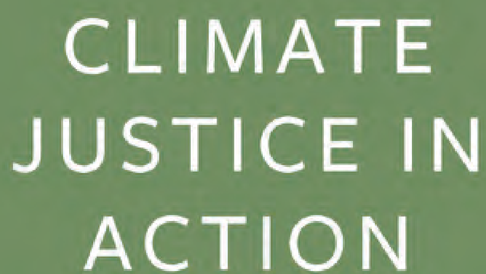

CLIMATE JUSTICE IN ACTION

ACTIVISM AND ADAPTATION IN EASTERN AFRICA

EDITED BY KATIE MCQUAID, NEIL J. W. CRAWFORD, ADMIRE MARE AND SUSAN NANDUDDU

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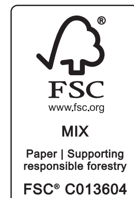

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Foreword

Ikal Angelei

As a pastoralist, I grew up seeing my people fight for survival, in search of pasture and water for their livelihoods. To us, it was a way of life, but years later, I realized it was climate injustice, where the actions of others led to our destruction. This edited volume on *Climate Justice in Action: Adaptation and Activism in Eastern Africa* is timely. Africa is in the grip of urgent environmental challenges that demand immediate and sustained advocacy and activism. From the relentless onslaught of climate change and its devastating impacts on vulnerable communities to the relentless depletion and degradation of natural resources, the need to balance economic development with environmental protection is more pressing than ever.

The intersection between the climate crisis, food security, seed sovereignty, water pollution, extraction in sensitive ecosystems, debt and renewable energy in Africa has emerged as a critical area of focus for environmental, sociocultural advocacy. The impacts of climate change, such as rising sea levels, increased frequency and intensity of extreme weather events, and shifts in rainfall patterns, disproportionately affect African nations, which often lack the resources and infrastructure to respond and adapt effectively. The increased exploitation of Africa's natural resources, often by foreign entities, has led to widespread environmental degradation, displacement of local communities, and the disruption of traditional livelihoods. However, African activists have not been idle. They have mobilized to demand greater transparency, accountability, and community-led decision making in managing these resources, demonstrating their agency and the importance of their actions in environmental advocacy.

There is a compelling argument for advocacy to recognize the need to balance environmental protection with the pressures of economic development and impoverishment. This polycrisis, where multiple, interconnected challenges must be navigated through building a collective voice advocating for the African continue, integrating environmental sustainability, social justice and equitable development, and advocating for solutions that address the root causes of these complex, interrelated issues. African environmental advocacy and activism are not just responding to

these challenges but are instrumental in shaping the global discourse and driving meaningful change.

By amplifying local communities' voices, challenging unjust power structures, and proposing innovative, holistic approaches, African environmental advocacy is at the forefront, leading the push for global climate action. This leadership role is crucial in highlighting the urgent need for greenhouse gas emissions reductions, changes in the consumerism of the Global North, and the inequality of global decisions that continue to exploit Africa. These systems are resulting in the destruction of Africa's productive and reproductive capabilities in a bid to 'feed' Global North citizens and economies. The destructive impact of these systems on our environments and ecosystems is severe, and the fragmentation of our production and reproductive systems is evident. It's destroying our economies, exacerbating poverty and inequality. For example, the feminist movement centres activism from a feminist lens, working with the food sovereignty movement, advocating for the right to access and use Indigenous seeds and food systems, recognizing the core impacts of the climate crisis, and amplifying the climate-justice movement, and because this is not in a vacuum, the efforts of land rights activists, fighting back false solutions on their lands. But we all recognize the impacts on everyday citizens, working people, urban poor, and the weak governance systems that enable these continued broken systems that destroy our environments and ecosystems, fragment our production and reproductive systems, and destroy our economies, exacerbating poverty and inequality.

However, to sustain this advocacy and activism, Africa requires a reimagination of organizing and movement building. This reimagined approach shifts from spaces occupied exclusively by nongovernmental organizations (NGOs) and civil society organizations (CSOs) to organizing grassroots and everyday citizens. It builds on their ways of life, recognizes their geographical contexts, and attends to their commonalities in the pathways of their struggles. It is crucial to build movements centred around young people, women, persons with disability (PWDs), and Indigenous peoples to recognize the strengths in our numbers and diversity. We must share everyday struggles and confront, head on, the imbalance in power. This determination to address power imbalances is key to our success. Through these collectives, we will not only build mass solidarity action that champions countercolonial and decolonial knowledge shifts but also connect to gather good ideas and innovations.

While our struggles are context specific to our geographies and realities, we need to invest in collective African agency, voice and resources, identifying our complementarity and diversity of passions to disrupt global, regional and national systems of injustice. As the illustrious Ugandan academic Sylvia Tamale notes in her book on decolonization: 'Africa's decolonial and decolonization struggles must also be solidified to act as one ecosystem'.

A close comrade and an accomplice in my activism journey always reminds me that 'the forest has no doorway; every hunter enters where they do; the determinant is what they bring back'. True to his words, this book brings together various hunters' stories and centres their lived realities. These stories, told with the strength and truth of words and the intensity of their knowledge, are a disruptive force. They aim to disrupt the systems that continue to exacerbate the economic, sociocultural and ecological peril in which we find ourselves. This peril is inextricable from the social injustices carried out upon Indigenous, local and marginalized peoples in the continent for decades that we have experienced and centuries before us.

Introduction: Responding to the Climate Crisis in Eastern Africa

JulietGrace Luwedde, Admire Mare, Susan Nanduddu, Neil J.W. Crawford and Katie McQuaid

'I cannot go back to Uganda because politically I'm not on the same page as the government, and that puts me in danger,' says Nyombi Morris, a climate activist forced into exile due to Uganda's *The Anti-Homosexuality Act, 2023* (Kimeu, 2024). The law imposes severe penalties, including life imprisonment and even the death penalty for certain same-sex acts, as well as 20 years for 'promotion' of LGBTQIA+ rights. Morris, who became vocal about LGBTQIA+ rights after his sister was outed and expelled from school, received threats of violence and arrest for his activism. With the support of Defend Defenders, he fled to Denmark, where he has applied for asylum. His story highlights the intersection of LGBTQIA+ rights and climate activism, as systemic oppression not only silences voices advocating for equality but also disrupts crucial environmental advocacy in regions like Uganda. Morris' experiences also speak more broadly to what Global Witness has termed a 'Climate of Fear' among environmental defenders and activists in Eastern Africa, particularly amidst large-scale resource extraction (Global Witness, 2023), and increasing targeting of climate activists through criminalization and antiprotest laws (Lakhani et al, 2024).

At an international climate policy-making level, Africa, and specifically Eastern Africa, has been a key site in recent years. In September 2023, the first Africa Climate Summit was held in Kenya's capital, Nairobi, and highlighted the continent's dual challenges: vulnerability to climate change despite minimal emissions and the reliance on unfulfilled promises from wealthier countries in the Minority World. Leaders adopted the Nairobi Declaration to advocate for Africa in global forums, emphasizing renewable energy potential and urban poverty. Kenya's President, William Ruto, in his opening speech to the Summit stressed he wants Africa to be seen as a provider of solutions to the climate crisis, not as victims (The Guardian, 2024). Activists criticized 'false solutions' like carbon markets, while US$26

billion in financing deals marked some progress. However, scepticism remains about whether these outcomes will lead to tangible improvements for Africans or remain aspirational rhetoric (Muiruri, 2023). All of which leaves us at a difficult and challenge point in history – where more must be done urgently to address the climate crisis, but there exists a number of political, economic and structural barriers, which must be overcome, especially by activists and frontline communities who currently lead efforts in Africa and beyond.

Climate finance at the heart of climate justice

Climate finance is a fundamental indicator of climate justice. Initially agreed upon in 1992 in Article 4, Paragraph 3 of the United Nations Framework Convention on Climate Change, Minority World countries committed to providing 'new and additional financial resources' to cover the full costs incurred by Majority World countries in meeting their obligations under the Convention. In 2009, Minority World nations set a target to collectively mobilize US$100 billion per year by 2020, a goal extended to 2025 under the 2015 Paris Agreement. This target is set to be replaced by a New Collective Quantified Goal, with discussions beginning in 2022. Synthesis reports revealed that the financial needs of Minority World countries to meet their mitigation and adaptation goals, as outlined in their Nationally Determined Contributions, were estimated between US$5.1–6.8 trillion through 2030. In November 2024, a new target of US$300 billion per year was agreed upon, a decision praised by Minority World countries but criticized by Majority World nations, who had called for a minimum of US$1.3 trillion annually.

