War (1998–2003). This was a multi-faceted and protracted struggle involving at least nine African states and numerous non-state armed groups, which has been aptly described as ‘Africa’s World War’ with millions of dead from direct fighting, disease and malnutrition.¹⁰³

The Sun City agreement in 2002 ended the war, led to the 2003 establishment of a transitional government and facilitated the formal withdrawal of foreign troops and introduced a power-sharing arrangement aimed at integrating former belligerents into official state institutions. The agreement also laid the groundwork for the 2006 national elections and postwar disarmament, demobilisation, and reintegration programs. It was bolstered by substantial international investment in peacebuilding and state reconstruction efforts. Yet, despite formal political settlement and the deployment of the largest and most expensive UN mission to the DRC (MONUC, later MONUSCO), armed violence has persisted as noted above, particularly in the eastern provinces of Ituri, North Kivu, South Kivu and Tanganyika.¹⁰⁴

The disarmament, demobilisation, and reintegration processes that followed the Sun City agreement were deeply flawed. Many ex-combatants were rapidly integrated into the Congolese national army without sufficient vetting, training, or institutional reform, resulting in a fragmented and often predatory military, notorious for indiscipline, human rights abuses

100 Büscher et al., 2024; Ntanyoma & Hintjens, 2022

101 Prunier, 2009

102 Assumani, 2020; Ntanyoma & Hintjens, 2022

103 OCHA, 2025; Stearns, 2021; van Leeuwen et al., 2023

104 Van Leeuwen et al., 2020; Verweijen et al., 2020

– including sexual violence – corruption, and looting. While some combatants benefited from formal demobilisation, many others returned to armed struggle or formed new militias due to the absence of meaningful reintegration support. Rather than dismantling the incentives for violence, the postwar settlement in eastern DRC reproduced conditions in which armed mobilisation continued to function as a viable, and at times necessary, strategy for survival, political power and economic access.¹⁰⁵ It is these patterns that continue to this day in our research sites.

Governance and the proliferation of armed groups

The DRC is frequently cited as a paradigmatic case of state failure, particularly in the east. The fragmentation of the Congolese state since the 1970s has indeed facilitated the proliferation of armed actors. Under Mobutu's long reign (1965–1997), state institutions were hollowed out through clientelism, corruption and deliberate underdevelopment.¹⁰⁶ Public services collapsed, the security apparatus was politicised and under-resourced, and law enforcement became inaccessible to most citizens. Contemporary Congolese governments have not been able to reverse these trends. In many rural areas, the presence of the Congolese state is minimal, or entirely symbolic. Where public services continue to be provided, it is mainly through local-level, bottom-up arrangements, where citizens themselves negotiate contributions towards salaries of civil servants, for example teachers and medical workers, to keep schools and health facilities open. Titeca and de Herdt refer to this pattern as 'real governance beyond the failed state'.¹⁰⁷ This vacuum has allowed armed actors to embed themselves as providers of security, justice, and economic regulation – roles typically associated with the state.¹⁰⁸

Reflecting on the cyclical surges of violence in the Kivus, Vlassenroot and Raeymaekers argue that rather than responding to each new emergency as an isolated event, the international community should focus on addressing the deeper structural impediment to peace in the DRC, namely the violent and privatised governance of public goods and resources.¹⁰⁹ From this perspective, conflict is not simply the product of state weakness, but rather the outcome of deliberate political strategies in which state and non-state actors collude in the fragmentation of authority.¹¹⁰ Political elites – particularly those in Kinshasa and provincial capitals – often undermine state institutions in eastern DRC and instrumentalise armed groups, creating a governance vacuum that allows militias and armed groups to flourish to the detriment of local populations.¹¹¹

105 Büscher et al., 2024; Ntanyoma & Hintjens, 2022; Van Leeuwen et al., 2020

106 Autesserre, 2010

107 Titeca & de Herdt, 2011

108 Vlassenroot & Raeymaekers, 2009

109 Vlassenroot & Raeymaekers, 2009

110 Stearns, 2014; Vlassenroot & Raeymaekers, 2009

111 Autesserre, 2010; Vlassenroot & Raeymaekers, 2009



Photo:
Pascal Bormann

Focus group in
Bwegera with
researcher Ali Bitenga

Even before the colonial era, communities in the DRC organized armed mobilization in response to the expanding influence of Swahili-Arab rulers. Waves of armed mobilization have been a recurring feature of both the colonial and post-colonial periods in Congo, reflecting longstanding patterns of resistance, contestation, and negotiation of power.¹¹² However, since the 1990s, eastern DRC has emerged as a hub for a diverse constellation of foreign and domestic armed actors. By 2025, over 120 armed groups were active in eastern Congo, embedded within complex networks of political ambition, ethnic mobilization, and extractive economies.¹¹³ Among the most prominent foreign armed groups operating in eastern DRC are the *Forces Démocratiques de Libération du Rwanda* (FDLR) primarily composed of Rwandan Hutu rebels with historic ties to the 1994 genocide—as well as Burundian insurgent groups such as Red Tabara and the National Forces of Liberation (FNL).¹¹⁴ These armed formations coexist and often compete with a diverse array of Mai-Mai militias, which are rooted in community defence traditions, but heterogeneous in their origins, objectives, and organisational forms. Mai-Mai groups are typically characterized by flexible, decentralised structures that enable them to adapt swiftly to shifting military and political landscapes.¹¹⁵

Recent reconfigurations have seen many Mai-Mai groups in North and South Kivu provinces reframed as *Wazalendo* (derived from the Swahili word for ‘patriots’) under President Tshisekedi’s call to defend the country in 2023, through legislation that transformed these previously informal, unregulated militias into *forces patriotiques* - state-recognised auxiliary forces.¹¹⁶ Mai-Mai groups was thus formally encouraged to participate alongside the national army in operations against the M23, a Tutsi-dominated and allegedly Rwanda-supported rebel group that, in alliance with Congolese Banyamulenge armed groups, has increasingly consolidated control over parts of both South and North Kivu, posing a significant threat to state authority and regional stability. *Wazalendo* groups represent an amalgam of armed groups and individuals defending (or claiming to defend) the nation against external aggression. Although their

112 Nzongola-Ntalaja, 2002

113 Global Centre for the Responsibility to Protect, 2025

114 Assumani, 2020; Claessens et al., 2014; Vlassenroot & Huggins, 2004

115 Claessens et al., 2014; Vlassenroot & Van Acker, 2001

116 Congo Research Group & Ebuteli, 2025

coordination has expanded as the conflict intensifies, they remain diverse ethnically and regionally and frequently operate autonomously or in competition with one another.¹¹⁷

However, not all armed groups in eastern Congo are incorporated into the *Wazalendo* framing. In South Kivu, militias associated with the Banyamulenge community – such as Twigwaneho active in the Haut plateau – are typically seen by other local ethnic groups as representing foreign Rwandan interests, and are now allies to the M23.¹¹⁸ Our study sites Makobola and Bweyera was under de facto territorial control by Wazalendo groups until December 2025, when it fell into the hands of M23 forces, just like our study site Nyabibwe had done earlier in the year.

Land conflict

Land conflict is an important source of violence in eastern DRC, recurring also in the empirical observations of this study. It is a historically rooted and multifaceted issue, shaped by colonial legacies, overlapping legal systems, demographic pressures and ongoing violence. During Belgian colonial rule, fertile lands in eastern DRC were expropriated for European settlers and missionary institutions. This marginalised local populations and disrupted indigenous systems of land tenure. After independence, the Congolese state did little to redress these inequalities. Instead, it inherited and perpetuated a dual system of land governance in which customary authorities continued to allocate land at the community level, while the state claimed exclusive authority to issue formal land titles. This legal pluralism has created a space of ambiguity and contestation, where the legitimacy of land claims is constantly negotiated, often pitting ancestral rights against statutory deeds.¹¹⁹

Once embedded in community-based systems of reciprocity and stewardship, land is increasingly commodified and appropriated by political and military elites, a theme that recurs also in this study's empirical analysis. Customary leaders, once considered custodians of communal land, are now frequently implicated in transactions that lease or sell land to powerful outsiders, including army commanders, national politicians, and urban investors, without the consent of local populations. This process of elite capture is particularly visible in territories like Kalehe, where our study site Nyabibwe is located, and Uvira, where our study site Makobola is located. In these areas, land has been allocated for agribusiness or speculative development programs. These land deals, negotiated through informal networks of patronage and enforced through threats or bribery, displace small-scale farmers and deepen local distrust in both state and customary institutions. This can spark disputes even in areas where relations between local groups were previously stable.¹²⁰

117 Huon, 2024

118 Brabant & Nzweve, 2013; Ntanyoma, 2024

119 Autesserre, 2010; Huggins, 2010; Vlassenroot et al., 2004; Vlassenroot & Huggins, 2004; Vlassenroot & Raeymaekers, 2009

120 Huggins, 2010; Claessens et al., 2014; Vlassenroot & Huggins, 2004

The aftermath of armed conflict further destabilises land tenure. Waves of displacement have fragmented communities, and returnees often discover their ancestral land occupied or transferred during their absence. These contested returns have sparked violent confrontations between former residents and new occupants. Armed groups and elements within the national army exploit these disputes, either by claiming to restore community justice, or by asserting control over valuable territory. In the Ruzizi Plain for instance, military officers and militia leaders have seized land along Lake Tanganyika, turning displacement into opportunity and embedding land struggles within broader dynamics of militarised predation.¹²¹

Land conflict often intersects with ethnic conflict, which must be understood through the lens of contested migration histories, systemic exclusion, and strategic manipulation of belonging in eastern Congo. In places like Uvira and Fizi, ethnic tensions flare between communities such as the Banyamulenge, Bembe, Bafuliru, and Barundi. The Banyamulenge is a Tutsi pastoralist ethnic group that recurrently has been portrayed as outsiders, despite their long-standing presence in the region, a perception that has led to their exclusion from customary land entitlements and governance structures. When they attempt to access grazing lands or settle in areas historically dominated by other autochthonous groups, disputes often escalate into open conflict. These tensions are not merely about land, they are entangled with claims to citizenship, dignity, and political recognition, often giving rise to the formation of ethnically aligned militias and reciprocal cycles of violence.¹²²

The state's ambiguous or partisan responses – selectively deploying security forces, tolerating militia activity by allied factions, and repressing opposition groups – have often aggravated these disputes, encouraging factions to mobilise armed support. Local leaders, aligned with ethnic constituencies, have invited militias to bolster their claims, deepening the militarisation of land and governance. This is visible in the emergence of armed self-defence groups such as the Banyamulenge-led Twigwaneho and the opposing Mai-Mai factions mentioned above. Each group justifies its presence as defenders of territorial and customary rights, transforming governance disputes into ethnically charged confrontations. Civilians are frequently caught in the crossfire, with entire villages displaced or destroyed.¹²³

Conflict dynamics in the research sites

In Uvira where Makobola is located, tensions between the Banyamulenge and other ethnic groups such as the Bafuliru, Bembe, and Barundi reflect long-standing disputes over access to land and political space.¹²⁴ The exclusion of the Banyamulenge from local governance structures and their framing as foreigners has fuelled their sense of alienation and motivated both political and military mobilisation. These dynamics have been especially volatile during periods of state decay, beginning in the late 1970s as Mobutu's corrupt dictatorship and economic decline weakened government institutions.¹²⁵ As we shall see in the empirical analysis, the 1998-1999

¹²¹ Assumani, 2020; Claessens et al., 2014; van Leeuwen et al., 2023; Vlassenroot et al., 2016

¹²² Brabant & Nzweve, 2013; Huggins, 2010; Ntanyoma & Hintjens, 2022

¹²³ Assumani, 2020; Ntanyoma & Hintjens, 2022

¹²⁴ Ntanyoma & Hintjens, 2022; Van Leeuwen et al., 2020

¹²⁵ Young & Turner, 2012

Makobola massacre during the Second Congo War continues to shape the narrative frameworks through which many local male Wazalendo, particularly those now aged between 40 and 60, articulate their motivations for joining armed groups. The massacre involved 500 civilians being killed by troops of the *Rassemblement Congolais pour la Démocratie*, reportedly supported by Rwandan forces. Victims, including women and children, were killed while seeking refuge in churches and homes.¹²⁶ In the wake of the Congo Wars, Banyamulenge-led militias, formed under the banner of self-defence, clashed with Mai-Mai groups aligned with rival ethnic communities. The 2018–2020 violence in the nearby Bijombo and Minembwe highlands exemplifies how unresolved land disputes and political marginalisation can crystallise into deadly violence, producing cycles of revenge, displacement and militarised identity.

In the Ruzizi plain in general and in our research site Bwegera in particular, interethnic tensions over power and land between the Bafuriru, Barundi, and later the Banyamulenge have deep historical roots.¹²⁷ Interethnic tensions frequently manifest in conflicts between the Bafuriru and the Barundi communities. The Bafuriru are widely regarded as the autochthonous group of the region, asserting ancestral ties to the land. In contrast, the Barundi population in Bwegera largely descends from migrants who arrived before or during the colonial period. Since the 1990s, these tensions have periodically escalated into violent clashes, particularly during the broader regional unrest of the First and Second Congo Wars. In the aftermath of these wars, land scarcity and population pressure have intensified disputes. Local land conflicts often revolve around questions of legitimacy, over who has the right to occupy, inherit, or sell land. In Bwegera, the Bafuriru people accuse the Barundi of expanding their agricultural claims beyond what was originally allocated, invoking customary law to assert exclusionary rights.¹²⁸ Although Bafuriru, Barundi, and Banyamulenge women often align with the political positions of their male ethnic counterparts, many women regardless of ethnic affiliation expressed deep exhaustion during our fieldwork with the recurrent cycles of armed violence and interethnic conflict, which frequently compelled them to flee to neighbouring villages. Importantly, this violence is not solely interethnic: in the Ruzizi Plain, a significant share of recent insecurity stems from Bafuriru armed groups targeting Bafuriru civilians, blurring the line between ethnic conflict and intra-community coercion. Civilian women described the burden of carrying household belongings and children during these violent confrontations as particularly wearisome, while many men tend to remain behind, either to engage in fighting, to fulfil the socially expected role of home protector, or to observe the unfolding conflict.

126 UNOHCHR, 2010

127 Verweijen et al., 2020

128 Van Leeuwen et al., 2020

In Kalehe territory where our study site Nyabibwe is located, similar patterns emerge, although shaped by a different set of actors. Tensions between the Tembo and Havu, considered autochthonous, and other groups such as the Hunde, Nande, or Hutu - often seen as migrants - are fuelled by competition over farmland, forests, and chieftaincy succession. In places like Bunyakiri and Ziralo, armed groups have inserted themselves into these disputes, aligning with specific ethnic claims and reinforcing community divisions. These dynamics are not spontaneous. Political elites and local authorities often manipulate ethnic narratives for electoral advantage or territorial control, embedding violence in broader structures of power and patronage. The resulting fragmentation of community cohesion and erosion of customary authority limits the potential for peaceful mediation or shared governance.¹²⁹ Moreover, just like the 1998–1999 massacre was a defining moment that galvanised armed resistance in Makobola, similar dynamics were observed in Nyabibwe and Bwegera. In both these areas, community-based armed groups coalesced under the Mai-Mai identity in response to foreign occupation during and after the wars of 1996–2003.

129 Vlassenroot et al., 2016

05 *Empirical analysis: Lived experiences of environmental insecurity at intra- household level*

Having introduced the methodology and the background for the study, we now turn to our empirical analysis of gendered lived experiences as they play out in a context of compounding crises in eastern DRC. The three empirical chapters each cover one level of human interaction, and this first chapter five covers the first level of analysis, the intra-household level. In this chapter, we group observations pertaining to individual experiences and relations within families sharing a household. The study identifies three significant gendered dimensions of environmental insecurity at this level: loss of masculine-coded livelihoods and increased workload for women; masculinity crises leading to mental health issues and increasing violence against women within the household; and negative effects on the schooling of children, particularly girls.

Loss of masculine-coded livelihoods and increased workload for women as breadwinners
Bwegera, situated on the fertile Ruzizi plain, has long been regarded as an agricultural hub in South Kivu.¹³⁰ Farmers cultivate cassava (considered gender-neutral and grown by both men and women), maize (also relatively gender-neutral), alongside rice, bananas and palm oil and tomatoes. The latter are widely perceived as masculine coded crops. Historically, men's farming activities have tended to be market-oriented with crops typically requiring longer growth periods, while women's agricultural labour focused on faster-growing, less profitable crops, largely directed toward daily household consumption, such as cassava, beans, and vegetables. As one male respondent explained:

*"When we were young, we knew that banana trees, coffee, and cinchona trees were grown by fathers, and cassava, beans, and vegetables were grown by mothers."*¹³¹

While some households farm their own land, land rental and sharecropping are also common. Women, especially widows and married women, often cultivate land belonging to their husbands or their husbands' families, reflecting the structural constraints on women's access to land ownership discussed above. Animal breeding has also been a defining livelihood in Bwegera. Cattle breeding, practiced mainly by Bafuliru, Banyamulenge, Barundi and Bashi communities, symbolises wealth and is thus a local expression of hegemonic masculinity. Men typically own cattle and hire male herders to tend them, while women play a central role in the commercialisation of dairy products. Women frequently sell milk by the roadside to travellers and traders from Bukavu, Uvira and surrounding areas, either purchasing from male cattle owners or selling milk allocated to them by their husbands. Other domestic animals – goats,

130 Mudinga et al., 2024

131 Nyabibwe, 05/01/2025

pigs, and chickens – are more gender-neutral, though usually still owned by men. However, both this study and previous research show that prolonged drought and recurrent armed conflict have significantly weakened animal breeding in recent decades.¹³²

In Nyabibwe, livelihoods are a combination of farming, animal breeding and mining. Fishing remains marginal, despite Nyabibwe being located on the shores of Lake Kivu. Cassava is widely cultivated and considered gender-neutral, while bananas, coffee and cinchona are culturally marked as male crops, historically associated with wealth, inheritance and authority. Bananas in particular carry symbolic weight. Respondents stated that owning a plantation is tied to masculine prestige and responsibility. Women have traditionally been excluded from banana farming, cultivation as well as access to the fields, because it was believed that their presence would cause the plants to wither. Many informants underscored how banana farming by men used to provide a steady income stream for families. As a female respondent from Nyabibwe noted:

*“Dad sold bananas and made enough money to meet family needs.”*¹³³

The extraction of cassiterite (tin ore) has been central to Nyabibwe’s economy, spurred by the decline of agriculture and global demand linked to electronics manufacturing. Mining is a deeply gendered form of livelihood. Men dominate underground digging and transporting minerals, activities celebrated as demonstrations of masculine strength and endurance. Although customary norms and formal regulations limit women’s access to the most profitable stages of extraction, they play critical roles in commercialisation and household survival. Women sustain the mining economy through less visible yet indispensable roles: washing and sorting ore, carrying loads to trading points, preparing food for miners, and engaging in petty trade.¹³⁴ Cassiterite is sold locally to licensed *négociants* before entering regional and international markets, making it one of the most vital economic resources in Nyabibwe. However, over the last five years, the difficulty in accessing cassiterite has sharply reduced the profitability of mining activities. Deposits have become difficult to reach, lying deep underground beyond the limits of artisanal tools, and with excessive water seepage in the pits. Several miners explained in interviews and focus groups in Nyabibwe that mineral sites are increasingly exhausted, making returns unpredictable. The respondents often expressed discouragement, noting that after months of digging, they sometimes find nothing. Many have migrated from distant areas in search of minerals, yet find themselves trapped by debt and social expectations. They find it impossible to return home without money, as doing so would undermine their status as providers. As several miners put it with visible sadness, “Shall I bring cheeks home?”, a local expression underscoring the moral and social weight of failing to provide for one’s family.