Setting a commitment is one thing, but fulfilling it is another. According to the 2024 data from the OECD, the target of US$100 billion was only achieved once, in 2022, when an estimated US$115.9 billion was mobilized by Minority World countries. This highlights that for every previous year, promises were left unfulfilled. This clearly reflects climate injustice, especially when sectors contributing to climate change receive far more financial support. Adaptation, a priority for many countries in Africa, remains severely underfunded. For instance, Africa alone requires US$53 billion each year but received just US$13 billion in 2021–2022 (Global Centre on Adaptation, 2024), 80 per cent of which was delivered in loans. In simple terms, Africa, which contributes less than 4 per cent to global greenhouse gases, is paying Minority World countries, which caused the problem, for most of the support provided, in order to adapt to the impacts that are rising.

Take displacement, for example. The Sixth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC) confirms with high

confidence that climate and weather extremes are increasingly driving displacement across all regions. One chapter in the report highlights this reality, noting that in Eastern Africa, cross-border migration is driven by a range of factors, including pastoralists' adaptability, climate events and persecution, often occurring simultaneously. Another chapter discusses water scarcity, which is also recognized as a climate-change impact in the IPCC report. While the chapter proposes solutions, such as water-production technologies and water-harvesting techniques, substantial financing is needed to implement these technologies. Vulnerable communities, who have contributed the least to climate disruption, lack the financial resources to address these issues, and their governments face competing priorities within limited budgets.

In addition to the challenges of accessing finance, research shows that only about 10 per cent of the funds allocated actually reach the community level, highlighting clear indicators of climate injustice. Climate activism plays a crucial role in exposing these gaps and pressuring decision makers to take corrective actions. This book highlights examples of climate activism in Eastern Africa, including the iconic legacy of Wangari Maathai, as beautifully explored by Wambua Muindi. Even after her passing, Maathai's work continues to inspire activists, with her efforts still visible in books and the Karura Forest, which she helped save. Karura, an urban forest spanning 2,500 acres in Nairobi, Kenya, stands as a testament to her work, which was assisted by traditional media. Maathai's story illustrates that climate activism is a multifaceted struggle – one against colonialism, patriarchy, corruption, and more. It is a fight for justice – climate justice and social justice. This book emphasizes how movements can outlast their founders, inspiring actions that often extend far beyond the original context of activism.

The Rise Up Movement in Uganda is one of the youth-led initiatives fighting against climate injustice, inspired by the legacy of Wangari Maathai, and explored within this book. Led by Vanessa Nakate, the movement draws additional inspiration from Greta Thunberg, whose global Fridays for Future movement grew through social media-driven protests. Hilda Nakabuye also played a key role in establishing the Ugandan chapter, further fuelling youth activism in the country. In this book, Antje Daniel argues that both the Rise Up Movement and Fridays for Future Uganda have become significant actors in global environmental politics as well as in Uganda's national context. Their advocacy for climate justice highlights the growing conflict in Uganda over the aspiration for an ecologically and socially just future. This struggle is often met with threats, intimidation and arrests. According to Fridays for Future Uganda's X account, in November 2024, youth activists protesting the East African Crude Oil project – funded by the fossil fuel industry – were arrested and imprisoned. Justice has yet to be served for their peaceful demonstration.

To the announcement of the US$300 billion climate finance goal, Vanessa Nakate reacted with a statement on her X account that

> the rich countries have thrown us crumbs once again. Leaders in developed countries have yet again tried to avoid their responsibilities. We, the peoples have been treated with contempt. We have been excluded. We have been abandoned. But we will hold them accountable. We will make them pay what they owe. We will never give up.

Activism for climate action is a crucial component in the fight for climate justice and should be supported, not challenged.

Unsettling climate justice

Climate justice has emerged as one of the latest floating signifiers in the long and winding debate about the consequences of global warming. At the core of climate justice is an understanding that we cannot treat climate change as simply an environmental crisis. Rather we should view it as an ethical, legal and political issue (Schlosberg and Collins, 2014). This broadens our approach to global warming to encompass issues to do with fairness and justice. Such a conceptualization of climate change enjoins us to move away from the narrow framing of the polycrisis facing humanity. By foregrounding fairness, justice and rights, we can centre ideas of environmental justice and fairness.

A number of definitions of climate justice have emerged in the last few years. Some of these definitions attempt to highlight the fact that all living beings have a natural right to access and obtain the resources needed to have an equal chance of survival and are entitled to exist free from harm (Anderson, 2004). Implicit in this definition is the idea of a rights-based approach to climate change. Informed by environmental justice discourse, climate justice – as explored across this book – seeks to illuminate, and act upon, the unequal, intersectional and disproportionate consequences of climate change on marginalized communities. Rather than assuming the environmental equilibrium will be restored without a fight, it seeks to push for legal and political redress. The idea of social justice is premised on a commitment to the achievement of a society that is equitable, fair and capable of confronting the root causes of injustice.

At the core of climate justice is the quest to achieve an equitable distribution of both the burdens of climate change and the efforts to mitigate climate change. By putting concepts, such as equity, human rights, collective, justice and the historical responsibilities for climate change at the front and centre, climate justice advocates acknowledge that those who have benefited most from industrialization should carry the burden for the accumulation of carbon dioxide in the earth's atmosphere and thus for climate change. It follows that countries in the Majority World are more likely to bear the brunt of

climate change when compared to their counterparts in the Minority World (Crawford et al, 2023). It also presupposes that rural areas are more likely to experience the vagaries of climate variability when compared to urban areas. Although this claim, usually coupled with a critique of urban areas are primary emitters of emissions and pollution, tends to miss that often the climate change literature has under-considered urbanism (Plänitz, 2019). The same can be said of women who are more likely to carry the burden of climate change when compared to men (Pearse, 2017), or sexual and gender diverse communities who despite disproportionate burderns are routinely excluded from climate research and action (McQuaid and Crawford, 2025). Similar comparisons can be made along other social categories and divisions – such as young and old, or rich and poor. Climate-justice advocates highlight that climate change accentuates existing inequalities but also brings into the picture newer and deeper forms of vulnerabilities (Sultana, 2022).

Building on Nancy Fraser's (2008) concept of 'abnormal justice', it is possible to advance theories of climate justice that shifts our attention away from the dominant discussion on how goods should be distributed in a just (and sustainable) society towards the very conditions that underpin how justice is understood, debated and advanced. Unlike other justice frameworks, Fraser's theorization invites us to unpack multiple experiences of climate injustice and to explore different ways of addressing them in the Majority World. The chapters in this book foreground injustices of maldistribution, misrecognition, misrepresentation, misframing and reprivatization. Under conditions of abnormal justice, claims about the distribution of resources and cultural recognition exist in tension (and are never fully resolvable) with claims about what Fraser (2008) terms 'representation', or inclusion and exclusion from democratic communities. This book invites us to ensure that those who have suffered due to processes of marginalization, exploitation, powerlessness, environmental imperialism and violence become visible, audible and knowable. In the context of climate justice, it is possible to make a case for 'recognitive, redistributive, rehabilitative, reparative, restorative, and representative forms of justice' (Mare, 2025). These underscore the importance of holding those who are emitting more greenhouse gas emissions to account. It also entails coming up with rehabilitative strategies to address deforestation, ozone-layer depletion and reforestation in Eastern Africa.

Climate justice also recognizes the intersectional nature of the impacts of climate change (Mikulewicz et al, 2023). Shying away from an approach where the consequences of climate change are presented as uniform and universal, it attempts to demonstrate how social and systemic factors are complicit in the differentiated effects of the ongoing polycrisis. Intersectionality is premised on the notion that social factors such as gender, race, class, age, disability and ethnicity intersect with each other to drive and exacerbate privileges, discriminations and oppressions (Amorim-Maia et al, 2022).