132 Brabant & Nzweve, 2013

133 Nyabibwe, 15/12/2023

134 Bashwira & van der Haar, 2020

In Nyabibwe, landslides had at the time of the field work blocked the national road that connects the city to Goma, severely disrupting the circulation of people and goods and isolating the community.¹³⁵ As a result of reduced accessibility, because Nyabibwe depends on external sources for food supplies, commodity prices have risen sharply. Along the road going the other direction, to Bukavu, floods and landslides have displaced many people and resulted in livelihood loss.¹³⁶

In Makobola, fishing has historically defined masculine livelihoods and identity due to the village's proximity to Lake Tanganyika, one of Africa's most productive fishing lakes.¹³⁷ Among men involved in fishing, masculinities are stratified. Some men own what is locally referred to as *equipe*, including canoes and fishing nets. These men are commonly described as bosses or patrons and occupy positions of authority within the fishing economy. Their control over equipment and labour place them closest to what might be described as a local form of hegemonic masculinity. Other men work directly in fishing, while *mulowaji* fishers occupy a more subordinate position, working for patrons or bosses in exchange for payment or a share of the catch. In these arrangements, catches are typically distributed rather than individually owned. There are also men who fish independently but lack full equipment, even if they owned a canoe. Others fish in more modest ways, using only a hook. Prior to the decline in fish populations in Lake Tanganyika, some men did not fish themselves but instead stood along the lakeshore and requested fish from other men, further illustrating the range of masculine positions within the fishing economy. In this sense, the concept of hegemonic masculinity can be applied in an expanded and nuanced sense to account for local hierarchies, material resources, and everyday practices.

In Makobola, women have historically been excluded from the fishing process itself – taboos prohibited them from approaching the lake or touching fishing gear, under the belief that their presence would compromise men's catches. This belief further entrenched the gendered division of labour. Women's participation was limited to cooking and household use of fish. More recently however, as we shall see below, women have become more involved in fish commercialisation, even as men continue to dominate fishing itself.

Our research shows that the profitability of fishing has sharply declined in Makobola. Respondents highlighted an unprecedented decline in fish populations in Lake Tanganyika, making it increasingly difficult for fishermen to sustain their livelihoods. This, in turn, heightens the vulnerability of the entire community, which relies on the lake for food and economic activity. As a woman from Makobola explained:

*“Most men go fishing but catch nothing. There is no longer work for men here, as the lake no longer produces fish.”*¹³⁸

135 Flavien et al., 2022

136 Flavien et al., 2022

137 Kolding et al., 2016

138 Makobola, 12/12/2023

In addition, rising water levels of Lake Tanganyika have become a serious concern for people living along the shores of the lake, in Makobola as well as in other parts of eastern DRC and in Burundi, Tanzania and Zambia.¹³⁹ Historical studies on Lake Tanganyika demonstrate that its water levels have fluctuated naturally over centuries due to geological and climatic factors,¹⁴⁰ while more recent research links the ongoing rise in water levels partly to climate change, alongside natural variability.¹⁴¹ Flooding along the shoreline has displaced local communities, destroyed fields and rendered fishing difficult, in Makobola as well as in neighbouring villages. As stated by one respondent:

“Many people lost their farms and houses as the rising waters destroyed them, forcing many families to rent or move to a different place.”¹⁴²

As the expansion of Lake Tanganyika submerges fertile agricultural land, food insecurity is exacerbated in these areas where alternative farmland is limited, already in use or inaccessible due to insecurity caused by a range of armed groups active in Uvira and Fizi territories. In addition, rising water levels have had severe impacts on local infrastructure, particularly in Uvira and Fizi. The national road connecting Uvira and Fizi through Makobola has repeatedly been submerged, especially in the Lwanga section, leading to vehicle accidents and drownings. Moreover, lake expansion has created significant challenges for transportation, as the rising waters often cut off vital access routes. The Congolese government has moved the road into the mountains multiple times, but the situation remains precarious as waters have been expanding almost every year recently. This disruption in transportation not only affects local communities but also hampers trade and economic activities in the region.

The picture emerging from focus groups and interviews in all three research sites is that in this context of compounding crises, environmental insecurity has significant negative impacts on the living conditions of the population. Most of our respondents reported having experienced livelihood changes related to climate change over the past decade. Many respondents expressed that temperatures have been rising significantly in the last ten years, as exemplified in the following quote from a respondent in Nyabibwe:

“It used to be very cold here, people used to stay close to the fire to warm themselves and covered themselves with blankets at night, but now it feels so hot that you do not need the blanket.”¹⁴³

139 TRT Global, 2023

140 Cohen et al., 1993

141 O'Reilly et al., 2003

142 Makobola, 30/12/2024

143 Nyabibwe, 16/12/2023



Photo:
Pascal Bormann

View of the mountains
of Nyabibwe with
the lake Kivu on the
horizon.

Changes also include unpredictable seasonal patterns, shifts in rainfall patterns and prolonged droughts, as reflected in this quote:

“We used to have two predictable seasons – rainy and dry – and could plan our activities accordingly. Now, the rainy season extends into the dry and the dry season extends into rainy season, making it difficult to find pasture for cows or grow crops.”¹⁴⁴

This malfunctioning of the seasons also leads to periods of heavy rain which consumes crops, and periods of strong sun, which dries them out. Furthermore, unpredictable rain patterns lead to food insecurity at household level, because when the rains eventually come, it often results in heavy downpours that destroy crops or render certain areas unsuitable for cultivation. Heavy rainfalls also trigger frequent landslides and floods, particularly in the mountainous regions of Makobola and Nyabibwe, displacing residents and destroying farms. This quote from a respondent in Nyabibwe exemplifies how this complicates agricultural farming efforts:

“Floods and landslides have destroyed almost half of the farm, sweeping away most of the crops.”¹⁴⁵

In this context of compounding crises, masculine-coded livelihoods have gradually disappeared across all three research sites, notably fishing in Lake Tanganyika as noted above, mining in Nyabibwe and paid employment in the formal sector. Furthermore, the combined effects of soil degradation, plant disease, irregular rainfall and recurrent flooding have undermined the productivity of once-reliable masculine coded cash crops such as bananas, coffee and palm oil. One respondent remarked:

“We used to see banana trees everywhere, but now due to the mosaic they are scarce.”¹⁴⁶

144 Nyabibwe, 16/12/2023

145 Nyabiwe, 14/12/2024

146 Nyabibwe, 15/12/2023

In addition, a respondent from Nyabibwe stated, highlighting the specific impact of environmental insecurity on men's livelihoods:

"There are no longer cinchona farms because of the landslides, and the soil is no longer suitable for these crops." ¹⁴⁷

While many men continue to engage in small-scale agriculture, cultivating tomatoes and other subsistence crops, this work has become precarious and often fails to meet household needs. Some men generate income through livestock keeping, particularly of cattle, and to a lesser extent goats and sheep. Yet this sector, too, has become highly insecure. With the expansion of armed activity, cows are frequently targeted by both organised armed groups and local robbers, making cattle breeding an increasingly risky enterprise. Prolonged droughts, combined with chronic insecurity, have further complicated the situation. Men that practice seasonal migration, moving with their herds in search of better pastures, they constantly face the risk of looting. A few cattle owners have resorted to carrying weapons or collaborating with armed actors in exchange for protection, while others have displaced their herds to safer areas. However, many have abandoned cattle keeping altogether, marking a significant shift away from what was once a key marker of hegemonic masculinity in the context.

A small number of men have employment in the public sector as teachers, nurses, or local administrators. While such positions are often regarded as prestigious within their communities, they are poorly paid, and salaries are frequently delayed for several months. The uncertainty surrounding these jobs has contributed to a general sense of frustration, as men struggle to reconcile their formal employment status with the persistent economic insecurity it entails.

In sum, practices that previously embodied masculinity, wealth, and authority have thus steadily lost their symbolic and material value, reshaping local gendered economies in the process. Previously, men and women shared the obligations for family subsistence in a more equal manner. Currently, however, subsistence agriculture, previously conducted by women as supplement to family consumption, has now become the main source of income for most families. Several men acknowledged that without women's contributions, their families would not be able to eat or pay for essential needs, such as school fees for children. Because subsistence agriculture is coded as a female chore, the general observation of the study is that men do not help their wives with such farming chores. As one respondent remarked:

"In the past, men were responsible for clearing the fields and supporting women in farming, but now women have to do everything on their own." ¹⁴⁸

147 Nyabibwe, 05/01/2025

148 Makobola, 23/12/2023

Thus, family subsistence has become coded as a female obligation. A male respondent from Nyabibwe noted the following in relation to redefined gender roles:

“Women have to work harder now to ensure the family’s survival as men have no work.” ¹⁴⁹

A female respondent from Bwegera noted:

“Women work harder now than men; most men do almost nothing.” ¹⁵⁰

A female respondent from Makobola noted:

“Women now do everything—they pay school fees, feed the children, while most husbands are no longer working, waiting for their wives to bring food for them to eat.” ¹⁵¹

Men’s growing dependence on women for their subsistence often remains unspoken, as it challenges deeply held hegemonic masculine ideas of male authority and provision. In several of our interviews and focus groups, men expressed feelings of discomfort and shame about this situation, describing how they “wait for what the wife brings to eat.”

This shift in breadwinner roles has taken place although key subsistence crops cultivated by women are also negatively affected. Cassava, corn and beans were reported by respondents across the three research sites to no longer produce as they once did, due to factors such as soil degradation, crop incompatibility and persistent plant diseases such as cassava mosaic disease. Historically, cassava could be stored in the ground for extended periods, providing a natural form of food security. However, as environmental insecurity has become more pervasive, this practice has become increasingly precarious. As one respondent, husband of a female farmer from Bwegera, highlights in a statement that reflects a broader shift in agricultural practices necessitated by environmental insecurity:

“As the environment has deteriorated, seeds no longer last. The mother can no longer keep the plants in the soil for long. Too much sun, too much rain – at some point, we had to harvest all the cassava within six months to avoid the problem.” ¹⁵²

Facing this situation, women demonstrate agency, not only by managing household consumption and expenses, but also by adopting complex agropastoral strategies to sustain agricultural production and prevent financial crises at household level in a context of compounding crises. This is a burdensome responsibility in a context where access to fertile

149 Makobola, 23/12/2023

150 Bwegera, 28/11/2023

151 Makobola, 23/12/2023

152 Bwegera, 1/12/2023

farmland has become increasingly difficult, and female farmers are forced to exert more physical labour. A participant from Bwegera explained:

“We now cultivate more land to yield smaller harvests, whereas we used to rely on just one farm to produce enough cassava to feed us for the whole year.” ¹⁵³

Certain varieties of beans, cassava or maize have also disappeared completely, leaving women to fall back on less productive varieties. To adapt to changed environmental conditions, women frequently change crop varieties to adapt to new environmental conditions. As noted by a female farmer from Bwegera:

“In the past, we grew the cassava variety called sawa sawa, but over time, it became highly susceptible to disease and unproductive, so we eventually replaced it with the V8 and kibonge varieties, which are more productive now.” ¹⁵⁴

This quote reflects the adaptive strategies that female farmers must employ, while also highlighting the unsustainability of newly introduced varieties which are constantly replaced with support of NGOs active in the region. All the women interviewed expressed nostalgia for the traditional varieties of cassava such as *nahunde* and *nakahegere*, which were durable and less prone to disease, unlike the newer varieties that must be frequently changed. To cope with the uncertainty of which crops will thrive or succumb to environmental hazards, some women are now planting several types of crops on the same farm. This diversification helps mitigate risks, as reflected by a female respondent from Makobola:

“Since there are many insects in the forest here that destroy maize, we no longer grow maize like we used to because of these insects. Cassava is what we cultivate more now, we also plant peanuts and other vegetables, but will only harvest a small amount, and the rest will be affected in one way or another.” ¹⁵⁵

This has not only worsened food insecurity, but has also amplified financial insecurity, destabilising the livelihoods of affected communities. Soil degradation and declining agricultural yields significantly alter the production and consumption strategies of households, pushing both women and men to adopt complex socioeconomic adaptation strategies. A broader trend recorded throughout interviews and focus groups is that in response to livelihood deterioration, while food have become individually focus as mentioned above, family reduce the number of meals they serve as a survival strategy,

153 Bwegera, 30/11/2023

154 Bwegera, 30/11/2023

155 Makobola, 22/12/2023

to ensure food stocks lasts throughout the week or the month. The sentiment expressed in the following quote from a female respondent from Bwegera reflects a broader trend recorded throughout focus groups and interviews:

*"When times were good, we had at least three meals a day, but now we eat only once a day, and sometimes we go to bed hungry."*¹⁵⁶

Our research also shows that livelihood deterioration has affected patterns of social interaction within communities. As noted by several respondents, it was previously common for neighbours in rural areas to share meals. Women would prepare meals not only for their families but also for their husbands' friends and close neighbours, fostering solidarity, love, and *udungu*, a Swahili term signifying relatedness or oneness. In one evening, people could share multiple meals from different households. However, as food insecurity has increased, this collective practice has nearly vanished. Where once families ate together, people now tend to eat within their own homes, signalling a shift from communal eating to a more individualised approach at the household level. Participants also reported cutting various household expenses, including the purchase of multiple sets of clothing for children – a former symbol of prestige that is now rare. Traditional celebrations, such as births, baptisms, Christmas, and New Year's parties, are being reduced or cancelled. These events, once marked by food, drink, music, and dancing with friends and neighbours, are now rarely celebrated.

In the current situation, women's bodies are required to perform more physical labour than the bodies of men, many of whom remain at home. Many respondents reported that farms close to their homes have been swept away by floods or rendered uncultivable due to soil degradation. Women must therefore often wake up early while most men are still asleep to begin their long journey to fields far away in the mountains, or to collect firewood, often walking 15 to 25 kilometres or more, in places where many armed groups operate. As noted by a woman from Nyabibwe:

*"We now have to find farms far away in the mountains".*¹⁵⁷

Many women respondents shared testaments of exhaustion from long days of walking and working the fields. Because of the risk of being subject to armed violence by non-state armed groups operating in areas where most fields are located, the number of hours women can work their fields safely are limited, which in turn affects yields negatively because the fields in fact require more work in a context of environmental insecurity. While some women are cultivating more extensive plots, others are increasingly farming multiple plots in different locations, uncertain which will produce crops and which will not, requiring more time and energy.

156 Bwegera, 16/12/2023

157 Nyabibwe, 14/12/2023



Photo:
Pascal Bormann

Focus group with
researcher Ali Bitenga
in Makobola.

In addition, access to water has become a significant challenge that increases women's workload, because many sources are either polluted or have dried up. While collective faucets are available in both Nyabibwe and Bwegera, participants noted that they are often overcrowded and lack sufficient water flow. Consequently, women and girls spend more time queuing for water. As one woman from Nyabibwe shared:

*"Our water source is now 10 kilometres away from home."*¹⁵⁸

Some pregnant women have experienced miscarriages due to the physical strain of carrying heavy water containers over long distances. Moreover, as women must walk longer distances to find water, they are increasingly being exposed to assault, as analysed further below. Indeed, this pattern of increased labour burden of women in rural environments affected by environmental insecurity recurs in scholarly literature on both conflict-affected and non-conflict affected areas.¹⁵⁹

Thus, women must now work harder and deploy time-consuming strategies of diversification, with additional livelihood strategies spanning retail of agricultural produce, transporting of heavy loads, sewing and, as analysed further below, transactional sex. As an example of strenuous, time-consuming alternative livelihood strategies, many women have resorted to transporting loads on their backs and heads consisting of food, mineralised stones or construction materials such as cement weighing more their own body weight, primarily in Nyabibwe. As noted by one respondent:

*"Female transporters are asked to carry loads that weigh more than they do, for low pay."*¹⁶⁰

This practice is connected to environmental insecurity in the sense that transportation by foot is needed because landslides have blocked the roads to both Goma and Bukavu for vehicles. This hard work has led to gynaecological issues, particularly among pregnant women, including fistula, prolapse, and miscarriages. As stated by a respondent in Nyabibwe:

*"We are aging too quickly because of the hard physical work."*¹⁶¹

¹⁵⁸ Nyabibwe, 14/12/2023

¹⁵⁹ Meyiwa et al., 2014

¹⁶⁰ Nyabibwe, 15/12/2023

¹⁶¹ Nyabibwe, 15/12/2023

Another respondent added:

*“Most of us look unhealthy now due to the strenuous work and lack of sufficient food.”*¹⁶²

Our research identified both reactive and proactive strategies employed by women farmers to confront environmental insecurity, reflecting the varied ways in which communities adapt. Reactive agricultural responses refer to actions taken in response to the immediate consequences of climate change impacts after they have already occurred, such as clearing stones from farmland after heavy rains. For instance, a female farmer from Nyabibwe, shared her experience:

*“In September 2022, after we had already planted beans and they had pods, heavy rains destroyed our crops and brought many stones into the farm.”*¹⁶³

In response, the respondent spent several days clearing the stones to restore the farm and allow the remaining crops to grow. Such reactive measures are often necessary to salvage what is left after a disaster and prepare for future farming activities. In terms of proactive measures, diversification into herding activities is a common agropastoral response deployed by women, and to a lesser extent men, facing livelihood deterioration. After the harvest, many women sell a portion of their crops and invest the proceeds in livestock, such as goats, chickens or rabbits. These animals serve multiple purposes: while some women use animal waste to fertilise family gardens or small farms, others view livestock as a form of economic security against future crises.

Across Bwegera, Nyabibwe and Makobola, small-scale business has grown as an increasingly important livelihood alongside agriculture, animal breeding and fishing, in a context of compounding crises. Women are the primary actors in petty trade, selling cassava flour, milk, vegetables, fish, household goods, second-hand clothing, and artisanal products in local markets. For villages such as Bwegera and Nyabibwe that are on a busy national road for instance, it is common to see women selling milk along the roadside to passengers travelling. They purchase milk wholesale from male cow owners and resell it in smaller quantities. The selling of milk on the roadside is an exclusively female domain in Bwegera. Meanwhile, in Nyabibwe and Makobola, women sell small items like peanuts, doughnuts, vegetables, and beans. Some female traders diversify their offerings, selling a variety of products, such as fries, charcoal, and other foods, to attract more customers and increase their income. While less profitable than men's large-scale or cross-border trade, women's businesses are central to household survival. Men consider these kinds of economic activities as specific to women, but by navigating these economic landscapes, women demonstrate resilience and adaptability in a context of compounding crisis. Commerce thus functions not only as a survival strategy but also as a gendered space of agency, where women actively negotiate roles, responsibilities, and power within families and communities.

¹⁶² Bwegera, 28/11/2023

¹⁶³ Nyabibwe, 14/12/2023

This form of economic diversification indeed builds on long-standing gendered divisions of labour dating back several decades, that have historically confined men to wage employment while women sustained households through informal and subsistence activities. As MacGaffey observed in her study of women in Zaire's second economy, women's engagement in informal trade and production has often served as a strategy to evade male control, allowing women to exercise a degree of economic autonomy even within a deeply patriarchal context.¹⁶⁴ However, this autonomy is ambivalent – it emerges under conditions of necessity rather than empowerment, and the increased economic independence rarely translate into greater decision-making power within households. As MacGaffey notes, women's capacity to navigate the second economy underscored both their resilience and the structural inequalities that compelled them to assume the burden of economic survival in times of crisis.

Even though the patterns are not new, our study shows that over the past two decades, these practices have expanded significantly, as declining agricultural productivity and limited access to formal employment have pushed more people – especially women – into diversified income-generating activities. What were once supplementary strategies have increasingly become central sources of household income, visible in the growing number of women engaged in market trading, food vending, and informal services.

Because men do not engage in these female-coded activities, many of them remain idle waiting for employment opportunities, thus abandoning their responsibilities as bread-winners and family fathers. Throughout interviews and focus groups, respondents repeatedly stated that 'women have become both fathers and mothers', reflecting how women have increasingly taken on dual roles of financial providers and caregivers. Indeed, in all three research sites, men's loss of income-generating activities has led to increased dependency on women. In married households, wives no longer expect their husbands to contribute meaningfully to the household, as they are aware of their husbands' lack of income or work. Many men spend their time idly at home, listening to the radio or watching soccer, with some engaging in various games or drinking cheap, highly alcoholised beverages. Whereas this has provoked masculinity crises in the communities, as we shall see in the next section, it has not translated into more equal power relations between men and women in rural areas. Rather, it simply leaves women to fend alone for their families, often with exhaustion and psychological stress as a result.

Indeed, we observe that women are more likely to employ diverse individual, social, economic, and collective strategies, while men tend to confront environmental insecurity primarily on an individual basis, as will be explored further below. Women continue to bear the brunt, as they navigate the uncertainty of environmental insecurity while developing innovative strategies to ensure their families' survival. For instance, because of the difficulty in accessing financial services, an increasing number of women are joining the groups savings and credit associations AVEC (*Association Villageoise d'Epargne et de Credit*). These associations function as an organisational, socioeconomic response amid compounding crises as women come together to form groups with specific economic and social interests. Through the AVEC,

164 MacGaffey, 1988

women meet regularly, save together, offer mutual support during life events, both joyful and challenging, and are offered to take out microloans for income-generating activities. The structure with president, vice-president and a cashier unites women, often from impoverished backgrounds, who trust one another and agree to regularly contribute to a mutual fund. However, not all women can participate in the AVEC due to requirements in terms of deposits and meeting participation.¹⁶⁵

While savings and loan associations have become widespread in both rural and urban areas prior to worsening environmental insecurity, the growing participation of women in rural settings reflects a conscious response to financial insecurity, food shortages, and limited access to healthcare. Although our focus groups and interviews indicate that some men are also involved in the AVEC, most members are women. Participants reported that men often struggle to repay loans, sometimes opting to migrate or refusing to reimburse, which can lead to financial difficulties for the group. This has contributed to the perception that women are more reliable borrowers than men. However, the situation is more complex than a simple dichotomy between responsible women and irresponsible men. Some men remain active and responsible members of the group, adhering to its norms and obligations. It was also reported that some women seek permission from their husband before joining a group, which also means that the husband may be aware that his wife has taken a loan. Sometimes is the husband who sends his wife to take a loan to take care of some expenses in the family.

In terms of gender roles, we note that they have been reshaped and reinforced in complex and partly contradictory ways. Despite the increased physical labour in public spaces, patriarchal normative expectations as to women's traditional gender roles in the household persist. Men persist in asserting their roles as heads of households, even though they are increasingly dependent on women economically. Before heading to the farm or market, most women ensure the house is clean and laundry is done, unless they have daughters old enough to help. Upon returning from their long days of work, they are expected to fetch water and cook. In rural communities, married women are traditionally expected to assume primary responsibility for domestic tasks, including ensuring that water is available in the shower room, typically located outside the home, and washing clothes for their husbands and children. During this time, men often rest, socialise, or engage in leisure activities such as playing games. According to many male respondents of this study, when women fail to perform such domestic duties, such as failing to prepare water for their husbands' shower or not washing their clothes, it is often interpreted as a sign of disrespect, even though this might be due to the woman simply being fatigued. This reflects not only the increasing burden of their tasks, but also indicating interpersonal conflicts within the household. As remarked by a male respondent from Makobola:

*"You'll see that she no longer respects you when she doesn't put water in the shower room or wash your clothes."*¹⁶⁶

165 IUCN, 2022

166 Makobola, 29/12/2024

This statement highlights the cultural expectation that men continue to be the heads of households, despite their diminishing economic clout. At the same time, subtle shifts are beginning to emerge. Some women, particularly those whose income has become vital to household survival, have gained a somewhat stronger voice in everyday decision-making, for instance regarding food purchases or children's schooling. These changes, however, remain limited, as they often occur within the broader framework of patriarchal authority, rather than in open challenge to it. This suggests a slow, negotiated adaptation rather than a profound transformation of gender relations. These observations pertaining to the persistence of traditional gender norms run counter to observations in research from Kenya, Sudan and Mozambique, where women have increasingly become breadwinners for similar reasons as those observed in eastern DRC, but where this development has led to a reshaping of gender roles, giving women more power relative to men.¹⁶⁷ Maviza et al term this a 'seismic shakeup of gender roles'.¹⁶⁸ This study does not find evidence of a similar 'seismic shakeup' in eastern DRC. Instead, the patterns observed in this case study reflect the findings of Navarro et al, who in a case study of gender relations, climate change and conflict on the Kenya-Uganda border observe that although gender roles have evolved with women increasingly taking on more responsibility for family subsistence, men are still regarded as the decisionmakers of the household.¹⁶⁹

Masculinity crises leading to mental health problems and increasing domestic violence

Our findings show that men narrate environmental insecurity primarily through the loss of resources associated with manhood and a diminishing ability to provide for their families, protect household members, and command social respect — capacities central to local ideals of being a *mwanaume muzima* (a complete man in Swahili). A *mwanaume muzima* is ideally a married man with a family and an income-generating activity, capable of providing food for his family and covering other household expenses.

The shift in gender roles whereby women are now the breadwinners of most households has provoked masculinity crises in all three research sites. Among male respondents aged 45-75, a sense of identity loss is prevalent. Constrained by structural and agential factors from taking up female coded livelihood activities, men largely find themselves passive, transitioning from breadwinners to dependent figures within the household. The idle men spend their time in complex and not linear ways, but in all the research sites, there were so-called *ligala*, social gathering 'talk places' where men meet to discuss local and international news and gossip. Other activities that men engage in to pass time and cope with their changed realities include drinking and watching soccer. Certainly, not all men transition into passive, dependent figures within the household. As a heterogeneous group, men's responses to environmental insecurity and ensuing shifts in livelihood landscapes are diverse, reflecting complex processes of adaptive masculinity. Some men strive to redefine their roles within the family and community in response to external pressures, engaging in

¹⁶⁷ Ensor 2022; Maviza et al., 2024; Omolo, 2010

¹⁶⁸ Maviza et al., 2024

¹⁶⁹ Navarro et al., 2025, p. 43

entrepreneurship activities within the informal economy. Some men reported that because small businesses is a female-coded activity, they willingly finance their wife's business to help them provide for the family until the husband's financial situation improves.

Motorcycle taxi operations, commonly called *bodaboda*, is one way through which some young men (approximate age span 20-45) seek outcomes in the context of compounding crises. *Bodaboda* drivers often take pride in their ability to provide regular income, thus reinforcing their masculine identity. However, environmental insecurity disrupts also this form of livelihood, as seen for example in Makobola where the expansion of Lake Tanganyika has submerged roads, leaving many *bodaboda* drivers out of work. Some responded by establishing a canoe taxi service to ferry traders across the lake to Uvira, yet many mourn the loss of the social prestige associated with *bodaboda* driving. Many unemployed *bodaboda* drivers joined the *ligala* and turned to alcohol consumption to cope with their livelihood loss. One of them stated:

*"Agriculture is no longer good, waters from the Lake Tanganyika have become a real problem for us, and we are now starving."*¹⁷⁰

By this, the respondent meant that there is a lack of livelihood options since agriculture is less productive than before and the roads are blocked, complicating *bodaboda* driving as a livelihood option. A similar dynamic was reported in Nyabibwe, where frequent landslides and floods prevent *bodaboda* drivers from working on the way to Bukavu city. According to them the job had become very difficult. For a 4-hour drive, they must spend 9 hours or more.

Another livelihood strategy observed among men is the phenomenon of *cascadeurs* – men typically aged 20-50 who refuse to remain idle and seek income by any means necessary. This livelihood strategy is also known in Congolese culture as *la débrouillardise*, the art of coping with hardship by any means possible.¹⁷¹ *Cascadeurs* is a form of adaptive masculinity that rejects passivity. Activities observed during field work include improvisational road-mending, a practice viewed as a last resort for men without stable work. The *cascadeurs* present themselves as 'agents of development', offering their labour as a form of community service, with the underlying motivation of income generation. After heavy rains, they clear debris from blocked roads, charging a small fee, often less than US\$ 0.25, to allow vehicles to pass. Though their efforts generate minimal income, they reflect the resourcefulness of men navigating precarious livelihoods. For many, this kind of work only emerges after sudden-onset disasters such as landslides and floods. Additionally, when Lake Tanganyika expands into the community, some men offer their services as carriers, transporting people and goods across muddy waters – a physically demanding task that exemplifies a particular male strategy to exploit opportunities during environmental distress. These activities allow some men to support their families.

170 Makobola, 23/12/2024

171 Wild-Wood, 2007

Some *cascadeurs* resort to standing at roadsides to pickpocket or engage in petty theft, practices known as ‘bad cascade’. In contrast, ‘good cascade’ involves borrowing money from friends or performing odd jobs like roof repair or latrine digging. Respondents also described the *homme frappeurs*, who deceive cunningly in complex ways to steal money, such as acquiring debt they will never reimburse.

Frustrated by their inability to secure steady incomes, some men, including local diggers in Nyabibwe, have turned to itinerant trading or migrated to mining areas, such as Walikale and Masisi in search of minerals like cassiterite, coltan, or gold. Often, men who migrate do not return to their families, fearing the shame of coming back empty-handed and being stigmatised as a *baba bata*, meaning duck father, a derogatory term for men perceived to be neglectful.

In sum, thus, certain men deploy alternative livelihood strategies. However, for most men consulted for this study, the inability to perform masculinity as traditionally conceived of has led to feelings of emasculation. Several male respondents expressed that when women notice their husbands no longer securing regular incomes or fulfilling their breadwinning roles, respect within the marriage diminishes. Men’s inability to fulfil traditional societal expectations of masculine identity manifests in a shift from hegemonic masculinity, embodied in the ideal of *mushamuka*, to marginalised masculinities, loss of hope and feelings of worthlessness. The latter was described using different terms. In Bwegera, respondents used the term *kambuya* (useless man) and in Nyabibwe, the term *zuka ol’ye* man (a man who does nothing but eat and sleep) was used. In Makobola, the term *mwanaume imbwa* (dog man) was used to express the shift from local versions of hegemonic masculinity to marginalised masculinities. Across all three sites, the above-mentioned term *baba bata* was also used. This masculinity crises have led to mental illness – anxiety, depression, insomnia, anger outbursts – among men of all ages, many of whom use substances to navigate suffering related to both the loss of masculine identity and material status. One young male respondent from Nyabibwe stated:

*“Many men drink alcohol, not to celebrate, but to forget the distress caused by lack of respect in the household and financial hardship.”*¹⁷²

For several young men, the position of marginalised masculinity has manifested itself in an inability to marry, as they cannot afford dowry payment. While some of them decide to enter an unofficial relationship, other young men earn the label of *celibataire endurci* (hardened bachelor), struggling to achieve full adult status in the communities. A similar situation has been documented among youth in various African countries. Research on post-genocide Rwanda, for example, demonstrates how structural constraints such as poverty, land scarcity, and limited employment opportunities have resulted in prolonged and uncertain transitions to adulthood for many young men and women.¹⁷³

¹⁷² Nyabibwe, 09/01/2025

¹⁷³ Sommers, 2012



Photo:
Pascal Bormann

Marie-Rose Bashwira
with an interviewee in
Bwegera.

The masculinity crises are significant, not just because of the suffering among individual men, but also because it sometimes translates into different forms of violent behaviour. This manifests at household level in the form of gender-based violence and, as we shall see below, in the form of mobilisation into armed groups. This emerges as a common theme in focus groups and interviews with both female and male respondents. Certainly, men's violence against women is a widespread and multifaceted feature of social relations in eastern DRC that predates both the conflicts of the 1990s and environmental insecurity.¹⁷⁴ However, as narrated in focus groups and interviews, men's violence in its different forms is an endemic feature of women's lived experiences of environmental insecurity in this context of compounding crisis. The inability to perform local versions of hegemonic masculinity leads to frustration among men that, as it emerges from our data, is often expressed through different forms of violence: psychological, economic, physical and sexual, although it is important to emphasise that not all men behave violently.

Psychological violence is observed in the form of male authority being enforced in the household through patriarchal norms and through the threat of violence. This in turn underpins the economic violence suffered by many women within households. Even though family subsistence is now largely conceived of as a female responsibility, married women are often expected to share, or altogether give, earnings or assets, destined for food and school fees for children, to their husbands. In turn, husbands often use it for alcohol, card games and the transactional sexual relationships analysed below.

Another form of strategy observed is polygyny, when one man marries two or more women, however now imbued with a new meaning. Historically, supporting multiple wives was a marker of wealth and status. However, in our focus groups and interviews, we observed that some men now engage in polygyny as a means of securing their own livelihoods and performing masculinity in a context of masculinity crises. One participant explained that polygyny would 'correct' the perceived arrogance and pride that their first wives display, having become primary breadwinners. Other respondents cited the material benefits of having several wives. One respondent explained that he, a 60-year-old father of seven, had migrated to Nyabibwe to seek fortune, but had failed as his merchandise was stolen by an armed group. He ultimately ended up marrying another wife in Nyabibwe, relying on her for survival. This illustrates how

¹⁷⁴ Baaz & Stern, 2009; Bitenga Alexandre et al., 2021; Freedman, 2015

polygyny is employed as a strategy to adapt to economic hardship. Another respondent from Bwegera also noted, in a statement that reflects the shift in breadwinning responsibilities from women to men and the advantage of marrying several women in such a context:

*“One woman cooks one meal, two women cook two meals, and three women cook three meals.”*¹⁷⁵

Moreover, the masculinity crises also manifest in the form of sexual violence, as many men turn to sexual performance as a means of performing masculinity and control. Facing psychological violence in the form of threat of physical violence, women must make their bodies available for intercourse at the end of the day. This is conceived of by men as their marital right, even though the woman is often exhausted because of her heavy workload and does not willingly consent to sex. Because many men in the research sites spend the day idle, there is a sexual interest imbalance that often leads to sexual violence within the household. This pattern was echoed in interviews and focus groups with male respondents. A prevalent belief expressed was that women are expected to provide sexual gratification to their husbands unless they are sick, revealing deep-rooted cultural norms that grant men control over women’s bodies. In addition, many men stated that they take medication to strengthen their sexual ability and prove to women that they retain that strength. As one respondent from Makobola explained:

*“Being a man means being strong in that area, you might have no money, but you need to prove yourself sexually so she respects you.”*¹⁷⁶

Many women refrain from reporting the sexual violence that they are exposed to at home to the authorities, accepting it as a normalised part of marital relations, rather than recognising it as criminal abuse. The household has thus increasingly become a site of sexualised violence. This highlights how environmental insecurity interacts with socially constructed gender norms to produce harm on specific bodies. From a broader perspective, this observation underscores the need to understand sexual violence in eastern DRC as a societal feature that goes beyond militarised sexual violence. Yet, the relation between masculinity crises and sexual violence is not linear. Certain respondents reported diminished interest in sex due to the psychological toll of economic insecurity, underscoring the complexity of masculinity in a context of compounding crises.

¹⁷⁵ Makobola, 29/12/2024

¹⁷⁶ Makobola, 29/12/2024

Negative effects on the schooling of children, particularly girls

Another household-level theme that emerges from the data is that as the conditions for agriculture worsens, livelihoods deteriorate and household incomes are reduced. One of the strategies deployed to ensure household survival in this context is to take children out of school for extended periods. This lived experience of environmental insecurity is conditioned by gender relations in the sense that whereas it affects both boys and girls, in several cases, respondents stated that if a choice must be made, households prioritise the schooling of boys. As one of the respondents mentioned:

“We send children to school through farming. When the women don't harvest, as they did last year, there are children whose schooling will be stopped. When you find you have no money, you ask the girl to stop and let her brothers continue.”¹⁷⁷

In other words, prevailing norms around which sex should be prioritised in terms of schooling leads to girls' education being affected negatively to a greater extent than that of boys. We understand this as a form of structural violence against girls. These negative effects on schooling are particularly problematic, considering that because the area is conflict-affected, education was not readily available even before environmental insecurity became a concern in the area.

¹⁷⁷ Bwegera, 28/11/2023

06 *Empirical analysis: Lived experiences of environmental insecurity at within- community level*

We now turn to exploring gendered lived experiences at the second level of analysis: within-community level. In this chapter, we group observations pertaining to social relations within villages. We identify three main ways in which gender relations condition lived experiences of environmental insecurity at this level. The first relates to gender-based violence, including transactional sex, the second to increasing instances of theft within villages, and the third to relations between women farmers and male herders.