In the context of Eastern Africa, it is imperative to pivot intersectionality as an organizing principle for sustainable climate adaptation and mitigation action. In that way, policy makers, environmental and social activists, and civil society are able to 'shift away from technocratic and exclusionary forms of climate change planning' (Long and Rice, 2020: n.p.). Most climate-adaptation strategies have sought to treat the Majority World as tabula rasa. Instead of allowing those most affected by climate change to use their Indigenous knowledge systems to push back climate change, top-down approaches have tended to dominate. Dressed in the form of modern knowledge systems, climate change has been conceptualized from the narrow prism of 'Western' epistemologies, ontologies and methodologies. Although provincial, 'Western' methods, knowledges and theories have been largely presented in terms of universal claims or of claims to the universal (Mbembe, 2017). Therefore, what some pass as universal may in fact be particular to certain sociopolitical and cultural contexts as well as value systems. We must therefore question if such thinking about climate change is adequate to deal with the complexities borne of the sociopolitical, economic and technological entanglements constitutive of a modern and interdependent sociality.

From a decolonial framing of climate justice, it is arguable that it is a continuation of epistemic domination by other means. It builds on earlier forms of domination, which are primarily organized in terms of a hierarchical racial order, which privileges the Minority World and their ideas of what constitutes knowledge, ethics, justice, culture and correct methods of generating knowledge among other things (Quijano, 2007). Climate-change adaptation strategies put forward by those in the Majority World are invisibilized, marginalized and rendered irrelevant. In order to get out of this climate-justice interregnum, there is need for 'intercultural translation' (de Sousa Santos, 2007). This is based on mutual recognition between different forms of knowledge (about climate change, adaptation and mitigation) and ways of living among other cognate elements. As this edited collection seeks to do, it is a way of enabling dialogue across differences under conditions of mutual recognition.

Living the double life: to please or to be pleased

Living the double life – this is what Ugandan environmental activist JulietGrace Luwedde often thinks about when she allows her imagination to run wild to the angelic world, the climate movement, and where things stand right now. At the time of writing, COP29 in Baku, Azerbaijan has just concluded. Her personal take, drawn also from conversations with colleagues, was that many people were unhappy with how things turned out – how decisions that impact all our lives have been handled. She explains how that

feeling of 'we have a decision, but that isn't what we all wanted' engulfed many of us. This was her third COP, having previously attended COP26 in Glasgow, Scotland and COP27 in Sharm el-Sheikh, Egypt, but the one that generated the greatest sense of disappointment. Before its close, she vividly remembers meeting fellow participants in the corridors outside of meeting rooms, demonstrating and voicing their concerns over insufficient financial commitments from Minority World countries to support vulnerable countries in addressing climate change. These protests highlighted the frustrations of many who felt that the agreed-upon US$300 billion annual funding by 2035 fell short of the necessary resources to effectively combat climate challenges.

Additionally, some delegates from the Majority World staged walkouts during finance meetings, expressing anger over the lack of progress and perceived inadequacies in the financial commitments being discussed. Truth is, these actions underscore the critical role of civil society and vulnerable nations in advocating for more ambitious climate action and equitable financial support during international climate negotiations. This raises questions for JulietGrace: where exactly are we going with all of this? What are we trying to achieve, and why do we keep coming back to this vicious cycle of endless discussions? We continue to talk, to deliberate, but at the end of the day, we seem to agree to disagree. What does that mean for the future? What does it mean for our communities, especially those represented in these rooms yet whose realities are rarely truly reflected in the decisions made?

As a young person, JulietGrace enjoys working with other young people within communities – it's something she hasn't done in a while. She misses being able to go Bwaise in Uganda's capital, Kampala, and have conversations about proper waste management or even hold creative art sessions where participants had the opportunity to express themselves through a medium that speaks to everyone. Lately, she finds herself in big rooms – and by big rooms she means the United Nations – (not like it's a bad thing, as this is a privilege in itself being here), speaking to people who understand the issues, people she's confident should be able to find solutions to our global crises. But at the end of the day, despite our collective understanding of what needs to be done, we all leave with different agendas. At the same time, JulietGrace claims to be pushing for better outcomes for her communities. The sentiment is shared: we all want to see the world improve, to ensure the 'elephant in the room' is addressed properly. Yet, we are approaching it differently. We have been given different terms of reference, shaped by where we come from. There's the Majority World versus the Minority World. The Majority World argues – rightfully so – that wealthy countries are responsible for the current state of the planet and must pay their dues. The Minority World, on the other hand, often acknowledges their historical

responsibility but implies that it's time to move on. 'We've heard you,' they say, 'but let's move forward now'.

For all the contributors to this book, climate justice is the recognition that those least responsible for climate change are bearing its brunt and that they, especially those from the Majority World, must lead the solutions. Adaptation, therefore, is not just about survival – it is about dignity, empowerment, and equity. Yet as activists, ones who often feel left out and unheard, we then wonder: 'what needs to change for activist voices to be heard in climate policy and politics?' This is the wrong question, JulietGrace argues. From personal reflections and experience, the question instead should be: What aren't activists doing to ensure their voices are heard and included?

As a global youth focal point for the UNCCD, JulietGrace has worked to amplify youth-led initiatives addressing desertification and drought. She has seen a shift: young people are no longer waiting for a seat at the table – they are building their own. However, these efforts often face systemic barriers, such as limited access to financing and exclusion from policy-making processes despite the very significant disconnect between activists and advocates for issues such as climate change. On one hand, advocates often focus on shaping policies, saying things like, 'Policies should address A, B, and C, and include X, Y, and Z'. On the other hand, activists are more focused on bringing attention to the real, on-the-ground issues and sharing lived experiences.

While both roles are critical, the divide between them creates a gap. Activists live the reality of climate impacts and highlight pressing concerns, while advocates translate these issues into actionable policy recommendations. However, for meaningful progress, these two groups need to communicate and collaborate better. In Uganda, for example, during the update of the Nationally Determined Contribution Two (NDCII), the government intentionally involved civil society in the process and this allowed for an inclusive NDC that has now gone on to be adopted by all. Reflecting on this, perhaps the key is for both activists and advocates to recognize their interdependence. Activists provide the foundation – the raw, lived realities – that advocates rely on to craft policies. By working together more effectively, they can ensure that lived experiences inform policies in a way that leads to real, actionable change.

Centring Eastern Africa

Our book seeks to ground our understandings of climate justice within Eastern African discourses and lived experiences. By attending to the conceptual, the legal, the political but most importantly the practice – and praxis – of climate justice in action, our authors seek to foreground the collective essence, and spirit, of climate justice actions in Eastern Africa. As

the chapters addressing climate activism note, and we can see in JulietGrace's reflections above, it is both the work of individuals speaking at global scales, but also the grassroots coalitions that build international, national and regional networks, that are shaping the climate-justice movement in Eastern Africa. The region is defined loosely here, with scope given to our authors to self-identify: given that 'Eastern Africa' or 'East Africa' tends to be understood slightly differently by different institutions, organizations, communities and individuals. All countries under focus here are part of either the United Nations Eastern African geoscheme, the African Union's definition of Eastern Africa, or members of the East African Community.

The climate crisis in Eastern Africa is marked by extreme weather events, including severe floods, droughts and erratic rainfall patterns, which are increasingly devastating the region. Taking one example, floods in Somalia, Ethiopia and Kenya, fuelled by heavy rains in late 2023, have displaced millions, while droughts and food insecurity have worsened in many areas. Climate change is also intensifying challenges, such as water scarcity and agricultural damage, impacting livelihoods across the region. These effects disproportionately affect the most vulnerable populations, and the region's capacity to adapt is limited by insufficient resources. Despite being at the forefront of the climate crisis, Eastern Africa has received comparatively limited attention within the climate-justice literature, which still tends to centre cases from the Minority World or other parts of the Majority World.