Increase in gender-based violence and transactional sex

In a context of environmental insecurity, women not only endure sexual violence in the domestic sphere, but also in public settings within communities. As noted above, soil erosion, floods and droughts have increased the distance women must walk to their farms, increasingly exposing them to sexual violence from armed groups, particularly if women travel alone to remote areas. Water sources, either polluted or dried up, are often located far from homes, exacerbating the risks of gender-based violence faced by women. Although collective water faucets exist in all the research sites, participants reported that these facilities are often overcrowded and suffer from insufficient water supply. Armed groups often target women on their way to fetch water, beating and sometimes raping them, especially if the women refuse to take water to the soldiers' camps. Thus, in addition to the heavier workload faced by women in a context of environmental insecurity, they also face sexual violence as a dual burden. As noted by a female respondent from Bwegera:

*“When we go far to fetch water, we return late in the evening, around 6-8 PM. Sometimes we encounter soldiers who beat us and demand that we deliver the water to their camps first, forcing us to return to the river to fetch more water. At times, we are raped by them.”*¹⁷⁸

This increased exposure to gender-based violence as wells dry up and women must walk longer distances to fetch water is well-documented also in existing literature on both conflict-affected and non-conflict affected areas.¹⁷⁹

Another gendered lived experience at within-community level that has been exacerbated by environmental insecurity in this context of compounding crises is transactional sex. Defined here as “engagement in sex in exchange for cash, goods, services, commodities, or privileges in order to meet the needs and wants of the parties involved”,¹⁸⁰ transactional sex is

¹⁷⁸ Bwegera, 28/11/2023

¹⁷⁹ E.g. Meyiwa et al., 2014; Pommells et al., 2018

¹⁸⁰ Mwapu et al. 2016, 1

widespread in eastern DRC, and is by no means a recent phenomenon.¹⁸¹ Many women (and some men) in eastern DRC practice transactional sex, exchanging sex for money, service, information, or an advantage, etc, either as additional income or as the main source of income for their families and themselves which may give rise to tensions within families. In our research sites, transactional sexual relationships primarily involve money to be used to buy food, pay school fees etc. We cannot, based on our data, quantify the exact extent to which the phenomenon of transactional sex has become more common in a context of environmental insecurity. Yet it emerges clearly from focus groups and interviews that as livelihoods deteriorate in a context of compounding crises, married and unmarried women of all ages find themselves in an impoverished and vulnerable state, thus increasingly forced to consider transactional sex as a livelihood option. Rather than letting their children go hungry, be sent away from school or lack basic clothing, some women in our research settings strategically engage in transactional sexual relationships to meet these fundamental needs. This practice can be understood as an expression of agency, yet one profoundly constrained by the sharply limited income generation opportunities available to them.

The academic debate on transactional sex in Africa features these two contrasting positions. The first foregrounds women's agency, arguing that transactional relationships cannot be reduced to poverty or coercion, but constitute arenas in which women actively pursue social, emotional, and material goals. Ethnographic work in Malawi by Swidler and Watkins illustrates how women cultivate multiple partnerships, evaluating men's generosity, reliability, and affective investment.¹⁸² These relationships are embedded in moral economies in which men are expected to provide, and women adeptly navigate these expectations to secure school fees, food, or household resources. Majola's research in Kenya reinforces this perspective, showing that young women engage older or wealthier partners not only for survival but to access education, consumer goods, and symbols of modernity. In this view, transactional sex becomes part of women's aspirations for self-fashioning, rather than a mere indicator of deprivation.¹⁸³ Moreover, an upcoming study by the second and third authors of this report show that motivations for transactional sex in eastern DRC are heterogeneous, and not confined to economically precarious women.¹⁸⁴ That forthcoming study shows that the practice is common also among women engaged in transcontinental trade, travelling to Dubai to purchase goods for resale in Bukavu. For these traders, transactional relationships serve multiple purposes, including reducing personal expenditures on hotels, flights, or meals by shifting these costs onto male partners, thereby maximising savings. The study also shows that contemporary social constructions of youth – embodied in expectations to dress fashionably, own a smartphone, and maintain a certain public image – motivate many girls to engage in transactional sex when their families cannot provide these markers of modernity. These findings correspond closely with agency-centred research, showing that transactional sex can be an active strategy for social mobility, economic optimisation, or the pursuit of modern identities – not merely a response to deprivation.

¹⁸¹ Maclin et al., 2015

¹⁸² Swidler & Watkins, 2007

¹⁸³ Mojola, 2014

¹⁸⁴ Bashwira et al., forthcoming



Photo:
Pascal Bormann

Marie-Rose Bwegera
and Ali Bitenga with
a focus group in
Nyabibwe.

The second position challenges the agency-centred interpretation by insisting that transactional sex must be analysed through the lens of structural vulnerability. Stoebenau et al argue that these relationships, whether oriented toward survival or consumption, are shaped by entrenched gender inequalities, limited livelihood opportunities, and pervasive economic insecurity.¹⁸⁵ Even when women seek partnerships that provide fashionable goods or social prestige, these desires emerge in contexts where alternative pathways to social mobility or basic security are sharply constrained. Public health research strengthens this interpretation by demonstrating that transactional relationships are often age-disparate, with older men exercising economic and social power that restricts women's ability to negotiate sex, including condom use.¹⁸⁶ Consequently, women face heightened risks of HIV, unintended pregnancy, and coercion, indicating that while their choices are meaningful, they are made within narrowed and unequal parameters. In other words, when transactional sex occurs under structural constraint, the line between choice and coercion is blurred.

Recent scholarship moves beyond this binary opposition, suggesting that transactional sex is best understood as a practice in which agency and vulnerability coexist. Wamoyi et al argue that women's choices to engage in transactional are often intentional, strategic, and aspirational, yet these strategies unfold within environments shaped by poverty, gendered dependency and unequal power relations.¹⁸⁷ In this view, transactional sex thus reflects neither pure empowerment nor pure exploitation, but rather a form of constrained agency – an interplay of desire, necessity and structural limitation. This conceptualisation is central to interpreting our data below, which shows that women's decisions in our research sites combine strategic action with profound structural constraint.

In our interviews and focus groups, transactional sex was frequently described as motivated by survival needs in a context of severely restrained possibilities. These constraints intersect with the changing family subsistence patterns analysed above, where women increasingly must assume the breadwinner role and cover expenses such as food and school fees.

¹⁸⁵ Stoebenau et al., 2016

¹⁸⁶ Wamoyi et al., 2018

¹⁸⁷ Wamoyi et al., 2019

As with the literature emphasising constrained agency, our findings show that women act purposefully to sustain their households, but their decisions are shaped in a landscape of compounding crises that sharply narrows their options. As one respondent explained:

*“The woman tends to give herself to men who can give her something to help her survive with her children, but in this state of infidelity, she risks contracting sexually transmitted diseases”.*¹⁸⁸

To meet pressing needs such as rent, clothing or food, women felt they had no other viable option than transactional sex, even as the exchanges expose them to health risks. This strongly aligns with the strand of scholarship arguing that transactional sex cannot be understood outside the structural pressures that push women toward high-risk exchanges. Their accounts underscore the simultaneity of agency and vulnerability: women act decisively to sustain their households, while navigating structural pressures that limit safer or more socially sanctioned alternatives.

Unmarried girls in our research sites also engage in transactional sexual relationships, a choice that they attributed to household impoverishment and parents’ inability to meet basic material needs. As a result, some girls sought relationships with men who could provide these items, despite the accompanying risk of early pregnancy. As observed in our data, transactional sex is also practiced in exchange for work opportunities, favours or services. As the competition for fertile land intensifies, male local elites who control land distribution also exploit the shortage of arable land to demand sexual favours from women in exchange for access to fertile farming spaces. Some respondents also mentioned that women retailers of milk may have ambiguous relationship with the wholesaler or the cow owner to either gain access to larger quantities of milk or to be served among the first. In certain instances, the woman may get a discount or not pay for the milk at all, enabling the woman to save money. This dynamic mirrors the structural vulnerability argument, highlighting how declining livelihood opportunities and gendered barriers constrain women’s choices, even as they act intentionally within these limitations.

Moreover, it emerges from our data that it is common for sexual relationships outside of wedlock to produce children for which the fathers shirk responsibility, placing the burden of child support on the woman and her family. This in turn compounds the economic and psychological burden on women, who may in turn have to resort to transactional sex for survival. The same is noted for the man who decide to move in another village in the search of better life and sometimes never come back. The children are left solely to the wife, who may then have to look for a provider for her and her children. Here again, the structural vulnerability framework helps explain that women’s resort to transactional sex is often embedded in gendered patterns of abandonment, limited livelihood options, and disproportionate care responsibilities.

188 Nyabibwe, 15/12/2023

Counter-examples include the experiences of some *hommes ambulants*—men who travel away from their homes to engage in artisanal mining or petty trade, but who struggle to find minerals, lose their goods to looting by armed actors, or ultimately go bankrupt. During a focus group discussion in Nyabibwe, one participant recounted how he left his family and travelled to Nyabibwe in the hope of finding minerals and selling small commodities such as clothes and torches. He explained that he was unable to find minerals as expected and that his merchandise was subsequently looted by members of an armed group, leaving him in a state of chronic financial crisis. In the aftermath, he entered into a cohabitation arrangement with a woman who sells beer and who now provides him with food and shelter. He described accepting this arrangement as a necessity born of prolonged economic hardship, while simultaneously experiencing it as deeply humiliating. As he put it:

*“She is the one feeding me and doing everything for me. I accept this because I cannot do otherwise, but I cannot speak up in this household because I am poor.”*¹⁸⁹

A related phenomenon observed is that of the *célibataire endurci*, referring to young men who remain unmarried because they are unable to afford the bridewealth required for marriage because of livelihood deterioration. In some cases, these men enter relationships with economically successful women—those running small businesses or earning their own income—not primarily with the intention of a real marriage, but as a strategy for survival in a context of sustained economic precarity.

We also observe that some men describe themselves as being victimised in situations involving transactional sex undertaken in exchange for favours or work, particularly when they feel that certain women impose themselves on them. In addition, our findings indicate that tensions and violence may emerge within households when a husband comes to believe that he is being “cuckolded”. In some cases, this perception appears to trigger violent behaviour. In others, men reported deliberately avoiding questions about the source of money or food provided by their wives, framing silence as a pragmatic response to economic dependence. As several male respondents remarked: *“When you have nothing, will you ask again where the food comes from? You just eat.”* Transactional sex can also generate tensions beyond the household, particularly at the community level, when a woman becomes aware that another woman is involved in a relationship with her husband.

As pointed out by Gibson et al and Mwapu et al, transactional sexual relationships can be ambiguous with affection playing a role.¹⁹⁰ However, our research shows that lived experiences of transactional sex are mainly negative in the communities studied, because it occurs when women are left with no other alternative in life and leads to a surge in sexually transmitted diseases, unwanted pregnancies and, not least, mental health problems among affected women. As a lived experience, this survival strategy causes stress and disgust. Therefore, we regard transactional sex in this specific context as a form of sexual violence underpinned by

¹⁸⁹ Nyabibwe, 06/01/2025

¹⁹⁰ Gibson et al., 2022; Mwapu et al., 2016

the economic violence discussed above, namely that men, even though income generation and family subsistence are now largely conceived of as female responsibilities, demand to access the incomes and other assets of their female family members. This means that even in a situation of unemployment, men often retain the financial clout to engage in transactional sex, thus asserting masculinity. These dynamics reflect the gendered power relations analysed above, where men retain disproportionate influence over economic resources and sexual negotiations, even when their formal economic roles decline. Transactional sex as a lived experience of environmental insecurity in a situation of compounding crises is thus conditioned by gender relations in the sense that the prevailing conception of masculinity in the context makes it socially acceptable for men to take advantage in this way of women and girls in vulnerable positions.

Increasing instances of theft within villages

Another theme emerging from the focus groups and interviews related to social relations within the village is increasing instances of theft of agricultural produce, livestock, charcoal and other goods perpetrated by village inhabitants in the village and at marketplaces. Many respondents stated that such theft has increased to unprecedented levels. For instance, male thieves often harvest crops, especially cassava, before the women who planted them could do so. This is particularly problematic for women who already struggle with low yields and farms located in hard-to-reach areas. As such, theft can be interpreted as a form of economic violence directed against women who invest considerable time and energy working in the fields.

This lived experience of environmental insecurity in a context of compounding crises is conditioned by gender relations in the sense that it is mostly young men who steal, due to the loss of traditional livelihood opportunities for men specifically in this area. Although most fertile land is owned by men, the victims of this kind of theft are largely the women who farm the land, because as the *de facto* breadwinners, they possess assets such as agricultural produce, goods for retail, and cash. As mentioned above, this specific lived experience of environmental insecurity is connected to the area being conflict-affected, because as the area is characterised by recurring cycles of conflict and economic crisis, young men often resort to criminal livelihoods because of the difficulty in establishing sustainable, masculine-coded livelihoods. One example of this is the *cascadeurs* engaging in theft, as analysed above. Armed groups also engage in crop theft. As one woman from Nyabibwe shared:

“After the flood took away half of my farm, I encountered two armed men harvesting my beans, corn, and yams. They each filled two bags with yams and beans and took them away.” ¹⁹¹

This testimony underscores multiple gendered vulnerabilities in a context of environmental insecurity, with agricultural land negatively affected by sudden-onset disasters and crop theft perpetrated by armed male assailants. In addition, respondents have also mentioned cases where men have sold belongings of the family without the knowledge of their wife. One example was of a woman who decided to buy a cow after years of selling milk. She had decided

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not to tell her husband for fear that he would steal her money, but had told her father-in-law. However, when her husband heard about the sale, he went and sold the cow and got the money back without telling the wife. The respondent stated that the husband did not even use the money for family needs. Another gendered dimension of the phenomenon of theft is the fact that some men steal to fulfil gendered expectations of the man as the breadwinner in a context where traditionally male income-generating opportunities have become increasingly scarce. Thus, theft can be understood as a predominantly male response to the pressures of environmental insecurity.

Worsening relations between women farmers and male herders

Another lived experience of environmental insecurity in a context of compounding crises are worsening relations between farmers and herders within villages. In the areas researched, the presence of armed groups in the mountains and other areas where farming land is located often makes it difficult for women to farm those fields. This problem becomes particularly pronounced after landslides where farming land becomes even more scarce. Thus, home-based vegetable gardens have become an increasingly important adaptive strategy as women resort to subsistence or semi-commercial farming within villages. In these gardens, women plant fast-growing vegetables such as amaranth that can be harvested within three to four weeks, and build small fences to protect them from wandering goats or chickens. Vegetables from these gardens have become vital for family survival, particularly as meat and fish have become inaccessible for many poor families. However, it emerges from our focus groups and interviews that such home gardens are destroyed by livestock like cows and goats to a greater extent now that herders graze nearer to villages because climate change and environmental degradation has caused a reduction in available grazing land, as well as the presence of armed groups in the hills where they used to go. These tensions can take place between, as well as within, ethnic groups living in the same village. As stated by a male community leader from Makobola:

“We manage such conflicts every day.”¹⁹²

This lived experience of environmental insecurity is conditioned by gender relations in the sense that animal owners are mainly men, although some women own small livestock such as pigs and goats. In case the cattle owner himself does not herd, the herder is also male. Women farmers are hit hard when the crops are destroyed by grazing cattle, because the woman then must seek other forms of subsistence, leading to a higher workload. In addition, because of the lack of effective governance mechanisms in the area, it is difficult for women farmers to seek recourse when crops are destroyed. It is difficult even in cases where the women have statutory tenure, and even more so in cases where the women do not have tenure because they farm their husband's land or sharecrop, but men do not feel concerned by the problem of field destruction and thus do not want to intervene on behalf of their wives.

192 Makobola, 22/12/2024

07 *Empirical analysis: Lived experiences of environmental insecurity at intercommunity level*

In our final empirical chapter, we analyse gendered lived experiences as they play out at intercommunity level. Here, we group observations pertaining to relations between villages or between population groups from other areas. At this level, we have identified two main dimensions, the first relating to the connection between environmental insecurity, gender and armed group mobilisation; and the second pertaining to gendered dimensions of herder-farmer tensions at intercommunity level.

The link between environmental insecurity, gender and armed group activity

The connections between environmental insecurity and mobilisation into armed groups are neither linear nor easily delineated in eastern DRC. Rather, mobilisation unfolds through a set of entangled historical, political, economic, social and geopolitical processes. As outlined above, poor infrastructure, weak state institutions and entrenched ethnic divisions are well-established drivers of armed mobilisation in eastern DRC.¹⁹³ Our findings suggest that environmental insecurity – particularly as it disrupts rural livelihoods such as fishing (in Makobola), business (Nyabibwe), farming, and cattle breeding – acts as a potent risk multiplier in contexts already marked by political tension and structural violence. Yet, while climate disruptions such as erratic rainfall, crop failures, and resource scarcity undoubtedly shape the conditions of everyday life, they do not lead uniformly to armed enlistment. Many individuals, including both women and men, navigate these insecurities without ever turning to armed violence, while others, facing similar pressures, do join armed groups. In this sense, we find that environmental insecurity does not operate as a root cause of armed mobilisation, but rather as a compounding condition – one that intensifies the likelihood and durability of such mobilisation within already fragile socio-political landscapes.

Moreover, as mentioned earlier, land conflict dynamics in eastern Congo are shaped by complex and overlapping historical, political, and economic dynamics. Yet our research shows that contemporary environmental insecurity is one of the factors that exacerbates these conflicts. As fertile arable land, traditionally owned by men and cultivated mostly by women, becomes progressively scarce, male local elites intensify their efforts to assert claims over territories perceived as agriculturally productive. Environmental stressors – such as soil degradation, demographic pressures, and migration – intersect with growing interest from external elites, particularly those from urban centres like Bukavu and Uvira, who seek to acquire productive lands through male customary chiefs in Bwegera. These dynamics, compounded by soil degradation and the scarcity of fertile land, exacerbate existing tensions,

193 Eg. Lake, 2017

transforming land into both an increasingly scarce resource and a highly politicised arena of contestation within a broader context of environmental insecurity.

To maintain control over increasingly constrained land resources, some male customary chiefs become entangled in the instrumentalisation of youth mobilisation into ethnically aligned armed groups. While chiefs have indeed played pivotal roles in Mai-Mai mobilisation since the 1990s, recently environmental insecurity and mounting pressures on land appear to interact with these long-standing patterns, shaping the ways in which customary authorities engage with youth groups today, rather than representing an entirely new phenomenon. It emerged from our focus groups and interviews that mobilisation is often framed as necessary to defend threatened ancestral lands and reaffirm customary authority in the face of perceived external encroachments.

The root of the current conflict in Bwegera was identified by many respondents as the 2012 killing of a Barundi chief – allegedly by Bafuliiru militias – and the subsequent succession dispute from which dual leadership structures emerged and Bafuliiru resistance to Barundi crystallised. However, it is important to recognise that such tensions are not new. Similar struggles over authority, legitimacy, and inter-community leadership already surfaced in earlier periods, including the 1980s and even the 1960s during the Sumba rebellion.¹⁹⁴ Yet the 2012 crisis still represents a significant inflection point for local actors, not because it introduced unprecedented forms of contestation, but because it reactivated long-standing cleavages under contemporary conditions of demographic pressure, land scarcity, shifting political alliances and environmental insecurity. In this sense, the rupture described by respondents reflects both the continuity of older disputes and the ways in which these have been reconfigured in the present.

As mentioned above, the 1998-1999 Makobola massacre continues to shape the narrative frameworks through which many local male Wazalendo – particularly those now aged between 40 and 60 – articulate their motivations for joining armed groups. For some Wazalendo, this traumatic event constitutes a foundational memory of collective victimhood and the perceived necessity of armed self-defence. Yet, the discourse around motivations to join armed groups remains fluid, shifting in response to the evolving political landscape and the changing contours of economic opportunity—both of which are increasingly constrained by environmental insecurity. As one respondent reflected in a focus group discussion:

*“I joined because of the 1998 Makobola massacre, which deeply harmed us and pushed us to take up arms to defend ourselves. Later, the Head of State made the call to come defend the homeland. We joined.”*¹⁹⁵

This testimony reveals how individual and collective trauma serve as catalysts for mobilization. The massacre was widely cited by survivors and their descendants as a

¹⁹⁴ Verweijen, 2016

¹⁹⁵ Makobola, 23/12/2024

foundational rupture – a moment when the state’s absence crystallised the need for self-defence through armed struggle. Moreover, the respondent’s narrative illustrates a transition: from community-driven self-defence to a more formalized alignment with state discourses of national sovereignty. The phrase *jusqu’à ce que le chef de l’État lance l’appel* (until the Head of State made the call”) marks a discursive shift from informal protection efforts to participation in the broader patriotic project to resist M23, as discussed above. Ideals of masculinity that valorise the ‘tough man’ — one who is physically and psychologically resilient, fearless, and ready to protect the community and family — also emerged from interviews and focus groups as key motivations for joining armed groups.

Interestingly, compared to older generations who often cited events like the Makobola massacre as a foundational motivation for forming self-defence groups, many younger people (mostly men and some women) aged 20–45 articulated a different set of grievances linked to armed mobilisation. In their narratives, the drivers of recruitment are more closely tied to present-day structural and environmental vulnerabilities—particularly the lack of employment opportunities, the depletion of fish stocks in Lake Tanganyika affecting masculine coded livelihoods, and declining agricultural productivity in the context of environmental insecurity. As one young man from Makobola explained:

*“Many young men become Wazalendo because of lack of employment.”*¹⁹⁶

The persistent marginalization of eastern Congolese communities – manifested through poverty, youth unemployment, inadequate schooling, lack of healthcare, lower agricultural production and fish scarcity in the case of Makobola – creates fertile ground for recruitment. Many armed groups exploit these vulnerabilities by offering economic incentives, promises of empowerment. As noted by one respondent:

*“They are promised that they will receive a salary of 100,000 Congolese francs per month.”*¹⁹⁷

However, the promised compensation often fails to materialise, compelling many *wazalendo* to rely on coercive extraction including deforestation, informal taxation, and other illicit practices to sustain their livelihoods. Although activities such as deforestation and illicit taxation are typically organised by armed groups as collective revenue-generation strategies, they do not exclude the possibility of individual gain. Combatants can occasionally benefit directly from the labour they contribute—whether through small personal shares of the proceeds, privileged access to goods and resources, or opportunities to appropriate items during extraction. In this sense, while these practices primarily sustain the armed group as an organization, they also create openings for uneven but tangible individual benefits, allowing some fighters to supplement their livelihoods through their involvement.

¹⁹⁶ Makobola, 30/12/2024

¹⁹⁷ Makobola, 30/12/2024

In settings marked by compounding crises, armed mobilisation often emerges as an adaptive livelihood strategy – albeit one with complex moral and socio-environmental consequences. Although the majority of men refrain from joining armed groups, a significant number nonetheless do so, and their participation has profound effects on the configuration of local authority, security provision, and everyday survival strategies. For these combatants, mobilisation becomes a response to environmental insecurity and diminishing economic prospects.

A recurring theme in the focus groups was that even though civilian women struggle to keep a certain standard of living for their households, it is difficult for them to stop their older sons from leaving their impoverished families and joining armed groups in search for both livelihoods and social belonging. Thus, as a result of the deterioration of masculine-coded livelihoods in the wake of a changing climate, many young men join armed groups, not to further political aims, but to secure subsistence in a Wazalendo formation through theft, extortion through civilian taxes, pillage and rape. We therefore understand the phenomenon of young men joining armed groups primarily as a response to conjunctural sociopolitical and economic dynamics, while recognising that environmental insecurity – although a more limited driver – interacts with these shifting political conditions in ways that can intensify pressures on young men. In this sense, mobilisation reflects not only the volatility of local political orders, but also the ways destructive masculine expectations are articulated through a politico-military idiom in contexts where livelihoods and futures are increasingly constrained. From an age perspective, we note that it is mostly young men in armed groups who commit violent acts. The commanders are often older, aged 40-60.

Certainly, not all young men join armed groups, and those who join do not necessarily expose the civilian population to violence. But overall, armed groups do expose the local population in other communities to gendered forms of harm. Female as well as male community dwellers are indeed affected by the different kinds of violent harm that armed groups perpetrate, including sexual harm. As an example, armed men, identified as *coupeurs de route* (highway robbers), often target traders traveling to and from markets, stealing their goods. While most small traders are women, men are not immune to such attacks. A female respondent from Nyabibwe recounted:

*“Rebels sometimes ambush women coming from the market. They demand all the food, money, and anything we have, telling us to leave everything behind. If you’ve bought medicine for a sick child, the rebels don’t care and take it away, as they do not consider it important.”*¹⁹⁸

Although armed groups are male-dominated, women are not only victims of theft, pillaging, and sexual violence. Some women also join, despite the beliefs that frame their presence on the battlefield as incompatible with *Mai-Mai* armed factions. As Kalambi notes, certain female combatants undergo rituals of purification and symbolic masculinisation, enabling

198 Nyabibwe, 13/12/2023



Photo:
Pascal Bormann

Marie-Rose Bashwira
with a focus group in
Nyabibwe.

their integration as fearless fighters within these male-dominated groups.¹⁹⁹ Women play active roles within the ranks, including in intelligence services and combat among others, even if their roles have often been marginalised or rendered invisible in these male-dominated factions.²⁰⁰ Women's roles include but are not limited to providing logistical support, including the transport of ammunition such as guns and bullets to their male counterparts, who often operate from remote forested areas. Operating in civilian clothing, some female combatants often hide weapons and other materials in baskets or containers associated with domesticity – items that are typically perceived by state and non-state security actors as benign or linked to gendered expectations of womanhood. This strategy allows some female combatants to bypass checkpoints and surveillance in ways that men, even when dressed in civilian clothes, often cannot.²⁰¹ In addition, women also play a key role in intelligence services in armed groups. As one respondent from Bwegera stated:

*“Women are our spies; they collect all the suspicious information circulating within the community and report to us.”*²⁰²

Respondents drew a critical distinction between what they described as *patriotic armed groups* – armed actors who claim to defend ancestral lands and provide security in contexts marked by weak or absent state authority – and armed bandits, whose motives are perceived as purely predatory, oriented toward looting and personal gain. However, we find that the boundaries between these categories are often porous. Instances were reported in which so-called patriotic groups engaged in banditry, and conversely, actors initially described as bandits framed their actions in protective or political terms. This fluidity illustrates the complex moral economies surrounding armed mobilisation in the region.

199 Kalambi, 2019

200 Kalambi, 2019

201 Kalambi, 2019

202 Bwegera, 18/12/2024

While both armed banditry and politico-military mobilisation are longstanding features of the Congolese landscape, respondents suggested a troubling dynamic: as one form of violence intensifies, the other tends to follow suit, creating a cycle in which the distinction between political and criminal violence becomes increasingly difficult to distinguish in a context of compounding crises.

Although cattle looting has long been practiced in the Ruzizi Plain, many respondents noted an intensification, attributing it to livelihood deterioration in the communities. Recurrent cattle looting by armed groups in the Ruzizi Plain has prompted some herders to take up arms in self-defence, thereby contributing to the broader pattern of armed proliferation. Here, the line between protection and aggression is blurred, as some herders mobilise not to loot, but to deter or respond to those who do. This dynamic contributes to a landscape where the causes and justifications for armed mobilisation are increasingly entangled and difficult to categorise, even though environmental insecurity does fuel the emergence of armed groups.

In Makobola, a similar pattern was observed in the fishing sector. Respondents recounted nighttime attacks on fishermen by male armed actors who seize their small catches and essential tools – lamps, engines and nets. Fishermen face a multi-layered crisis marked by scarcity of fish stocks and, in some contexts, armed violence that results in the confiscation of their already limited catch and fishing equipment. These losses carry profound consequences for their masculinities by undermining their role as providers and fathers.

The link between armed mobilisation and deforestation

One key strategy for income generation across the three research sites, among non-state armed groups as well as combatants associated with the national army, is systematic deforestation for charcoal production and sourcing of building materials.²⁰³ Rapid urbanisation in the expanding urban centres Goma and Bukavu drives the harvesting of valuable hardwoods across eastern DRC.²⁰⁴ Trees are often felled in rural areas, with some timber sold locally and the rest transported to urban centres for construction and furniture production. This is the case also in our study sites, where non-state armed groups, the Congolese military and the local population all participate in logging activities aimed at producing construction wood as well as charcoal, both vital sources of income within precarious livelihoods.

This creates a complex tension between economic survival and environmental sustainability. The once extensive forests on the hills of Makobola and Nyabibwe have been depleted, largely due to charcoal production and timber extraction for construction. Ancient forests once protected by male customary authorities and home to diverse flora and fauna – including monkeys, wild vegetables, and medicinal plants – have undergone drastic clearing. Male armed actors reportedly cut down entire trees, including roots, to produce charcoal, leaving once-lush green mountains barren and ecosystems devastated.

203 In other parts of eastern DRC, deforestation is also driven by mining activities. C.f. Ladewig et al., 2024

204 Majambu et al., 2021

One respondent noted:

*“I’m telling you, back home they sold off an entire forest and turned it all into charcoal—and now that it’s gone, the pride is gone too.”*²⁰⁵

A key informant from Makobola lamented further:

*“There used to be trees on all the mountains up there, but armed groups have cut them down. Now, you won’t find a single tree.”*²⁰⁶

The extraction of construction timber is predominantly controlled and executed by men, predominantly armed actors, whereas charcoal production and trade involve a distinct gendered economy. While armed men typically engage in the cutting of trees and charcoal production, civilian women, including combatants’ wives, often serve as intermediaries in the charcoal economy—purchasing it from militia members and reselling it to local markets. This dynamic not only reveals a gendered division of labour in conflict contexts but also complicates dominant narratives that frame relations between armed men and women primarily through the lens of sexual violence and coercive power. Instead, it points to overlooked sites of economic cooperation and mutual dependency, as exemplified by the gendered roles embedded in the charcoal production process.

The act of deforesting for charcoal production is not merely an ecological event, but a socio-political process rooted in survival strategies amid broader structural neglect and environmental distress. In contexts where formal employment is scarce, fishing and agricultural systems are destabilised, and land tenure remains contested, charcoal production often emerges as one of the few viable livelihood strategies. Yet, implementing large-scale deforestation in communities that attribute cultural and ecological value to their forests typically requires some forms of social engineering. This may involve the strategic use of armed mobilisation – not merely to facilitate resource extraction, but to suppress potential resistance and reconfigure local power dynamics in favour of extractive interests. When the forest, once a source of identity, belonging, and intergenerational pride, is depleted, this marks not just ecological ruin but also the erosion of collective dignity. The respondent’s linking of ecological exhaustion with the fading of ‘pride’ speaks to the deep affective and existential consequences of environmental dispossession, particularly when communities are left to navigate shrinking resources in the absence of sustainable alternatives or meaningful state support.

In some localities, armed groups are directly engaged in the production and trade of charcoal, while in others they assume a more regulatory role. Armed actors control forest territories, levy taxes and impose ‘protection fees’ on civilians involved in logging or charcoal production. This serves a dual purpose for armed groups, allowing them to profit from natural resource exploitation while also consolidating authority over local populations and territory.

205 Makobola, 30/12/2024

206 Makobola, 23/12/2023

Moreover, systematic deforestation can at times also unfold through their collaboration with customary chiefs. Although some residents recall a period when customary authorities actively protected the forests around Makobola, contemporary practices reveal a more ambivalent landscape of authority. Certain customary chiefs now sometimes cooperate with armed actors engaged in deforestation—whether by granting access, sharing profits, or informally sanctioning extraction. Consequently, forest loss reflects not only the activities of armed groups but also the shifting and sometimes complicit roles of customary authorities.

As trees are cut down, environmental degradation follows suit in the form of slow-onset events such as erosion and soil depletion, and sudden-onset disasters such as landslides. This underscores a critical insight: while environmental insecurity may serve as a risk multiplier for armed mobilisation, the reverse is also true – armed mobilisation exacerbates environmental degradation, predominantly carried out by male combatants. The relationship is therefore circular and mutually reinforcing, challenging mono-causal explanations and calling for more intersectional approaches to understanding complex interactions between armed mobilisation, gender, economy, and environmental insecurity.

Lastly, in Nyabibwe and Bwegera, our respondents stressed that displacement due to conflict contributes to intensifying forest loss, as displaced and returning populations meet their energy needs with charcoal and engage in agricultural expansion.²⁰⁷ As people seek safety and land for cultivation, they often clear forested areas for subsistence farming, leading to the gradual conversion of forest into agricultural plots. This process links patterns of displacement and resettlement to long-term environmental degradation.

The link between environmental insecurity and informal taxation

Beyond deforestation, informal taxation emerges from our research as a significant source of revenue for armed groups. This echoes findings by Hoffmann et al, who show how armed actors in eastern Congo routinely position themselves as fiscal authorities in settings of limited state presence.²⁰⁸ Informal taxation not only attracts individuals to join armed groups but also sustains their continued presence over time. Our research shows that because of the drastic narrowing of livelihoods in this context of compounding crisis as analysed above, armed groups remain important as alternative systems of revenue generation. They offer income, protection, and access to resources through coercive extraction. However, it is important to note that these dynamics are also reinforced by political factors, including the symbolic weight of the ‘call of the Head of State’ as analysed above, appealing for communities to mobilise in defence of the DRC against foreign aggression. In this context, informal taxation has become an alternative mode of survival both for individual combatants and for armed groups. In Nyabibwe, a particularly illustrative practice was the imposition of a so-called *lala salama* tax (Swahili for ‘sleep in peace’). This term itself encapsulates the coercive logic of the system: pay to avoid harm.

207 C.f. Mudinga et al. 2024, Hoffmann et al., 2016

208 Hoffmann et al., 2016

A respondent explained:

“And they had already printed tokens called ‘Lala Salama.’ Any man who didn’t have one—those people would take him to where they spend the night, and if you didn’t have 100,000 Congolese francs, you wouldn’t be released, and they would beat you severely. As for the women, they weren’t harassed, but they were asked to give part of what they were carrying. But any man who didn’t have a token couldn’t cross without it. What’s surprising is that we heard the government is aware of the existence of these people.” ²⁰⁹

The use of printed tokens labelled *lala salama* reflects not only the militarisation of civilian life but also a privatised and gendered form of territorial control and surveillance. Men, seen as potential threats or sources of extortion, are subjected to beatings and detention if they fail to comply. Women, though spared physical punishment in many cases, are monitored and taxed based on their possessions including but not limited to pieces cassava, beans among others. This taxation system institutionalizes inequality and deepens class stratification: only those who can afford to pay the *lala salama* tax are permitted freedom of movement and safety. The token thus becomes more than just a receipt – it is a passport to security and a symbol of militarized power. As one respondent sums it up:

“If you didn’t have 100,000 Congolese francs, you wouldn’t be released, and they would beat you severely.” ²¹⁰

Gendered dimensions of herder-farmer tensions

As noted above, tensions between herders and farmers resulting from changing patterns of seasonal livestock migration is a well-known aspect of environmental insecurity in conflict-affected areas.²¹¹ However, the gendered dimensions of such tensions at intercommunity level have not yet been analysed in scholarly literature. In the DRC, the phenomenon of herder-farmer conflicts has previously been understood primarily along ethnic lines, as tensions between bafulero farmers and banyamulenge/barundi herders. This study shows that in addition to the ethnic dimension, herder-farmer tensions as lived experience of environmental insecurity is also conditioned by gender relations, because herders are male and farmers mostly female.

209 Nyabibwe, 14/12/2023

210 Makobola, 30/12/2024

211 E.g. Adams et al., 2023; Efobi et al., 2025; Tseer et al., 2025; Turner, 2004



Photo:
Pascal Bormann

Sign in Mutarule village on the road of Uvira villa, stating "This is the way of the cow. Respecting it brings peace".

As environmental insecurity makes it increasingly difficult for male herders to find grazing land, they must move their cattle further, for longer periods and into new areas to suitable pasture. Yet, these shifts in transhumance routes are driven not only by environmental pressures but also by the presence of armed groups, which restricts access to certain grazing zones and forces herders to alter their movements. During seasonal migration, cattle – primarily considered the property of men – frequently consume crops that are predominantly cultivated by women. In a similar vein as the intracommunity tensions between herders and farmers discussed above, women farmers are hit hard when crops are destroyed by grazing cattle.

Although tensions between herders and farmers at within-community level have existed for several decades, respondents expressed that environmental insecurity and armed conflict have exacerbated these conflicts, transforming them into a persistent social issue in rural communities. One respondent described the situation poignantly, underscoring the substantial waste of time, energy and capital invested in agricultural production:

*"And often, cows belong to men and crops to the women, because it's the women who farm and the men who raise animals. I myself am a victim of this situation, as my field is right next to a farm, and not a single month goes by without a cow escaping to destroy my crops."*²¹²

Another female respondent from Nyabiwe stated:

*"Cows grazed my crops and trampled on them, but the herder threatened to put me in prison. When I insisted, he said, 'A cow will buy you.'"*²¹³

This statement, which equates a woman to the monetary value of a cow, a traditional dowry payment, illustrates the complex interplay between environmental insecurity and gendered power structures. In our focus groups and interviews, the issue of crop grazing by cattle was frequently linked to environmental insecurity, local governance challenges, and ambiguity surrounding whether such incidents were intentional or accidental.