A focus on how this is mobilized, resisted and challenged across this diverse region compels us to confront the intersectional and complex entanglements at play in demanding climate justice. Taken together, our chapters creatively call for a relational, situated, political and historical approach to – and enaction of – climate justice that celebrates feminist and intersectional perspectives and begins from lived and collective experience. Climate justice, we are reminded, is inherently and deeply political; entwined with individual and collective freedoms, and disproportionately burdening those already multiply marginalized communities. In their chapter, Schroeder and Fransen, for example, highlight a concerning oversight of displaced populations in recent climate adaptation plans of host countries and need for more comprehensive and empathetic approaches in climate-adaptation policies. They note the increasing convergence of climate change and displacement in Eastern Africa necessitates urgent and focused attention from policy makers, researchers and international organizations. Indeed, our cover features a digital artwork by Ugandan artist, Philip Kairu, entitled 'Bidi Bidi', that aims to draw attention to the precarious environmental and social conditions facing refugees and asylum seekers encamped in rural refugee settlements.

Intersectionality is therefore at the heart of our book, as is attention to lived experience and plural ontologies and epistemologies. As Muindi reminds us in his chapter, this calls for not just the recognition and naming of injustice,

but proceeds to (and leads) remedy … the emerging field of intersectional climate justice has much to learn from Maathai: that climate action must have politics, freedom, feminism at its heart; it must be grounded and historical and situated; it must be holistic, grounded in collaborative activism, rights, planetary consciousness … [and] embrace epistemologies and experiential indigenous knowledge and systems.

Climate Justice in Action is a celebration and showcasing of inclusive action, from the scale of grassroots communities to the mobilizing of collective and regional movements and legislative precedents. Krishnan, Wambui and Lohan's chapter highlights how women-led organizations and grassroots movements are leading responses to overlapping and multiple conflict- and climate-related challenges in South Sudan, while Ronoh's chapter highlights what we can learn from how Kenyan and Ugandan grassroots movements mobilize intangible resources, building local coalitions as networks of resistance to advocate for climate justice through various means such as media campaigns, protests and litigation within unique political and historical contexts. At the same time, our authors highlight the importance of climate action addressing key ongoing and interrelated issues including sexual and reproductive health, displacement and food security.

Focusing on climate justice in action in Eastern Africa compels us to ensure that our climate thinking is neither siloed nor relegated to the sole dominion of Minority World 'experts'. Our book instead is a call to ground approaches to climate justice within broader counter colonial justice work, embracing, among others, women's advocacy, Indigenous rights, antipoverty and corruption, education, sustainable livelihoods, loss and damage, and so on. It is a weaving together of multiple actions to tackle systemic change while maintaining a commitment to the collective values of Ubuntu.

Our chapters

Wambua Muindi's chapter launches our book with a discussion on intersectional climate justice as both an action and a process, drawn from the discursive context of the life writing of Wangari Maathai. Drawing on her autobiography *Unbowed* (2006), Muindi examines how Maathai successfully mapped out with temporal and spatial sensibility ideas of intersectionality, climate justice and environmental politics as they relate to nuances of femininity, freedom and political forces in African womanhood, focusing on how this triumvirate negotiates climate crises with particular attention to Kenya and Eastern Africa. The chapter suggests that in literature, specifically women's life writings, of those in and around the climate space, and as personified in *Unbowed*, offer critical lessons to climate action approaches.

Sheila Ronoh's chapter empirically examines how environmental and climate movements in Kenya and Uganda have harnessed resources and

leveraged both local and international alliances over time to pursue justice. Using Ubuntu philosophy to frame her analysis, her chapter explores how environmental and climate activists use public awareness campaigns and formation of local coalitions to resist environmental and climate injustices in both countries. She discusses how international coalitions have supported local movements in their pursuit of justice, the importance of African values in the international campaigning space, and the power of local organizing and the importance of African cultural perspectives in shaping more meaningful and inclusive climate action worldwide.

In her poem 'Voice of the Heavens and the Bowels', Arinda Daphine summons those in charge and calls out ministries, individuals, companies, organizations and agencies charged with roles and duties related to the extractives industry. Written for performance, this poem borrows from *Ekyevugo*, an indigenous performative poetry among the Bantu tribes in Uganda. She blends innuendo, intimacy and politics in this searing indictment of how mineral wealth discovery so often translates into dire risks to lives and communities.

Robert Birungi's chapter argues for prioritizing the cultural authenticity, attachment and knowledge of Indigenous communities in climate action. He asks, how do we historically link African identity with ecological balance? How are pre-colonial African traditional practices relevant to the prevailing 21st-century environmental challenges? He explores how the marginalized Indigenous Banyoro community of Bunyoro has utilized local knowledge systems that encompass cultural norms, clan systems, values and belief systems traceable to the precolonial era, to respond to and resist the adverse climate-change risks posed by the recent oil and gas discovery in the area. These cultural resistance measures embedded within the clan system are crucial, he argues, to the fight against climate change in Bunyoro, as the community is obliged culturally to abide by the customary rules to protect the sanctity and sacredness of nature.

Eileen Jahn's chapter examines Beth Koigi's invention *Majik Water*: a breakthrough technology that addresses water scarcity by harvesting potable water from the air. Using advanced air-to-water technology, the system operates by capturing humidity from the air and using advanced condensation techniques to produce clean drinking water, making it particularly valuable for off-grid communities, where water sources, such as groundwater or piped water from elsewhere, are scarce or unreliable. Addressing the profound social, economic and political implications of water scarcity in Eastern Africa, her chapter critically examines innovative technological solutions, the colonial roots and contemporary forms of resource exploitation, and the importance of simultaneously addressing systemic challenges, including governance, infrastructure and the equitable and inclusive distribution of resources.

In his chapter, Zimbabwean journalist Lungelo Ndhlovu introduces the climate leadership of Mother's Haven, an LGBTQIA+ grassroots organization in rural Zimbabwe. In conversation with its founder, he explores how climate-related crises are disproportionately impacting sexual and gender diverse mothers, who are experiencing increased social exclusion and discrimination against LGBTQIA+ people. The chapter examines how Mother's Haven is advocating for the well-being of lesbian, bisexual and transgender (LBT) mothers and their children, combining workshops on leadership, self-awareness, sensitizing LBT mother's families, alongside agricultural adaptation including cultivation of sweet potatoes, sugar beans, and tomatoes to assist them in adjusting to the economic impacts of climate change.

In her chapter, Josepha Wessels explores the perspectives of young Sudanese environmental activists and graffiti artists on a sustainable future to provide a broader outlook on the ongoing changes on a political and social level. She asks how revolutionary Sudanese artists and environmentalists can work together to develop visions for a sustainable Sudan. Using participatory methods, her study documented Sudanese revolutionary street art, and conducted ethnographic fieldwork and interviews in 2022, bringing together Sudanese graffiti artists and environmentalists for a workshop on sustainable future visions for Sudan. The chapter focuses on transformative anthropological interventions in the ongoing ontological turn from anthropocentric extractivism to life-sustaining and more-than-human perspectives for a sustainable future. It describes a cocreative methodology that brings to the surface grassroots perspectives on human–environment relations and sustainable futures to better understand how these perspectives help to the undoing of simplistic apocalyptic or utopian narratives.

Starting with a focus on a recent photoessay, Antonio Kalyango and Neil J.W. Crawford's chapter considers the critical importance of urban trees for both ecological and social benefits. Trees provide shade, improve air quality, reduce stress and contribute to biodiversity. In rapidly urbanizing cities in Uganda, like Masaka, however, these green spaces are often sacrificed for development. Activists and civil society groups like Masaka-based Biodiversity Conservation Foundation have fought to preserve historic trees and advocate for sustainable urban planning. Their efforts highlight the need for a balanced approach to urban growth, one that incorporates green spaces to mitigate climate change and enhance the liveability of cities.

In their chapter, Sneha Krishnan, Philomena Wambui and Nitesh Lohan offer an intersectional analysis of humanitarian and government climate-change adaptation policies and disaster-response interventions in South Sudan, with a focus on women's empowerment. They highlight the country's humanitarian landscape, which has been shaped by historical and contextual challenges such as protracted civil wars, severe environmental

crises, and gender-based violence. Using empirical evidence from key informant interviews and focus group discussions, their chapter investigates adaptive strategies and policy responses by local, national and international actors. They examine the roles of women-led organizations and grassroots movements in promoting resilience and transformative change in the face of overlapping crises, emphasizing the critical importance of gender-sensitive and intersectional approaches.

In their chapter, Douglas Nyathi, Samukeliso Khumalo, Keith Phiri, Joram Ndlovu and Munyaradzi Dzvimbo examine the nexus between climate change and sexual and reproductive health and rights (SRHR) in rural Zimbabwe. They explore how climate crises exacerbate gender inequalities and undermine women's SRHR in humanitarian settings, investigating how multiple and intersecting social, economic, political, and cultural factors and backgrounds aggravate women's discrimination and vulnerability to health and climate change. They highlight how current levels of climate finance directed towards meeting the needs of women and girls impacted by climate change are extremely low and insufficient. There is a need, they argue, for governments and other stakeholders to support and empower women's resilience and adaptation to climate impacts through political and financial support for SRHR services, family planning and education to ensure that families and communities can respond better to climate impacts, build resilience and ensure gender and climate justice.

Antje Daniel explores how youth activists frame the climate crisis. She asks, Who are the young people engaged in the climate justice movement? What motives drive activists, given the fact that the climate crisis in Uganda is not only a natural crisis, but also linked to social conflicts and injustices? How do activists frame the climate crisis in relation to youth, gender, or global inequality? She argues that the framing of youth climate activism is important to comprehend the relevant climate conflicts and their political negotiation by young people in Uganda. She explores how Vanessa Nakate and Hilda Flavia Nakabuye frame the climate crisis from an intersectional lens. She argues that activists perceive youth, gender and their situated experience in Uganda as overlapping dimensions of inequality, which shape their understanding of climate crisis and therewith their activism. Of particular importance to the chapter is how youth acknowledge that climate crisis is embedded in global dynamics of climate inequality, which are partly framed as 'climate colonialism'.

Gomes, Reilly, Murray, Sinnott and Sadlier's chapter examines the impact of the Sustainable Accountability Uniting Tanzanian and Irish Youth (hereafter SAUTI-Youth) project in Tanga (Tanzania). Focusing on the voice of young people participating in SAUTI-Youth, they examine the nuanced relationship between youth participation, climate action and local government decision making, exploring the project's impact on young

lives through the lens of climate change, climate crisis and sustainability actions. From a research design perspective, their chapter demonstrates the importance of youth-centered methodologies whereby young people become active participants in addressing climate change, moving beyond capacities as mere environmental guardians to encompass a broader role as agents of change in society. Through community initiatives like Citizen Voice and Action (CVA), the SAUTI-Youth programme enables young people to influence policy decisions and advocate for environmental sustainability.

Margaret Wagana's chapter takes an interdisciplinary approach of law, social sciences and anthropology, to centre climate and environmental justice in order to address the needs of refugee children. She interrogates the interconnection between displacement, environmental and climate injustice, and food (in)security. Focusing on the Young African Leaders Initiative – Green Refugees Community Project, her chapter explores the challenges and successes experienced by refugee children in western Uganda. She investigates how these factors impact the well-being of refugee children and examines the role of nongovernmental organizations and external partners, as well as constitutional and judiciary responses, to addressing these challenges through climate action.

Jana Kaufmann and Sonja Fransen's chapter examines the inclusion of displaced populations in climate-change-related laws and policies across 11 Eastern African countries by analyzing 55 legal and policy documents sourced from the Climate Change Laws of the World (CCLW) Database. Displaced populations are often located in climate 'hot spots' – areas highly vulnerable to environmental risks – yet they are largely underrepresented in national climate adaptation strategies. Using a combination of frequency and frame analysis, their chapter finds that displaced populations are primarily mentioned in documents from Somalia, South Sudan and Uganda, often framed negatively as burdens or threats. Positive frames, such as those advocating for inclusion and humanitarian support, are less frequent. Their chapter underscores the need for more comprehensive inclusion of displaced populations in national climate-adaptation policies, particularly in the context of increasing climate risks and displacement trends in the region.

Dalia Malek reflects on migrants from Somalia to Ethiopia, examining the multiple overlapping factors that can drive migration in Eastern Africa, a characterization of migration that contrasts with the standards of international refugee law where persecution is ordinarily considered the sole motivator. She demonstrates how under international refugee law, migrants in Eastern Africa who seek international protection from the harms of climate change across borders must fulfil a 'legal ideal' where their displacement is also attributed to persecution in conjunction with climate change. Achieving this standard should be considered beneficial for some, but its exclusionary rigidity contradicts the calls for flexibility and

resourcefulness that are necessary and practical for addressing climate-change displacement. Although the African regional system does not necessarily offer a straightforward or comprehensive answer to these calls, its hallmark flexibility, she argues, can facilitate innovation. The legal tools it provides, alongside other regional efforts, can help circumvent the restrictiveness of international refugee law when applied to the climate-change context. She examines the unique acknowledgements of climate-change displacement in the subregional IGAD Transhumance and Free Movement Agreements, as well as considering tools including the African Charter on Human and Peoples' Rights and its potential for strategic litigation before the African Commission and African Court, as well as the regional 1969 Organisation of African Unity Convention Governing the Specific Aspects of Refugee Problems in Africa (1969 OAU Convention) and its expanded refugee definition.

The final chapter of the book reflects on key learnings from our nearly 39 contributors, a majority of whom are based in Africa. Drawing on the wealth of practical and grounded examples, we highlight the importance of intersectional climate actions that not only seek to curb environmental catastrophe triggered by erratic weather, heatwaves, floods and droughts in one of the most climate vulnerable regions in the world, but focus on transforming the inequalities that drive present and historical social and economic injustices. We centre the direct voices of climate leaders on the frontline of the movement for intersectional climate justice to underscore not just how climate change compounds existing inequalities, but the urgent need for intersectional, inclusive actions led by local researchers, activists, practitioners and movements, that focus on the root causes of inequality and injustice, and the interconnections between multiple forms of marginalization and oppression. In doing so, this final chapter, and the book more generally, shift our gaze beyond vulnerabilities, to action and response, celebrating local diversity and highlighting myriad creative pathways to activism and adaptation.

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1

'Why Were We Robbing Ourselves of a Future?': Intersectional Climate Justice in Wangari Maathai's *Unbowed*

Wambua Muindi

Introduction

Eastern Africa is at the centre of the ecological crisis currently facing the world. Increasingly, among others, floods, prolonged droughts, famine and mudslides are a common feature of the extremes of climate change. For those among us interested in literature and working in the knowledge industries, one wonders then, what can we learn from the region's social imaginaries about climate change, action and justice? What tales, stories and histories do people in Eastern Africa have to tell about this ecological catastrophe?

Among the most poignant stories in terms of critical attention, lived experience, real work in the climate space and international recognition, is that of Wangari Maathai (1940–2011). A pioneer environmental activist, she won the Nobel Peace Prize in 2004, was the Congo Basin Forest Ecosystem Goodwill Ambassador (the world's second lung), and has Africa Environment Day (3 March) named in her honour: Wangari Maathai Day. *Unbowed* (2008) is her autobiography, which besides memorializing her life, used her engagement in climate activism as a standpoint to illustrate how (East) African imaginaries think through planetary relationality and habitability. Interestingly, 2024 marks two decades since Maathai was feted by the Norwegian Nobel Committee, which prized her 'for her contribution to sustainable development, democracy and peace'. This in and of itself was a recognition, of international scale, of an individual whose lifetime

contributions to improving the human condition existed at intersections of gender, politics and the environment.

Unbowed is not alone in problematizing intersectionality and climate justice in the African literature canon. Other feminist texts with rich ecocritical perspectives range from Imbolo Mbue's climate fiction *How Beautiful We Were* (2021), to Leila Aboulela's historical fiction *River Spirit* (2023), and Yvonne Owuor's historical *The Dragonfly Sea* (2019) whose transoceanic perspectives of the Indian Ocean world are profound to say the least.