212 Nyabibwe, 16/12/2023

213 Nyabibwe, 15/12/2023

An informant from Bwegera articulated the phenomenon as one exacerbated by resource scarcity:

*“Herders move away because of droughts, as cows prefer water and grass. However, there are few areas that can provide these conditions due to climate change. Both herders and farmers are drawn to these limited areas, which leads to conflict when cows graze on crops.”*²¹⁴

Respondents from Bwegera also attributed farmer-herder conflicts to poorly defined spatial boundaries, with farming areas sometimes overlapping with traditional herding routes.

As stated by one respondent:

*“Sometimes farmers cultivate along cows’ paths, which is very exposing. But also, some herders are absent-minded; they may herd 100 cows but have no control over them. The cows can escape and wander into the farms. I would say that both farmers and herders are problematic in this situation.”*²¹⁵

The lack of effective conflict litigation structures in this conflict-affected area makes tensions around the seasonal migration of livestock difficult to resolve by peaceful means. Because women mostly do not own the land that they farm, because they either farm their husband’s land or sharecrop, it is difficult for them to seek recourse. Even in cases where women have secured land tenure, they do not always manage to claim damages from cattle owners. Local councils are indeed designated to mediate in disputes between herders and farmers, but several respondents noted that women often bear the brunt of the losses, largely due to their lower gender status and economic marginalisation within the community.

However, farmers are not passive victims of cattle grazing. Many demonstrate agency in various ways, such as chasing cows off their fields. In more extreme instances, respondents described cases in which both female and male farmers attacked cattle with machetes, thereby further exacerbating tensions between herders and farmers. Others pursue formal avenues by reporting incidents to the police or armed actors, although institutions for dispute resolution are fragmented and often predatory. As Verweijen and Brabant illustrate, armed groups sometimes exploit or regulate herder-farmer conflicts by imposing fines, levying fees, or extracting payments.²¹⁶ Yet, there are important nuances to the picture painted above. As noted by Mudinga et al, herders, who are predominantly male, are also vulnerable to environmental hazards.²¹⁷ Unprecedented violent thunderstorms and floods are consistently threatening pastoralist livelihoods.

214 Bwegera, 01/12/2023

215 Bwegera, 30/11/2023

216 Verweijen & Brabant, 2017

217 Mudinga et al., 2024

As noted by one respondent in Nyabibwe:

“We have been witnessing violent thunder that kills our cattle. In addition, when the rivers flood, many cows are swept away by erosion, and we later find them dead.” ²¹⁸

Although cattle looting has long been practiced in the Ruzizi Plain, many respondents perceived a recent intensification in this context of compounding crises. A key informant in Bwegera stated:

“Sometimes in a single week, we experience two incidents of cow theft. Last week, 47 cows were stolen by armed men and taken into the forest.” ²¹⁹

This represents an additional burden on male herders’ livelihoods, already strained by shrinking grazing areas. Recurrent cattle looting in Ruzizi plain has prompted some herders to take up arms in self-defence, thereby contributing to the broader pattern of armed proliferation. In addition, violent storms and floods were increasingly perceived as serious threats to cattle husbandry, a domain traditionally associated with masculinity. As one respondent from Nyabibwe remarked:

“Thunder strikes our cows more frequently than ever before, and floods sweep them away more often than we’ve ever seen.” ²²⁰

218 Nyabibwe, 14/12/2023

219 Bwegera, 27/11/2023

220 Nyabibwe, 14/12/2023

08 Conclusion

Reading environmental insecurity through the framework of compounded crises, our findings suggest that in eastern DRC it is not experienced as a singular or exceptional disruption, but rather as part of a dense and historically layered condition of life shaped by overlapping crises, including climate variability, environmental degradation, armed conflict, economic decline, and governance failure. In Bwegera, Makobola, and Nyabibwe, these crises are not encountered as separate domains but as mutually reinforcing processes that seep into everyday practices of survival, reorganise social relations, and shape gendered expectations.

Feminist political ecology has long argued that environmental change is never neutral, but always mediated through social hierarchies that determine who bears risk, who controls resources, and whose knowledge counts.²²¹ The findings of this study confirm this insight. Women's lives are disproportionately reorganised around environmental degradation through intensified reproductive and productive labour, longer working days, and an expanded responsibility for household survival. As soil fertility declines, rainfall becomes increasingly erratic, and access to food, income, land, and water grows more precarious, women are compelled to multiply livelihood strategies. However, these activities are often physically exhausting, poorly remunerated, and socially undervalued, offering little recognition or authority in return.

At the same time, the findings complicate narratives that frame women solely as victims of environmental insecurity. Women emerge as central agents of adaptation, improvisation, and endurance, sustaining households and communities amid environmental insecurity, political instability, and economic collapse. Yet this agency unfolds within sharply constrained structural conditions. Adaptive strategies such as petty trade, intensive labour, migration, and transactional sex are not simply individual choices, but practices shaped by structural violence, gendered moral economies, and pervasive insecurity. As such, they can sometimes expose women to heightened risks of exploitation, stigma, and gender-based violence, while rarely translating into greater protection or social recognition. The study thus reinforces critiques of the 'victimisation fallacy' in climate–gender discourse, while also resisting celebratory accounts of resilience that obscure the violence and unequal burdens carried by women's bodies and lives.²²²

However, the report's findings also make clear that environmental insecurity strikes at the heart of dominant masculine ideals centred on breadwinning, control over land and resources, and household authority. As male-dominated livelihoods such as cash-crop agriculture, fishing, cattle keeping, and mining become increasingly precarious, many men experience a profound loss of social worth, dignity, and recognised adulthood. These experiences align with critical masculinity scholarship that conceptualises masculinity not as a stable identity, but as a fragile and relational accomplishment, dependent on economic capacity, social recognition, and moral legitimacy.²²³

221 Dianne Rocheleau et al., 1996

222 Arora-Jonsson, 2011

223 Connell, 1995

The crises of masculinity documented in this study is therefore not merely psychological. It is produced at the intersection of environmental insecurity, political instability, and prolonged economic decline. Men's narratives of shame, frustration, and dependency reveal how environmental insecurity erodes their ability to inhabit socially valued roles, giving rise to what the literature has described as 'thwarted' or 'marginal' masculinities.²²⁴ In this context, some men seek to reassert authority and visibility through violence, substance abuse, theft, polygyny, or mobilisation into armed groups. These practices are best understood as gendered responses to loss and uncertainty, rather than as innate expressions of masculinity, underscoring the need to analyse violence as socially produced and contextually embedded.

Importantly, the findings resist deterministic interpretations that equate masculinity crises with inevitable violence. Men respond to environmental insecurity in multiple and sometimes contradictory ways. Alongside destructive practices, many engage in care work, religious participation, migration, and non-violent forms of livelihood improvisation, such as repairing roads or transporting people *on bodaboda*, among others. This plurality of masculine practices echoes scholarly critiques of hegemonic masculinity frameworks that flatten men's experiences, particularly in contexts of chronic precarity where hegemonic ideals are increasingly unattainable.²²⁵ By foregrounding men's vulnerabilities alongside women's, the study demonstrates that gender analysis must remain relational, attentive to how femininities and masculinities are co-produced through shared, though unequal, encounters with compounded crisis.

Across intra-household, within-community, and intercommunity levels, the study reveals how environmental insecurity contributes to a continuum of gendered violence embedded in everyday life. Rather than producing entirely new forms of violence, environmental insecurity intensifies and reconfigures existing patterns of domestic abuse, sexual exploitation, transactional sex, theft, and intergenerational inequality. Girls' withdrawal from school, women's increased exposure to sexual violence during livelihood activities, and the normalisation of transactional sex as a strategy of survival illustrate how environmental insecurity intersects with patriarchal norms and economic desperation to deepen gendered harm. These dynamics resonate with feminist security scholarship that conceptualises violence not as an episodic phenomenon tied solely to armed conflict, but as an ordinary condition sustained across blurred distinctions between war and peace.²²⁶

Taken together, the findings challenge technocratic and depoliticised approaches to environmental insecurity that treat it primarily as a problem of climate adaptation or resource management. In eastern DRC, environmental insecurity is inseparable from historical violence, gendered power relations, and political exclusion. Addressing it therefore requires approaches that are attentive to lived experience and social relations. Such responses must

224 Dolan, 2002

225 Myrtilinen et al., 2025

226 Cockburn, 2004

confront patriarchal norms without instrumentalising women's endurance, and engage men's vulnerabilities without legitimising violence. They must also recognise that environmental governance is deeply entangled with questions of land, authority, identity, and belonging.

Ultimately, this study contributes to broader scholarly and policy debates by demonstrating that environmental insecurity in conflict-affected contexts is best understood as a gendered social process rather than an external ecological threat. Grounded in lived experience and informed by feminist political ecology, gender, and masculinity studies, this study shows how environmental insecurity reshapes not only livelihoods, but also social relations, moral orders, and horizons of possibility. Without addressing the intertwined injustices of environmental degradation, gender inequality, and structural violence, efforts to promote stability and peace in eastern DRC will remain partial and fragile. Sustainable peace, in this context, depends as much on transforming gendered political ecologies as on ending armed conflict itself.

These conclusions are summarised in the table below, indicating how environmental insecurity not only exacerbates vulnerabilities, but also reshapes the fabric of social life in conflict-affected contexts, producing new forms of gendered harms and insecurities across multiple levels of social interaction. The table also illustrates the coping strategies that both men and women undertake, as well as the way their life is shaped and reshaped by environmental insecurity.

Table 1 Summary of gendered lived experiences in a context of compounding crises in eastern DRC

LEVEL	IMPACT OF ENVIRONMENTAL INSECURITY	GENDERED LIVED EXPERIENCE OF ENVIRONMENTAL INSECURITY	HOW GENDER RELATIONS CONDITION THOSE LIVED EXPERIENCES	IN WHAT WAY DOES THIS LIVED EXPERIENCE OF ENVIRONMENTAL INSECURITY REFLECT THAT IT TAKES PLACE IN A CONFLICT-AFFECTED AREA?
INTRA-HOUSEHOLD LEVEL (including individual experiences)	Livelihood deterioration and reduced household incomes as a result of worsening conditions for agriculture. In a context of environmental insecurity, fields require more work than was previously the case.	Families take children, particularly girls, out of school Women are forced to work harder than before and diversify their livelihoods to fend for their children	Prevailing norms around which sex should be prioritised in terms of schooling leads to girls' education being affected negatively. Rigid gender roles, particularly as regards the conception of 'an ideal man', makes it difficult for men to adapt to new circumstances as regards livelihood opportunities. Instead, men commonly abandon their roles and thus their responsibilities as breadwinners and family fathers, leaving women to fend for their families with exhaustion, sickness, miscarriages and prolapse as a result.	Education is not readily available in the areas studied because of recurring insecurity. Conflicts between customary authorities cause generalised insecurity in villages with occasional outburst of armed violence. In this context, women are restricted in terms of the number of hours where they can work their fields safely.
	Loss of traditional livelihood opportunities for men specifically, resulting from climate change, environmental degradation and state collapse.	Masculinity crises leading to mental health issues and increasing violence against women within the household (psychological, economic, physical and sexual). Increasing instances of theft of agricultural produce, livestock and goods within villages perpetrated by village inhabitants.	The difficulty in terms of assuming the role of 'an ideal man' according to prevailing conceptions of masculinity leads to feelings of emasculation and mental illness, frustration that is often expressed through different forms of violence – economic, physical (including suicide) and sexual. It is mostly young men who steal and mostly women who are victims of theft, because as the main breadwinners, women possess assets such as agricultural produce, goods for retail and cash.	The fact that the areas in question are conflict-affected makes the effect of lost livelihood opportunities for men even more pronounced because it is difficult to develop new livelihoods in such a context.
WITHIN-COMMUNITY LEVEL (social relations within communities)	Livelihood deterioration and reduced household incomes as a result of worsening conditions for agriculture.	Gender-based violence, including transactional sex, at within-community level.	The prevailing normative conception of gender relations makes it socially acceptable for men to take advantage of women and girls in vulnerable positions through different forms of gender-based violence, including transactional sex.	The vulnerability of women and girls is more pronounced because protracted cycles of violence in the area have left local populations impoverished and vulnerable.
	Reduced availability of grazing land because of climate change and environmental degradation.	Worsening relations between women farmers and male herders within villages as herders graze nearer to the village, thus destroying crops to a greater extent. These tensions can take place between as well as within ethnic groups.	Animal owners (cattle) are mainly men, although some women own pigs and goats. In case the cattle owner himself does not herd, the herder is also male. It is mainly women farmers who are hard hit when the crops are destroyed by grazing cattle, because the woman then have to seek other forms of subsistence, leading to higher workload. In addition, because of the lack of effective governance mechanisms, it is difficult for women farmers to seek recourse when crops are destroyed. It is difficult even in cases where the women have statutory tenure, and even more so in cases where the women do not have tenure because they farm their husband's land or sharecrop.	In the areas researched, the presence of armed groups in the mountains and other areas where farming land is located often makes it difficult for women to farm those fields. This problem becomes particularly pronounced after landslides where farming land becomes even more scarce. Thus, women sometimes have to resort to subsistence agriculture within villages. The pronounced vulnerability of women in this context is thus connected to the area being conflict-affected.

LEVEL	IMPACT OF ENVIRONMENTAL INSECURITY	GENDERED LIVED EXPERIENCE OF ENVIRONMENTAL INSECURITY	HOW GENDER RELATIONS CONDITION THOSE LIVED EXPERIENCES	IN WHAT WAY DOES THIS LIVED EXPERIENCE OF ENVIRONMENTAL INSECURITY REFLECT THAT IT TAKES PLACE IN A CONFLICT-AFFECTED AREA?
INTER-COMMUNITY LEVEL	Loss of livelihood opportunities for men specifically, resulting from climate change, environmental degradation and state collapse.	(Mostly young) men leave the communities to join armed groups (Wazalendo/Mai-Mai). These groups in turn expose the local population in other communities to gendered forms of harm.	Because young men cannot meet the prevailing normative expectations of manhood without having secured a sustainable form of livelihood, joining an armed group is a way to secure both livelihoods and social belonging. Female as well as male community dwellers are affected by the different kinds of violent harm perpetrated by such groups, including sexual harm. However, women are disproportionately affected by sexual violence.	Joining an armed group is an option for young men precisely because it is a conflict-affected area where armed groups are active.
	Increasing difficulty in finding grazing land because of climate change and environmental degradation makes herders having to move cattle further, for longer periods and into new areas to find pasture.	Cattle moving into new areas creates tensions with host communities, sometimes even outbursts of violent conflict. This phenomenon has previously been understood along ethnic lines, as tensions between bafulero farmers and banyamulenge/barundi herders. However, there is also a key gendered dimension to this phenomenon, as herders are male, farmers mostly female, and herders' wives left behind are also female.	In a similar vein as the intra-community tensions between herders and farmers, women farmers are hit hard when crops are destroyed by grazing cattle, because they then have to seek other forms of subsistence for their families. However, because the women mostly do not own the land, because they either farm their husband's land or sharecrop, it is difficult for them to seek recourse.	The lack of effective conflict litigation mechanisms with capacity to address gender inequalities makes tensions around the seasonal migration of livestock more difficult to resolve by peaceful means, thus making the area even more conflict-affected. Even in cases where women have secured land tenure, they do not always manage to claim damages from cattle owners

Bibliography

Adams, E. A., Thill, A., Kuusaana, E. D., & Mittag, A. (2023). Farmer-herder conflicts in sub-Saharan Africa: drivers, impacts, and resolution and peacebuilding strategies. In *Environmental Research Letters* (Vol. 18, Number 12). Institute of Physics.
<https://doi.org/10.1088/1748-9326/ad0702>

Adger, N., Pulhin, J. M., Barnett, J., Dabelko, G. D., Hovelsrud, G. K., Levy, M., Oswald Spring, Ú., Vogel, C. H., Adams, H., Hodbod, J., Kent, S., Tarazona, M., Aldunce, P., Leichenko, R., Pulhin, J., Barnett, J., Dabelko, G., Hovelsrud, G., Levy, M., ... Mastrandrea, P. (2014). Human security. In C. Field, V. Barros, D. Dokken, K. Mach, M. Mastrandrea, T. Bilir, M. Chatterjee, K. Ebi, R. Estrada, B. Genova, E. Girma, E. Kissel, A. Levy, S. MacCracken, P. Mastrandrea, & L. White (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.

AFP. (2022, April 26). *RDC: un glissement de terrain fait 9 morts à Bukavu*.
<https://www.voaafricaine.com/a/rdc-neuf-morts-dans-un-glissement-de-terrain-%C3%A0-bukavu-mairie/6546092.html>

Ahmed, A., & Dery, I. (2022). Framing climate change and gender intersect from the perspective of masculinity. *SN Social Sciences*, 2(9), 1–12.
<https://doi.org/10.1007/S43545-022-00501-W/METRICS>

Allouche, J., Nazneen, S., Mugumo, M., Kulumbwa Lulego, E., & Hamuli, I. (2023). Breaking the Culture of Silence and Women's Protection Groups in North and South Kivu (Democratic Republic of Congo). *Journal of Pacifism and Nonviolence*, 1(2), 208–235.
<https://doi.org/10.1163/27727882-bja00015>

Amani, R. K., Riera, B., Imani, G., Batumike, R., Zafra-Calvo, N., & Cuni-Sanchez, A. (2022). Climate Change Perceptions and Adaptations among Smallholder Farmers in the Mountains of Eastern Democratic Republic of Congo. *Land*, 11(5). <https://doi.org/10.3390/land11050628>

Andersson, J. (2023). *Climate related security risks in eastern DRC: Local perspectives from North and South Kivu provinces* (FBA Report).

Angélique, N. C., Stany, V., Lebailly, P., & Azadi, H. (2022). Agricultural Development in the Fight against Poverty: The Case of South Kivu, DR Congo. *Land*, 11(4).
<https://doi.org/10.3390/land11040472>

Anyidoho, N. A. (2020). Women, Gender, and Development in Africa. *The Palgrave Handbook of African Women's Studies*, 1–15. https://doi.org/10.1007/978-3-319-77030-7_63-1

Arnfred, S. (2011). *Sexuality & gender politics in Mozambique: rethinking gender in Africa*. James Currey.