However, this chapter takes life writing as an entry point to demonstrate how social imaginaries primed by lived experiences have the potential to not only participate in climate knowledge production but also complicate climate action and justice futures. It argues that the African autobiography is marked by ideological intellection with stances drawn from African epistemologies and thought patterns to complicate the genre and that this refracts itself to prime the genre with multiple readings of the 'life story'. This way, from an interdisciplinary praxis, they can be read to understand the shadow and weight of history punctuated by the story of an individual who embodies a philosophical ideal rooted in a particular time and place. Contextually, reading Maathai's *Unbowed* for ideas on intersectional climate justice opens new vistas for appreciating climate-change discourse in Eastern Africa.

Whereas this paper takes intersectionality as rooted in Kimberle Crenshaw's (1989) thinking, it examines it within the discursive context of literature climate justice and action. The chapter's working definition is ideated towards the conceptualization of intersectionality as a method that 'unveils how climate change exacerbates pre-existing injustices and how society's most vulnerable are structurally hit the hardest by climate change' (De Jong, 2023). This way, the literature's focus on culture and its forms enables an understanding of cultural texts applicable to practise-based research in the intersection of climate action and justice. For instance, Maathai's life, vision and work have been read as 'registers of freedom' working to show how within her ecocritical perspectives is a preoccupation with the fate of women in the world (Musila, 2020). The chapter adds to this intervention by Musila to the extent that it instead performs a reading of her autobiography with an intersectional eye.

In operationalizing the method, the chapter follows the theorization that in climate studies 'an intersectional approach, developed within critical feminist theory, is advantageous' (Kaijser and Kronsell, 2013). Life stories, then, assume the capacity to be read as embodying the lived reality of the climate crisis and structural inequalities of climate change and efforts to curb environmental challenges. This way, from an interdisciplinary sensibility, the chapter supposes that by mining the ecological turn in literature, ecocritical perspectives and drawing on conceptual and genre-specific methodologies like self-fashioning in life writing, the genre can

help bolster the climate agenda as a matter of agency. I equally take a cue from Elizabeth Mukutu et al's (2018: 19) argument about ecocriticism alone being unable to make sense of Maathai's autobiography: 'reading through the lens of ecocriticism is ultimately inadequate in understanding the form that Maathai's *Unbowed* as an autobiographical writing takes. Maathai's writing enables us to make connections with racism, sexism, classism, colonialism and even speciesism, man is not alone in this planet and must coexist'. This supposition then has this study apply intersectionality as a method to read her autobiography.

Particularly, reading Maathai's *Unbowed* and exploring the suggestion that intersectionality has the potency to be used in 'spatio-temporal settings that are removed from its moment and place of inception' (Sircar, 2021: 903), the autobiography could yield insights on intersectionality and climate justice in Eastern Africa since it infuses historiography in its narrative with the real-life story of Maathai and her activism that has charted intersectionality discourses in Africa, and Eastern Africa specifically, from issues of and on social disasters, movements, justice, and legislation among others and their relation to climate justice.

Born in 1940, Maathai came of age in the just independent era of Kenya. This period of transition from colonial rule to self-rule shaped a young Maathai's worldview. Her reality was a multifaceted one: independence as a young adult, with a young family, the onset of a President Moi dictatorship that would last 24 years, civil rights movement in the 1980s and 1990s, her involvement in active politics to challenge the dictatorship and join the immediate postdictatorship government. Her life intersected with social, political, economic, cultural and environmental changes. All these changes impacted her work as climate change happens amidst other changes in society with different dynamics and tensions. This is where and how *Unbowed* becomes critical since it interfaces all this to recast her lifelong commitment to mitigating climate change and its effects. Hence the chapter's intersectional reading of her autobiography as performative of climate justice and knowledge, having published it after the Nobel accolade. In so doing, I hope to go beyond a focus on climate action that would traditionally focus on mitigation action, adaptation action or loss and damage, to articulate the interconnectedness with politics and building agency to challenge systems, and agitate against human rights abuses.

The chapter will therefore reflect upon the question of intersectionality and climate justice through the triumvirate of femininity, freedom and politics. For Maathai, where femininity is encapsulated by the feminist epistemic position, the idea of freedom is reflected in the idea of governance and power politics relate to the dynamics of power as informed by the intrinsic idiosyncrasies of political regimes and their ideology, if any, towards climate change, action and justice.

Femininity

Maathai's *Unbowed* is an autobiography about a luminary woman who dedicated her life and made it her mission to agitate for the climate agenda specifically, and women's rights, generally. Canonically, it falls under African life writing and the subgenre of women's life writing and it inevitably assumes a feminist fashion looking to insert female agency into the life story and literary history of a woman of many firsts: the first African woman to win the Nobel Peace Prize (2004), the first woman professor in East and Central Africa, and the first female biology PhD in Kenya. The autobiography is an exegesis of an examined life worth living.

Her experiential authority in the climate space as a woman of colour is reflected through the autobiography. Written 2 years after the accolade of the Nobel Prize, *Unbowed* is an act of memory that fashions Maathai as a woman who, to quote Fanon (2005), rose out of obscurity to fulfil her mission. In fact, in the autobiography, the idea of self-fashioning in life writing assumes a new function beyond the mere situated experience of cultural imagination but primed by the reality of the international recognition that came with the Nobel Prize. To this end, it is arguable that *Unbowed* performs her identity within the whole climate-justice movement in which she was a pioneer in Eastern Africa.

Wangari Maathai's autobiography, I argue, contextualizes notions of planetary habitability from a feminist-epistemic position. From this standpoint, *Unbowed* makes the case for engendering climate action. Reading Maathai, one gets the sense that the place and space for women in climate justice, politics and activism is the centre. Arguably, this ideation led to the founding of initiatives like the Green Belt Movement (GBM). Thematically, central to the autobiography is the place of women in climate space and society. This animates the recollection of her marriage, her nominal tinkering from Mathai to Maathai, her entry into politics, the discrimination faced as a female academic, the mothers of political detainees, and the protest at Freedom Corner in Uhuru Park.

This way, Maathai does not only argue for the place of women but also problematizes and domesticates feminist discourse. If the urban woman faces discrimination of her gender and in the workplace, the rural woman is also discriminated against in the rural area albeit differently. What is the bottom line? There is gender inequality, which she ties to human causes and, which, according to her, complicates the fight for the planet. On receiving the scholarship to go to America, she writes 'It was quite astonishing news, especially in my village, where girls' education was still not fully appreciated' (Maathai, 2008: 89). However, she is optimistic and this hope is tied to the idea of freedom. Critically, she marries the hope by showing how compound the climate-change agenda is and calls for adapting climate causes to broad sociopolitical geographies.

In this and related ways, Maathai's point is that climate justice and action interventions ought to be gender responsive. Whether trickle-down or bottom-up initiatives, women ought to be involved for they are a critical component of society. This way, she was not only challenging patriarchy in Kenya but was also making the point for a worldview that includes women not as an affirmative act but because they matter.

For the GBM, Maathai sought to empower women through tree planting (Maathai, 2011: 14). These were rural women folk who bore the brunt of a changing environment since they were the people mainly active in the farms. The initiative sought to not only improve green cover but also supplement the subsistence farming the women engaged in. The tree planting would open up Maathai's eyes to the power of women even in the face of adversity. The women groups were able to monetize their venture and make the most out of their agroforestry practice. Maathai observes 'Not surprisingly, the women were incredibly resourceful' (Maathai, 2008: 153). By planting trees and being part of a community of networked women groups, the initiative took a new form and broadened its approach to include training and seminars on broader social-political realities. Maathai characterizes this turn as sowing seeds of change: 'Gradually, the Green Belt Movement grew from a tree-planting program into one that planted ideas as well' (Maathai, 2008: 190).

The idea of freedom

The evolution of the GBM from a purely tree-planting organization to a socially engaged organization is perhaps the hallmark of intersectionality that defines Maathai's life story. For her, the idea of freedom is interlaced with cross-cutting and situated gender issues, combining the political, social, economic and environmental with women as social and environmental agents (and leaders). In her own words, her approach 'evolved into the "civic and environmental education" seminars that became part and parcel of the Green Belt Movement's work … we also looked at issues of democracy, human rights, gender, and power' (Maathai, 2008: 192). Through her environmental initiatives, she was able to understand that her gender meant she would be discriminated against and that government inaction and lack of support as shown by some government officials was tied to the idea of freedom.