Arora-Jonsson, S. (2011). Virtue and vulnerability: Discourses on women, gender and climate change. *Global Environmental Change*, 21(2), 744–751. <https://doi.org/10.1016/j.gloenvcha.2011.01.005>

Assumani, F. M. (2020). Mobilisation de la violence armée dans la sécurisation foncière: Cas de la plaine de la Ruzizi au Sud-Kivu en République démocratique du Congo. *Revue Internationale Des Études Du Développement*, 244(4), 55–77. <https://doi.org/10.3917/RIED.244.0055>

Autesserre, S. (2010). *The trouble with the Congo: local violence and the failure of international peacebuilding*. Cambridge University Press.

Baaz, M. E., & Stern, M. (2009). Why Do Soldiers Rape? Masculinity, Violence, and Sexuality in the Armed Forces in the Congo (DRC). *International Studies Quarterly*, 53(2), 495–518. <https://doi.org/10.1111/j.1468-2478.2009.00543.x>

Balasha, A. M., Munyahali, W., Kulumbu, J. T., Okwe, A. N., Fyama, J. N. M., Lenge, E. K., & Tambwe, A. N. (2023). Understanding farmers' perception of climate change and adaptation practices in the marshlands of South Kivu, Democratic Republic of Congo. *Climate Risk Management*, 39. <https://doi.org/10.1016/j.crm.2022.100469>

Baldwin, G. (2026). *Twenty-five years of men, boys and masculinities in the WPS agenda* (SIPRI Research Policy Paper).

Barnett, J., & Adger, W. N. (2007). Climate change, human security and violent conflict. *Political Geography*, 26(6), 639–655. <https://doi.org/10.1016/j.polgeo.2007.03.003>

Bashwira, M. R., Amisi, M., & Bitenga Alexandre, A. (n.d.). Clandestinité et lutte pour la survie : Comprendre le parcours des acteurs engagés dans le sexe transactionnel dans la ville de Bukavu. *Forthcoming*.

Bashwira, M. R., & van der Haar, G. (2020). Necessity or choice: women's migration to artisanal mining regions in eastern DRC. *Canadian Journal of African Studies*, 54(1), 79–99. <https://doi.org/10.1080/00083968.2019.1674170>

Baskaran, G. (2025). *Building Critical Minerals Cooperation Between the United States and the Democratic Republic of the Congo* (CSIS Briefs).

Batumike, R., Bulonvu, F., Imani, G., Akonkwa, D., Gahigi, A., Klein, J. A., Marchant, R., & Cuni-Sanchez, A. (2022). Climate change and hunter-gatherers in montane eastern DR Congo. *Climate and Development*, 14(5), 431–442. <https://doi.org/10.1080/17565529.2021.1930987>

Bele, M. Y., Sonwa, D. J., & Tiani, A. M. (2014). Local Communities Vulnerability to Climate Change and Adaptation Strategies in Bukavu in DR Congo. *Journal of Environment and Development*, 23(3), 331–357. <https://doi.org/10.1177/1070496514536395>

- Bitenga Alexandre, A. (2026). *We'll help you understand your war: Western frames versus local realities*. Bukavu Dialogue Series.
- Bitenga Alexandre, A., Moke Mutondo, K., Bazilashe Balegamire, J., Emile, A., & Mukwege, D. (2021). Motivations for sexual violence in armed conflicts: voices from combatants in eastern Democratic Republic of Congo. *Medicine, Conflict and Survival*, 37(1), 15–33. <https://doi.org/10.1080/13623699.2021.1882365>
- Brabant, J., & Nzweve, J.-L. (2013). *La houe, la vache et le fusil. Conflits liés à la transhumance en territoires de Fizi et Uvira (Sud-Kivu, RDC): État des lieux et leçons tirées de l'expérience de LPI*. <https://www.life-peace.org>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706QP063OA>
- 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>
- Buhaug, H., & Von Uexkull, N. (2025). *Annual Review of Environment and Resources Vicious Circles: Violence, Vulnerability, and Climate Change*. 28, 22. <https://doi.org/10.1146/annurev-environ-012220>
- Burke, M., Hsiang, S. M., & Miguel, E. (2015). Climate and Conflict. *Source: Annual Review of Economics*, 7, 577–617.
- Büscher, K., Perazzone, S., Cuvelier, J., Lumbu, S., Rwakira, E., Bulambo, P., Mvano Yabauma, C., & Muzalia, G. (2024). Contested 'commune rurales': Decentralisation and the (violent) struggle for public authority in the Democratic Republic of Congo. *Global Policy*, 15(S4), 84–96. <https://doi.org/10.1111/1758-5899.13309>
- Butler, J. (1986). Sex and Gender in Simone de Beauvoir's Second Sex. *Yale French Studies*, 72, 35–49.
- Cardona, O.-D., van Aalst, M. K., Birkmann, J., Fordham, M., McGregor, G., Perez, R., Pulwarty, R. S., Lisa Schipper, E. F., Tan Sinh, B., Décamps, H., Keim, M., Davis, I., van Aalst, M., Birkmann, J., Fordham, M., McGregor, G., Perez, R., Pulwarty, R., Schipper, E., ... Midgley, P. (2012). Determinants of risk: exposure and vulnerability. In C. B. Field, V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, & P.M. Midgley (Eds.), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC)* (pp. 65–108). Cambridge University Press.
- Chang, S., & Christensen, H. B. (2023). *Nothing Gold Can Stay: Artisanal Mine Certifications and Conflict Dynamics in the Congo*.

Chesley, N. (2011). Stay-at-Home Fathers and Breadwinning Mothers. *Gender & Society*, 25(5), 642–664. <https://doi.org/10.1177/0891243211417433>

Cirimwami, J.-P. K., Ramananarivo, S., Mutabazi, A. N., Muhigwa, B., Bisimwa, E. B., Ramananarivo, R., & Razafiarjaona, J. (2019). Changement climatique et production agricole dans la région du Sud-Kivu montagneux à l'Est de la RD Congo [Climate change and agricultural production in the mountainous South Kivu region of Eastern DR Congo]. In *International Journal of Innovation and Applied Studies* (Vol. 26, Number 2). <http://www.ijias.issr-journals.org/>

Claessens, K., Mudinga, E., & Ansoms, A. (2014). Competition over Soil & Subsoil: Land Grabbing by Local Elites in South Kivu (DRC). In A. Ansoms & T. Hilhorst (Eds.), *Losing your Land* (pp. 82–102). Boydell and Brewer Limited. <https://doi.org/10.1017/9781782043416.005>

Cohen, A. S., Soreghan, M. J., & Scholz, C. A. (1993). Estimating the age of formation of lakes: An example from Lake Tanganyika, East African Rift system. *Geology*, 21(6), 511. [https://doi.org/10.1130/0091-7613\(1993\)021<0511:ETAOFO>2.3.CO;2](https://doi.org/10.1130/0091-7613(1993)021<0511:ETAOFO>2.3.CO;2)

Cold Ravnkilde, S. M., & Ba, B. (2022). *Unpacking “new climate wars”:* *Actors and Drivers of Conflict in the Sahel* (2022:04; DIIS Report).

Collier, P., & Hoeffler, A. (2004). Greed and Grievance in Civil War. *Oxford Economic Papers*, 56, 563–595. <https://www.jstor.org/stable/3488799>

Coltrane, S. (2000). Research on Household Labor: Modeling and Measuring the Social Embeddedness of Routine Family Work. *Journal of Marriage and Family*, 62(4), 1208–1233. <https://doi.org/10.1111/J.1741-3737.2000.01208.X>

Congo Research Group, & Ebuteli. (2025). *Fighting Fire with Fire in Eastern Congo: The Wazalendo Phenomenon and the Outsourcing of Warfare*.

Connell, R. W. (1995). *Masculinities*. University of California Press.

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender & Society*, 19(6), 829–859. <https://doi.org/10.1177/0891243205278639>

Crompton, R. (1999). Restructuring Gender Relations and Employment: *The Decline of the Male Breadwinner* (R. Crompton, Ed.). Oxford University Press.

Cuvelier, J. (2014). Work and Masculinity in Katanga's Artisanal Mines. *Africa Spectrum*, 49(2), 3–26.

de Beauvoir, S. (1949). *Le Deuxième Sexe*. Gallimard.

Deutsch, F. M. (2007). Undoing Gender. *Gender & Society*, 21(1), 106–127.
<https://doi.org/10.1177/0891243206293577>

Dianne Rocheleau, Barbara Thomas-Slayter, & Esther Wangari. (1996). *Feminist Political Ecology: Global Issues and Local Experience*. Routledge.

Dolan, C. (2002). Collapsing masculinities and weak states: A case study of Northern Uganda. In F. Cleaver & M. Kimmel (Eds.), *Masculinities Matter: Men, gender and development* (pp. 57–83). Zed Books.

DPPA. (2022). *Weathering Two Storms: DPPA Practice Note Gender and Climate in Peace and Security*.

Dutta, H. (2023). The Environmental Aspects of Refugee Crises: Insights from South Asia, Middle East, and Sub-Saharan Africa. *Journal of International Migration and Integration*, 24(2), 913–938. <https://doi.org/10.1007/S12134-022-00986-7/METRICS>

Efobi, U., Adejumo, O., & Kim, J. (2025). Climate change and the farmer-Pastoralist's violent conflict: Experimental evidence from Nigeria. *Ecological Economics*, 228, 108449.
<https://doi.org/10.1016/J.ECOLECON.2024.108449>

Ensor, M. (2022). Climate Disasters, Mass Violence, and Human Mobility in South Sudan: Through a Gender Lens. *Genocide Studies and Prevention*, 16(1), 60–75.
<https://doi.org/10.5038/1911-9933.16.1.1844>

Eriksson Baaz, M., & Utas, M. (2019). Exploring the Backstage: Methodological and Ethical Issues Surrounding the Role of Research Brokers in Insecure Zones. In *Civil Wars* (Vol. 21, Number 2, pp. 157–178). Routledge. <https://doi.org/10.1080/13698249.2019.1656357>

Fjelde, H., & von Uexkull, N. (2012). Climate triggers: Rainfall anomalies, vulnerability and communal conflict in Sub-Saharan Africa. *Political Geography*, 31(7), 444–453.

Flavien, K. M., Rugain, N. B., Ciraba, H. M., Jonathan, K. M., Sandra, M. N., Sambo, G., Vicky, K., Diane, S. B., Rusimbuka Marcel, B., Kadufu, M., 10, B., & Prosper, K. M. (2022). Dynamics of landslides and their impact on the Lake Kivu coastline for the period 2018 to 2020 (Nyabibwe, Kalehe Territory, South Kivu, DRC). *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(5).

Francis, B. (2024). Be a man: A theory of climate change, masculinities and violence. *Environment and Security*, 2(1), 121–144. <https://doi.org/10.1177/27538796241230584>

Freedman, J. (2015). *Gender, Violence and Politics in the Democratic Republic of Congo: Gender in a Global/Local world*. Ashgate.

Fröhlich, C., & Gioli, G. (2015). Gender, Conflict, and Global Environmental Change. *Peace Review*, 27(2), 137–146. <https://doi.org/10.1080/10402659.2015.1037609>

Funder, M., Cold-Ravnkilde, S. M., & Ginsborg, I. P. (2012). *Addressing climate change and conflict in development cooperation : experiences from natural resource management* (04; DIIS Report). Danish Institute for International Studies.

Gibson, K., Dixon, A., Goebel, A., & Bartels, S. (2022). Love, Sex, and Exchange in the Context of Peacebuilding in the Democratic Republic of Congo. *International Peacekeeping*, 29(4), 678–705. <https://doi.org/10.1080/13533312.2022.2094781>

Gleditsch, N. P. (2012). Whither the weather? Climate change and conflict. *Journal of Peace Research*, 49(1).

Global Centre for the Responsibility to Protect. (2025). *Democratic Republic of the Congo*. <https://www.globalr2p.org/countries/democratic-republic-of-the-congo/#:~:text=More%20than%20120%20militias%20and,against%20humanity%20and%20war%20crimes>

Hendrix, C. S. (2017). The streetlight effect in climate change research on Africa. *Global Environmental Change*, 43, 137–147. <https://doi.org/10.1016/j.gloenvcha.2017.01.009>

Hilhorst, D., & Bashwira, M.-R. (2014). *The Women's Movement in South Kivu, DRC. A civil society analysis* (11; Special Chair Humanitarian Aid and Reconstruction).

Hoffmann, K. (2021). Ethnogovernmentality: The making of ethnic territories and subjects in Eastern DR Congo. *Geoforum*, 119, 251–267. <https://doi.org/10.1016/J.GEOFORUM.2019.10.002>

Hoffmann, K., Vlassenroot, K., & Marchais, G. (2016). Taxation, Stateness and Armed Groups: Public Authority and Resource Extraction in Eastern Congo. *Development and Change*, 47(6), 1434–1456. <https://doi.org/10.1111/DECH.12275>

Hollander, T. (2014). Men, Masculinities, and the Demise of a State. *Men and Masculinities*, 17(4), 417–439. <https://doi.org/10.1177/1097184X14544906>

Hsiang, S. M., Burke, M., & Miguel, E. (2013). Quantifying the influence of climate on human conflict. *Science*, 341(6151). <https://doi.org/10.1126/science.1235367>

Huggins, C. (2010). *Land, Power and Identity: roots of violent conflict in eastern DRC*. <https://www.international-alert.org>

Huon, P. (2024, August 13). 'Ticking time bomb': DR Congo turns to abusive militias to fight M23 rebels. The New Humanitarian.

- Ibanda G., Bulonza E., Sabongo P., Amundala N., Mampeta S., & Sonwa D-J. (2021). *Women's land rights realities in the 'Rubi-Tele' Hunting Domain, in the Democratic Republic of the Congo* (ASC-TUFS Working Papers Volume 1).
- Ide, T., Ensor, M. O., Le Masson, V., & Kozak, S. (2021). Gender in the climate-conflict nexus: “forgotten” variables, alternative securities, and hidden power dimensions. *Politics and Governance*, 9(4), 43–52. <https://doi.org/10.17645/pag.v9i4.4275>
- IPCC. (2022). *Working Group II contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Technical Summary*. Intergovernmental Panel on Climate Change. <https://www.ipcc.ch/assessment-report/ar6/>
- IUCN. (2022). *A Place to Call Her Own: Land titling and gender-based violence in South Kivu, DRC*. International Union for Conservation of Nature. <https://iucn.org/news/gender/202104/a-place-call-her-own-land-titling-and-gender-based-violence-south-kivu-drc>
- Jacobs, C. ; Assumani, I., Sifa Katembera, R., Lubala Kubiha, S. ; Kyamusugulwa, P. M., & Ruhamy Mugenzi, J. (2020). *Figurations of displacement in the DRC: empirical findings and reflections on protracted displacement and translocal connections of Congolese IDPs* (4; Trafig Working Paper).
- Jean-Bouchard, É. (2014). The (in)visible subject: women's normative strategies in eastern Congo. *The Journal of Legal Pluralism and Unofficial Law*, 46(3), 357–373. <https://doi.org/10.1080/07329113.2014.986947>
- Kabumba Rubega, G. (2023). *Stratégies locales d'adaptation aux impacts du changement climatique dans les montagnes Africaines: cas des agropasteurs Nyindu des Monts Itombwe en République Démocratique du Congo* (Mémoire Présenté et Défendu En Vue de l'obtention Du Diplôme de DEA/DES/Master En Sciences).
- Kalambi, B. B. (2019). *La Participation des femmes et filles dans la résistance locale Mai-Mai en Territoire d'Uvira (1996-2017)* (Cahiers Du Ceruki). <https://www.isdrbukavu.ac.cd/recherche/publications/>
- Katcho Karume, C., Yona Rubakuka, S., Bora, F., & Nfundiko, C. (2018). Changement climatique, sécurité alimentaire et aptitudes des terres au Sud-Kivu à l'horizon 2050. In J. Barhalengehwa Basimine, C. Katcho Karume, & M. N. Cikuru (Eds.), *Résilience aux catastrophes naturelles et d'origine anthropique en République Démocratique du Congo*. Academia - L'Harmattan.
- Khan, A. R., Ratele, K., Dery, I., & Khandaker, S. (2023). Men and climate change: some thoughts on South Africa and Bangladesh. *International Journal for Masculinity Studies*, 18(2), 137–153. <https://doi.org/10.1080/18902138.2022.2077082>

Kinnvall, C., & Rydstrom, H. (2019). *Climate Hazards, Disasters, and Gender Ramifications*. Routledge.

Klara Claessens, Emery Mudinga, & An Ansoms. (2014). Competition over Soil & Subsoil: Land Grabbing by Local Elites in South Kivu (DRC). In A. Ansoms & T. Hilhorst (Eds.), *Losing Your Land: Dispossession in the Great Lakes*. Boydell & Brewer.

Knowledge Success. (2024, May 30). *Empowering Change: Breaking Down Gender Norms through Positive Masculinity in the DRC*. <https://knowledgesuccess.org/2024/02/29/empowering-change-breaking-down-gender-norms-through-positive-masculinity-in-the-drc/>

Kolding, J., van Zwieten, P., Marttin, F., & Poulain, F. (2016). *Fisheries in the Drylands of Sub-Saharan Africa: "Fish come with the rains". Building resilience for fisheries-dependent livelihoods to enhance food security and nutrition in the drylands* (FIAF/FIAP/C1118 (En); FAO Fisheries and Aquaculture Circular).

Koubi, V. (2019). Climate Change and Conflict. *Annual Review of Political Science*, (22), 343–360. <https://doi.org/https://doi.org/10.1146/annurev-polisci-050317-070830>

Krampe, F., Kreutz, J., & Ide, T. (2025). Armed conflict causes long-lasting environmental harms. *Environment and Security*. <https://doi.org/10.1177/27538796251323739>

Ladewig, M., Angelsen, A., Masolele, R. N., & Chervier, C. (2024). Deforestation triggered by artisanal mining in eastern Democratic Republic of the Congo. *Nature Sustainability*, 7(11), 1452–1460. <https://doi.org/10.1038/s41893-024-01421-8>

Lake, M. (2017). Building the Rule of War: Postconflict Institutions and the Micro-Dynamics of Conflict in Eastern DR Congo. *International Organization*, 71(2), 281–315. <https://doi.org/10.1017/S002081831700008X>

Lam, C. B., McHale, S. M., & Crouter, A. C. (2012). The Division of Household Labor: Longitudinal Changes and Within-Couple Variation. *Journal of Marriage and Family*, 74(5), 944–952. <https://doi.org/10.1111/j.1741-3737.2012.01007.x>

Laudati, A. (2013). Beyond minerals: broadening “economies of violence” in eastern Democratic Republic of Congo. *Review of African Political Economy*, 40(135), 32–50. <https://doi.org/10.1080/03056244.2012.760446>

Lauro, A. (2020). Women in the Democratic Republic of the Congo. In *Oxford Research Encyclopedia of African History*.

Lwambo, D. (2013). ‘Before the war, I was a man’: men and masculinities in the Eastern Democratic Republic of Congo. *Gender & Development*, 21(1), 47–66. <https://doi.org/10.1080/13552074.2013.769771>

- MacGaffey, J. (1988). Evading Male Control: Women in the Second Economy in Zaire. In S. B. Stichter & J. Parpart (Eds.), *Patriarchy And Class*. Routledge.
- MacGregor, S. (2010). "Gender and climate change": From impacts to discourses. *Journal of the Indian Ocean Region*, 6(2), 223–238. <https://doi.org/10.1080/19480881.2010.536669>
- Mach, K. J., Kraan, C. M., Adger, W. N., Buhaug, H., Burke, M., Fearon, J. D., Field, C. B., Hendrix, C. S., Maystadt, J. F., O'Loughlin, J., Roessler, P., Scheffran, J., Schultz, K. A., & von Uexkull, N. (2019). Climate as a risk factor for armed conflict. *Nature*, 571(7764), 193–197. <https://doi.org/10.1038/s41586-019-1300-6>
- Maclin, B., Kelly, J., Kabanga, J., & VanRooyen, M. (2015). 'They have embraced a different behaviour': transactional sex and family dynamics in eastern Congo's conflict. *Culture, Health & Sexuality*, 17(1), 119–131. <https://doi.org/10.1080/13691058.2014.951395>
- Majambu, E., Demaze, M. T., & Ongolo, S. (2021). The politics of forest governance failure in the Democratic Republic of Congo (DRC): lessons from 35 years of political rivalries. *International Forestry Review*, 23(3), 321–337. <https://doi.org/10.1505/146554821833992857>
- Mathys, G., & Vlassenroot, K. (2016). 'It's not all about the land': Land disputes and conflict in the eastern Congo (PSRP Briefing Paper 14).
- Maviza, G., Maphosa, M., Caroli, G., Synnestvedt, T., & Tarusarira, J. (2024). *The Complicated Relationship Between Climate, Conflict, and Gender in Mozambique Shifting Gender Norms*. <https://www.newsecuritybeat.org/2024/02/the-complicated-relationship-between-climate-conflict-and-gender-in-mozambique/?v2>
- Meyiwa, T., Maseti, T., Ngubane, S., Letsekha, T., & Rozani, C. (2014). Women in selected rural municipalities: Resilience and agency against vulnerabilities to climate change. *Agenda*, 28(3), 102–114. <https://doi.org/10.1080/10130950.2014.955686>
- Mignolo, W. D., & Walsh, C. E. (2018). On Decoloniality. Duke University Press. <https://doi.org/10.1215/9780822371779>
- Mojola, S. A. (2014). *Love, money, and HIV: Becoming a modern African woman in the age of AIDS*. University of California Press.
- Mudimbe, V. Y. (1988). *The invention of Africa*. Indiana University Press.
- Mudinga, E. (2013). *Discours et contours populaires sur l'accès de la femme à l'héritage et à la propriété foncière: une approche comparative urbano-rurale au Sud Kivu. Etude effectuée en territoires de Kalehe, Kabare et dans la ville de Bukavu à l'Est de la RDC*.

Mudinga, E., Muzalia, G., Musamba, J., Polepole, P., & Van Acker, T. (2024). *Climate change and conflict in the Ruzizi Plain (DRC)*.

Mudinga, E., & Wakenge, C. I. (2021). *Land Crisis and Stakeholders' Responses in the Democratic Republic of the Congo* (9; Congo Research Briefs).

Muvundja, F. A., Wüest, A., Isumbisho, M., Kaningini, M. B., Pasche, N., Rinta, P., & Schmid, M. (2014). Modelling Lake Kivu water level variations over the last seven decades. *Limnologia*, 47, 21–33. <https://doi.org/10.1016/j.limno.2014.02.003>

Mwapu, I., Hilhorst, D., Mashanda, M., Bahananga, M., & Mugenzi, R. (2016). *Women engaging in transactional sex and working in prostitution: Practices and underlying factors of the sex trade in South Kivu, the Democratic Republic of Congo* (Report 10; Secure Livelihoods Research Consortium). <https://www.securelivelihoods.org>

Myrntinen, H., Lewis, C., Schulz, P., Touquet, H., Yousaf, F., Laruni, E., Abeytia, A., Brito, E., Ojo, J. S., & Okoi, O. (2025). Masculinities in conflict and peacebuilding: A critical mapping of the field. In *Routledge Handbook of Masculinities, Conflict, and Peacebuilding* (pp. 32–46). Taylor and Francis. <https://doi.org/10.4324/9781003320876-4>

Nagel, Joane. (2016). *Gender and climate change: impacts, science, policy*. Routledge, Taylor & Francis Group. <https://www.routledge.com/Gender-and-Climate-Change-Impacts-Science-Policy/Nagel/p/book/9781612057675>

Navarro, R., Müller-Koné, M., & Longoli, S. (2025). *Gender Relations in the Face of Climate Change and Conflict at the Kenya-Uganda Border* (BICC Report).

Neumayer, E., & Plümper, T. (2007). The gendered nature of natural disasters: The impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Annals of the Association of American Geographers*, 97(3), 551–566. <https://doi.org/10.1111/j.1467-8306.2007.00563.x>

Nixon, R. (2013). *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.

Notre Dame Global Adaptation Initiative. (2023, April 23). ND-GAIN Country Index.

Ntanyoma, R. (2024). Radio Okapi online newspapers: Between media framing, conflict and peacebuilding. *Media, War & Conflict*. <https://doi.org/10.1177/17506352241268833>

Ntanyoma, R., & Hintjens, H. (2022). Expressive violence and the slow genocide of the Banyamulenge of South Kivu. *Ethnicities*, 22(3), 374–403. <https://doi.org/10.1177/14687968211009895;PAGE:STRING:ARTICLE/CHAPTER>

NUPI, & SIPRI. (2023). *Climate, Peace and Security Fact Sheet: Democratic Republic of the Congo*.

Nyenyezi, A., Ansoms, A., Vlassenroot, K., Mudinga, E., & Muzalia, G. (2020).

The Bukavu Series: toward a decolonisation of research. In *Blog post collection*, Presses Universitaires de Louvain.

Nzongola-Ntalaja, G. (2002). *The Congo from Leopold to Kabila: A People's History*. Zed Books; Palgrave.

OCHA. (2025). *Democratic Republic of the Congo*.
<https://www.unocha.org/democratic-republic-congo>

Omolo, N. A. (2010). Gender and climate change-induced conflict in pastoral communities: Case study of Turkana in north-western Kenya. *African Journal on Conflict Resolution*, 10(2).

O'Reilly, C. M., Alin, S. R., Plisnier, P.-D., Cohen, A. S., & McKee, B. A. (2003). Climate change decreases aquatic ecosystem productivity of Lake Tanganyika, Africa. *Nature*, 424(6950), 766–768. <https://doi.org/10.1038/nature01833>

Pateman, C. (1983). FEMINIST CRITIQUES OF THE PUBLIC/PRIVATE DICHOTOMY. In S. I. Benn & G. Gaus (Eds.), *Public and Private in Social Life* (pp. 281–303). Taylor and Francis.
<https://doi.org/10.4324/9781003601678-15/FEMINIST-CRITIQUES-PUBLIC-PRIVATE-DICHOTOMY-CAROLE-PATEMAN>

Pommells, M., Schuster-Wallace, C., Watt, S., & Mulawa, Z. (2018). Gender Violence as a Water, Sanitation, and Hygiene Risk: Uncovering Violence Against Women and Girls as It Pertains to Poor WaSH Access. *Violence Against Women*, 24(15), 1851–1862.
<https://doi.org/10.1177/1077801218754410;JOURNAL:JOURNAL:VAWA;PAGE:STRING:ARTICLE/CHAPTER>

Prunier, G. (2009). *Africa's World War: Congo, the Rwandan Genocide, and the Making of a Continental Catastrophe*. Oxford University Press.

Radio Okapi. (2022, December 2). *Sud-Kivu : 12 corps sortis des décombres après un éboulement de terre à Kalehe*. <https://www.radiookapi.net/2022/12/02/actualite/securite/sud-kivu-12-corps-sortis-des-decombres-apres-un-eboulement-de-terre>

Seff, I., Falb, K., Yu, G., Landis, D., & Stark, L. (2021). Gender-equitable caregiver attitudes and education and safety of adolescent girls in South Kivu, DRC: A secondary analysis from a randomized controlled trial. *PLOS Medicine*, 18(9), e1003619.
<https://doi.org/10.1371/journal.pmed.1003619>

Seyuba, K. (2025). *Climate, Peace and Security in eastern Democratic Republic of the Congo (2; SIPRI Insights on Peace and Security)*.

Shepherd, L. J. (2009). *Gender, Violence and Global Politics: Contemporary Debates in Feminist Security Studies*.

Shepherd, L. J. (2010). Gender matters in *Global Politics: A feminist introduction to International Relations*. Routledge.

Sheria Nfundiko, J. (2015). Femmes du Sud-Kivu, victimes et actrices en situation de conflit et postconflit. *Hérodote*, n° 158(3), 182–199. <https://doi.org/10.3917/her.158.0182>

Smith, E. S. (2022). *Gender Dimensions of Climate Insecurity* (4; SIPRI Insights on Peace and Security).

Smith, J. M., Olosky, L., & Fernández, J. G. (2021). *The Climate-Gender-Conflict Nexus: Amplifying women's contributions at the grassroots*.

Solow, A. R. (2013). A call for peace on climate and conflict. *Nature*, 497(May).

Sommers, M. (2012). *Stuck: Rwandan Youth and the Struggle for Adulthood*. University of Georgia Press.

Stearns, J. K. (2014). Causality and conflict: tracing the origins of armed groups in the eastern Congo. *Peacebuilding*, 2(2), 157–171. <https://doi.org/10.1080/21647259.2014.910382>

Stearns, J. K. (2021). *The War That Doesn't Say Its Name : The Unending Conflict in the Congo*. Princeton University Press.

Stoebenau, K., Heise, L., Wamoyi, J., & Bobrova, N. (2016). Revisiting the understanding of “transactional sex” in sub-Saharan Africa: A review and synthesis of the literature. *Social Science & Medicine*, 168, 186–197. <https://doi.org/10.1016/j.socscimed.2016.09.023>

Sweet, R. (2020). Bureaucrats at war: The resilient state in the Congo. In *African Affairs* (Vol. 119, Number 475, pp. 224–250). Oxford University Press. <https://doi.org/10.1093/afraf/adaa001>

Swidler, A., & Watkins, S. C. (2007). Ties of Dependence: AIDS and Transactional Sex in Rural Malawi. *Studies in Family Planning*, 38(3), 147–162. <https://doi.org/10.1111/j.1728-4465.2007.00127.x>

Tanyag, M., & True, J. (2019). *Gender Responsive Alternatives to Climate Change: A Global Research Report*.

Theisen, O. M. (2017). Climate Change and Violence: Insights from Political Science. In *Current Climate Change Reports* (Vol. 3, Number 4, pp. 210–221). Springer. <https://doi.org/10.1007/s40641-017-0079-5>

Thulin, E. J., Lustig, A., Perrotte, V., Lwabanya, M., & Evans, T. (2022). Male and Female Perceptions and Experiences of Sexual and Gender-based Violence in South Kivu, Eastern DRC. *Journal of Interpersonal Violence*, 37(11–12), NP9469–NP9495. <https://doi.org/10.1177/0886260520983301>

Titeca, K., & de Herdt, T. (2011). Real governance beyond the 'failed state': Negotiating education in the Democratic Republic of the Congo. *African Affairs*, 110(439), 213–231. <https://doi.org/10.1093/AFRAF/ADR005>

TRT Global. (2023, November 14). *Neighbours' alarm over deteriorating Lake Tanganyika*. TRT Global. <https://trt.global/afrika-english/article/15819271>

Trujillo, N. (1991). Hegemonic masculinity on the mound: Media representations of Nolan Ryan and American sports culture. *Critical Studies in Mass Communication*, 8(3), 290–308. <https://doi.org/10.1080/15295039109366799>

Tseer, T., Marfo, S., & Halidu, M. (2025). Beyond climate change and scarcity: a cultural dimension of farmer–herder conflict in the Asante-Akim North Municipality, Ghana. *Conflict, Security and Development*. <https://doi.org/10.1080/14678802.2025.2460080;CTYPE:STRING:JOURNAL>

Turner, M. D. (2004). Political ecology and the moral dimensions of “resource conflicts”: the case of farmer–herder conflicts in the Sahel. *Political Geography*, 23(7), 863–889. <https://doi.org/10.1016/J.POLGEO.2004.05.009>

UCDP. (2024, September 10). *UCDP Definitions*. Uppsala Conflict Data Program. <https://www.uu.se/en/departement/peace-and-conflict-research/research/ucdp/ucdp-definitions>

UNEP, UN Women, UNDP, & UNDPPA/PBSO. (2020). *Gender, climate and security: Sustaining inclusive peace on the frontlines of climate change*.

UNICEF. (2025). *DR Congo Humanitarian Situation Report No. 3: Upsurge in Conflict, 15 April 2025*.

UNOHCHR. (2010). Democratic Republic of the Congo, 1993–2003: *Report of the Mapping Exercise documenting the most serious violations of human rights and international humanitarian law committed within the territory of the Democratic Republic of the Congo between March 1993 and June 2003*.

Van Leeuwen, M., Nindorera, J., Kambale Nzweve, J. L., & Corbijn, C. (2020). The 'local turn' and notions of conflict and peacebuilding – Reflections on local peace committees in Burundi and eastern DR Congo. *Peacebuilding*, 8(3), 279–299. <https://doi.org/10.1080/21647259.2019.1633760>

van Leeuwen, M., van der Haar, G., Ansoms, A., Baraka Akilimali, J., Mushagalusa Mudinga, E., Mulumeoderhwa Polepole, P., & Munezero, C. (2023). Localized land tenure registration in Burundi and eastern DR Congo: Contributing to sustainable peace? *Global Environmental Change*, 83, 102763. <https://doi.org/10.1016/J.GLOENVCHA.2023.102763>

Verweijen, J. (2016). *Un Microcosme de Militarisation: Conflit, Gouvernance et Mobilisation Armée en Territoire d'Uvira*. <https://www.riftvalley.net>

Verweijen, J., & Brabant, J. (2017). Cows and guns. Cattle-related conflict and armed violence in Fizi and Itombwe, eastern DR Congo. *The Journal of Modern African Studies*, 55(1), 1–27. <https://doi.org/10.1017/S0022278X16000823>

Verweijen, J., Muzalia, G., & Vlassenroot, K. (2025). “We Are Caught Between Violence and Famine” - Analysis of the Deepening Crisis Affecting Eastern DR Congo. *Egmont Institute Commentaries*. <https://www.egmontinstitute.be/we-are-caught-between-violence-and-famine-analysis-of-the-deepening-crisis-affecting-eastern-dr-congo/>

Verweijen, J., Twaiibu, J., Abedi, O. D., & Ntababarwa, A. N. (2020). *The Ruzizi Plain: a crossroads of conflict and violence* (Insecure Livelihoods Series).

Vinke, K., Campbell, L., Schirwon, D., Seyuba, K., Krampe, F., Maalim, H., & Isulu Mbungwal, G. (2023). *Climate and Environmental Security in the Democratic Republic of Congo: Competing over Abundant Resources - Adapting to Change*. <https://www.ssoar.info>

Vlassenroot, K., & Huggins, C. (2004). Land, Migration and Conflict in eastern DR Congo. *Eco-Conflicts*, 3(4).

Vlassenroot, K., & Raeymaekers, T. (2009). Kivu’s Intractable Security Conundrum. *African Affairs*, 108(432), 475–484.

Vlassenroot, K., Raeymaekers, T., Verhoeve, A., Jourdan, L., & Cuvelier, J. (2004). Conflict and social transformation in Eastern DR Congo. Published in 2004 in *Gent by Academia Press*, 13–38. <https://lib.ugent.be/catalog/rug01:000969882>

Vlassenroot, K., & Van Acker, F. (2001). War as exit from exclusion? The formation of Mayi-Mayi militias in Eastern Congo. In *Afrika Focus* (Vol. 17).

Vlassenroot, Koen., Mudinga, Emery., & Hoffmann, Kasper. (2016). *Contesting authority: armed rebellion and military fragmentation in Walikale and Kalehe, North and South Kivu*. Rift Valley Institute. <https://researchprofiles.ku.dk/en/publications/contesting-authority-armed-rebellion-and-military-fragmentation-i/>

Vogel, C. (2022). *Conflict Minerals*, Inc. Hurst Publishers.

von Uexkull, N., & Buhaug, H. (2021). Security implications of climate change: A decade of scientific progress. In *Journal of Peace Research* (Vol. 58, Number 1, pp. 3–17). SAGE Publications Ltd. <https://doi.org/10.1177/0022343320984210>

von Uexkull, N., d’Errico, M., & Jackson, J. (2020). Drought, Resilience, and Support for Violence: Household Survey Evidence from DR Congo. *Journal of Conflict Resolution*, 64(10), 1994–2021. <https://doi.org/10.1177/0022002720923400>

Wamoyi, J., Buller, A. M., Nyato, D., Kyegombe, N., Meiksin, R., & Heise, L. (2018). “Eat and you will be eaten”: a qualitative study exploring costs and benefits of age-disparate sexual relationships in Tanzania and Uganda: implications for girls’ sexual and reproductive health interventions. *Reproductive Health*, 15(1). <https://doi.org/10.1186/S12978-018-0650-0>

Wamoyi, J., Ranganathan, M., Kyegombe, N., & Stoebenau, K. (2019). Improving the Measurement of Transactional Sex in Sub-Saharan Africa: A Critical Review. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 80(4), 367–374. <https://doi.org/10.1097/QAI.0000000000001928>

Weather & Climate. (2025). *South Kivu, Democratic Republic of the Congo: Climate summary*. Weather & Climate Website. https://weatherandclimate.com/democratic-republic-of-the-congo/sud-kivu#google_vignette

West, C., & Zimmerman, D. H. (1987). Doing Gender. In *Gender and Society* (Vol. 1, Number 2). <https://www.jstor.org/about/terms.html>

Wild-Wood, E. (2007). “Se Débrouiller” or the Art of Serendipity in Historical Research. *History in Africa*, 34, 367–381. <https://doi.org/10.1353/HIA.2007.0024>

Yoshida, K., Bond, H., & Kezie-Nwoha, H. (2021). *Defending the Future: Gender, Conflict and Environmental Peace*.

Young, Crawford., & Turner, Thomas. (2012). *The rise and decline of the Zairian state*. University of Wisconsin Press .

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