The starting point she writes about is the basic appreciation of culture. Right from birth, among the Gikuyu community to which she was born, Maathai demonstrates how one is engaged with the environment: 'When a baby joined the community, a beautiful and practical ritual followed that introduced the infant to the land of the ancestors and conserved a world of plenty and good that came from that soil' (Maathai, 2008: 15). The relationship continues through her growing up and childhood adventures: 'Chania River, walking on a footbridge for the first time. The river roared and frothed as

it tumbled headlong downstream. Dense vegetation overhung the river and the air was thick and damp' (Maathai, 2008: 68). This vivid imagery and description speak to a past that is just that, a past. It is remarkable that in 2023 there were media reports in Kenya that the river was only a shadow of its former self and almost dried up. Reading this part of a young Maathai's life and the reality of this river drying up illustrates how climate change is a reality.

The proximity to the environment is a guiding trope of the autobiography, reflecting the local knowledge and belief systems, which shape her formative stages and sustained her worldview. It is this lived and experiential knowledge that Wangari Maathai grew up with that informs her approach to the environment and in the autobiography is personified by the chapter aptly titled 'Foresters Without Diplomas'. The chapter, laced with humour, ridicules the bureaucratic labyrinths that she alludes to, which led to government inaction. A government official was perturbed by Maathai's agency to teach rural women obsessing over modern agrarian science: 'The foresters didn't understand why I was trying to teach rural women how to plant trees. "You need a professional", they told me. "You need people with diplomas to plant trees." But, I learned, professionals can make simple things complicated' (Maathai, 2008: 152). This attitude prevented the foresters from cooperating with the women and Maathai who were engaged in tree planting despite being a part of a government agency with a mandate to help.

In so doing, Maathai curves space for Indigenous knowledge with African ways of knowing privileged as opposed to privileging modernity epistemologies, which she offers a critique of. She notes 'Education, if it means anything, should not take people away from the land, but instill in them even more respect for it, because educated people are in a position to understand what is being lost' (Maathai, 2008: 154). Maathai sustains this critique in her exposition of the ideological intellection of the GBM that used intersectional feminist approaches to conservation. Founded in 1977, it distinguished and continues to show how grassroots initiatives are key parts of climate action, especially in tackling global deforestation. Through this initiative to plant trees, Wangari Maathai sought to help achieve what is now being touted as improving green forest cover. Her visionary leadership to this end was rightly quoted by Kenyan President William Ruto, who launched a nationwide initiative dubbed the '*Jaza Miti Initiative*', seeking to plant 15 billion trees by 2032. She writes that in coming up with the initiative, Maathai was guided by a simple question: 'Why were we robbing ourselves of a future?' (Maathai, 2008: 190).

This way, the movement sought to include the cultural variable to ensure sustainable development: 'We integrated the question of culture into our seminars and eventually wondered whether culture was a missing link in Africa's development' (Maathai, 2008: 192). This decolonial vision that

sought to centre African ecologies, philosophy and thought patterns gave impetus to the movement since it meant that the engaged rural women folk could pursue, among others, economic freedom by being able to subsidize their family's income and they were not tied down to patriarchy.

Such a vision is encapsulated in Grace Musila's (2019) theorization of Maathai's work as forging 'registers of freedom'. This means that for Maathai, everything – be it climate change, democracy, gender and power issues – all starts with the idea of freedom and its implied contexts in climate-change discourses. To this end, fighting for the planet means forging ahead from being free or beholden to any interests save for those interested in sustainable development, and human rights for all through fairness, equality and democratic progress. In other words, we are only free if our governments are free of corruption, inequality is not distressing and the environment is free from pollution and ecological collapse. For instance, just as Hathaway read inequality as 'a root cause of global environmental damage' (Hathaway, 2019: 13), with freedom this root can be dealt a blow. Hence, for those committed to championing sustainability and climate justice, freedom should be the shield and defender.

Maathai is alive to colonial extractive histories. She recollects as follows: 'The missionaries were followed by traders and administrators who introduced new methods of exploiting our rich natural resources: logging, clear-cutting native forests, establishing plantations of imported trees, hunting wildlife, and undertaking expansive commercial agriculture' (Maathai, 2008: 18). Her standpoint on environmental justice is this nuanced; it takes on the colonial legacy of resource extraction from which she highlights the repercussions. The narrative assumes shared knowledge with a keen reader who appreciates the effect of the colonial enterprise in British East Africa. Perhaps, in a Marxist leaning she adds:

> Everything that represented the local culture was enthusiastically replaced: Millet gave way to maize, and millet porridge, then the most common Kikuyu drink, was displaced in favor of tea. As the crops changed, so did the tools used for agriculture and cooking: Corrugated iron pots replaced earthen ones, plates and cups replaced calabashes, spoons replaced fingers and sticks. Clothes of animal skin were put aside in favor of cotton dresses for women and shirts, shorts, and trousers for men. (Maathai, 2008: 23)

Her reflections on what was as she grew up set the pace for the narrative that at best reflects a certain versatility in planetary consciousness and at worst planetary relationality. The extractive nature of the empire is appealed to enact ecological injustice that sought to replace subsistence farming for instance with cash crop cultivation, of course, to service the empire.

To Maathai, development needs not be at the expense of the planet. It is imperative that humans not think of progress as isolated from the rest of other life forms. She proposes a 'holistic approach to development that dealt with problems on the ground but also examined and addressed their individual and systemic causes' (Maathai, 2008: 276). This care and empathy is a trope that informed much of her activism; she cared for green spaces, women's rights and development all as related aspects. This relational, situated and historical nuance advances the emerging field of intersectional climate justice (Mikulewicz et al, 2023: 1275), emphasizing not just the recognition and naming of injustice but proceeds to (and leads) remedy. Current climate interventions ought to endeavour to not be isolationist and, in so doing, will encourage a holistic approach as Wangari Maathai envisioned.

This is how Maathai was able to champion for change primarily but also for other just causes. Her posthumous impact on young climate activists in Africa and beyond is demonstrable through, for instance, Vanessa Nakate from Uganda and Elizabeth Wathuti from Kenya. Elizabeth, for instance, runs the Green Generation Initiative whose activities are akin to the GBM with a focus on schools. They continue to show how climate thinking is not to be viewed in isolation, rather it is tied to women's advocacy as a social category who are impacted disproportionately but who also are faced with other challenges.

With the support of the wider GBM, media support and opposition politics, Maathai was able to pioneer efforts to protect public green spaces in urban Nairobi. The examples of Uhuru Park and Karura Forest stand out. The first, a natural public park next to the Central Business District in Nairobi with a history of being marked for grabbing by the political elite and infamously for the construction of a political party's headquarters, and the latter a 1041 hectares unplanned forest gazetted in 1932, respectively. This has continued to influence how successive governments, national and county, approach urban development in Nairobi especially. Through this, she was able to demonstrate how environmental spaces can or are synonymous with acts of civil disobedience.

Moreover, Maathai appreciated the ideals of freedom as they related to activism and political agitation, linking all this with the important work of climate action and justice with politics, justice, freedom and livelihoods, hence having an intersectional panoramic view of climate change. This she acknowledges by writing 'I was acting in the spirit of Uhuru, or freedom' (Maathai, 2008: 211). The motivation was to make a difference following the idea of freedom, which in the just postcolonial era was primed by an Africanist sense, and arguably Ubuntu as her activism demonstrated. Her activities went beyond Kenya, she writes 'This is why I agreed to become a goodwill ambassador for an initiative aimed at protecting the world's second "lung", the Congo Basin Forest Ecosystem' (Maathai, 2008: 316).

Maathai's politics

Maathai was politically engaged. Not only did she serve as a Member of Parliament for Tetu constituency, Nyeri County (2002–07), was once married to a politician, who she divorced, but also was appointed a Deputy Minister of the Environment from 2003 to 2007. Her entry into politics was faced with opposition but out of sheer grit she took this in her stride: 'I was intrigued by this apparent opposition to my candidacy, which I knew was due in part to my ethnicity, in part to my education, and was again partly due to my marital status' (Maathai, 2008: 174). The complicated equation was partly due to her gender, ethnicity and education, which animate African womanhood, which she personified. The trio marked her entry and her survival in the politics of Kenya, which at the time were under the dictatorial Moi regime.

Her life demonstrated political agency and its capacity to influence or arm twist the powers that be. Two instances demonstrate this best. First, she supported the mothers of political detainees who were protesting the illegal detention of their sons on trumped-up charges. The very space that was Uhuru Park next to Nyayo House, a symbol of state violence, defined what now Freedom Corner is. Her politics are reflected when she writes, 'The mothers' nonviolent protest became a focus, in Kenya and in other countries, for those wanting to end state-sponsored torture, random imprisonment, and the unjust suppression of the rights and voices of the people' (Maathai, 2008: 244). She indulged in political causes, which sought a better Kenya. Second, she indulged in drama politics to stage protests in the fight for Uhuru Park and Karura Forest as well. For the latter, realizing that 'The government was taking public land in Karura Forest to the north of Nairobi and giving it to its political allies for executive offices and private houses' (Maathai, 2008: 282), she put up a spirited fight that saved the forest amidst a motivated forest grab by the then regime. She adopted various strategies to circumvent the government's attempts to have their aides steal public land. Ultimately, she was successful due to her activist dramaturgy.

Her political engagement put her in direct confrontation with the dictatorial Moi regime. This was critical in two ways. First, in an urbanist sense, it would help create what are now emblems of Black-resistance geographies and simultaneously remaining public green spaces in Nairobi that are Uhuru Park and Karura Forest. For both, Maathai demonstrated courage and conviction in literally putting her body on the line to defend herself. Second, this put to the public memory the important work in environmental justice she was engaged in, besides of course making her popular given the media coverage she would get. These acts of public resistance and defiance characterized her brand of activism that in Fanonian thinking called for legitimate violence against the state.

For Maathai, agitating for climate action is an all-hands-on-deck process. Just as Tobin et al (2023: 555) write that 'climate change governance systems comprise a wide variety of actors', to Maathai any action taken to combat climate change in its very nature requires a broad approach. Considerations range from the individual, social, political and economic since each actor has vested interests, which means consensus. This way, action is ideated towards efficiency and efficacy. However, where the political parties come in, dramatizing the inaction and lack of political will on the leadership, Maathai observes 'Party manifestos, once written and presented to the registrar of parties, make good reading for students of political science' (Maathai, 2008: 279). She calls to action by this reference to environmental justice activists to ensure that they lobby for action by reminding responsibility bearers of their political process. Maathai suggests even through her activism the importance of political accountability. For instance, she alludes to her husband's attitude to the voters as he did not care and he would willingly disregard them until the next elections to denote political change. She is against such political cultures since they are decrepit and only serve to harm the people and the environment.

Her strand of indicting political agency equally was staged in her Nobel Prize acceptance speech. The lecture performed her rhetorical ability to walk the talk as she relied on orality to underscore her intersectional feminist approach. Recognized for her intersectional approach to ensuring world peace, her Nobel lecture epitomized her intersectional politics:

> Tree planting became a natural choice to address some of the initial basic needs identified by women. Also, tree planting is simple, attainable and guarantees quick successful results within a reasonable amount of time. These are all important to sustain interest and commitment. So together we planted over 30 million trees that provide fuel, food, shelter and income to support the children, educational and household needs. (GBM YouTube, 2015)

Maathai was big on collectivizing our approaches to climate action (Medrado et al, 2022: 15). To her, in as much as it was important to agitate for change, it was a collective and communal approach that was going to achieve maximum effort. To her, then, collaborative efforts were the way to go: 'Green Belt Movement was not only an environmental, women's, and human rights movement, but also part of the broader movement for democracy' (Maathai, 2008: 200). Collaboration also meant tying justice causes to the climate cause. This is the planetary consciousness of Maathai that all happening on the planet had an aspect of relationality that compounded climate action. Towards the conclusion of the autobiography she remarks 'Every day, I'm reminded that what we become depends on what we make of our

relationships' (Maathai, 2008: 323). This is the philosophy that undergirded Maathai's environmental activism.

Maathai at best demonstrated innovativeness and adaptation of sustainable climate action. In many speeches she made, and in the autobiography, she relates a tale of the hummingbird she first heard from Professor Suji in Japan. The story is about a fire that broke out in a forest and after all animals left only a resilient hummingbird attempted to put out the fire. Through this analogy of the hummingbird, whose small yet unrelenting efforts are what we can do, and brick by brick build a climate-justice movement just as the bird is trying to put out the fire in its little way. For Maathai, '...this is what we are called to do, no matter who or where we are, or what our capabilities. We are called to do the best we can!' (Maathai, 2008: 324). The sense to start small just as the hummingbird tale speaks to both individual environmental responsibility and ultimately collective efforts.

Collective effort is further reflected in the autobiography through the collectivizing approaches the Maathai's GBM took with groups like the National Council of Women of Kenya, and local and international collaborative efforts with government and nongovernmental organizations. Climate-justice activists need to embrace solidarity and build cross-cultural dialogues across academia, social groups, think tanks, and policy groups if policy making is to be influenced.

Ultimately, the autobiography exemplifies the importance of archiving thoughts and voices for the earth for posterity. It alludes to the idea of staying the course 'unbowed' as in the tree metaphor and the hummingbird tale. She does this in full acknowledgement of the reality of the disheartening fact that 'Working for justice and freedom is often a lonely and dispiriting business' (Maathai, 2008: 268). This reflective thought that ushers the conclusion of the autobiography supposes an encouraging tone to all those involved in climate justice. To quote Maathai 'If we really carry the burden, we are driven to action. We cannot tire or give up' (Maathai, 2008: 316).

Conclusion

My intersectional reading of *Unbowed*, a reflection on a life past, which was invested in both climate action and climate justice, shows that the emerging field of intersectional climate justice has much to learn from Maathai: that climate action must have politics, freedom, feminism at its heart; it must be grounded and historical and situated; it must be holistic, grounded in collaborative activism, rights, planetary consciousness. Further, the chapter's reading of autobiography has privileged the imperative to decoloniality, whose keen awareness seeks to embrace epistemologies and experiential indigenous knowledge and systems.

This chapter has examined how at the intersection of climate discourse(s) and climate justice the discipline of the literature can be instructive in adding a layer of nuance by reflecting upon the power of the story and narrative in climate justice and action. Through a reading of Wangari Maathai's *Unbowed*, I have repositioned her writing besides her privileged activism, fame and popular image in public memory to argue for her autobiography as an African cultural inscription centering Eastern African ecology in a time of ecological collapse. Moreover, within the intersectional discourse, *Unbowed* helps with ideas on sustainability and climate knowledge, indigenous or otherwise. While the autobiography adapts her interests in climate as intertwined with her politics, life journey and the later recognition of such attempts to combat climate change, for intersectional studies, her autobiography reads as a manifesto for action, hence positioning itself as a whetstone to any form of activist action especially in Eastern Africa, which in many ways shares similarities not only in culture but politics too.

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2

Ubuntu and African Social Movements: Local and International Coalitions for Environmental and Climate Justice in Kenya and Uganda

Sheila Ronoh

Introduction

Active environmental and climate movements have emerged in both Kenya and Uganda over many years in response to the increasingly felt impacts of extractivism, environmental degradation and climate change. In both of these countries, one key causal factor – changes in land-use patterns – can be traced back to the colonial era. During this period, the introduction of extractivist commercial farming led to the displacement of Indigenous communities from their land and the communal spaces they once shared and nurtured (Hetherington, 1993). This was the beginning of a new era of 'modernization', where, scholars have argued, individualism overrode the sense of community or the African concept of *Ubuntu* (Chibvongodze, 2016). Ubuntu, a philosophy, as well as practices and values, which characterized African communities over many centuries, embodies the communal cultural values of tolerance, respect and humanity. This also includes respect for the environment. Sacred values were, for example, attributed to natural resources, such as forests, which meant that people treated them with reverence as a shared heritage and collectively conserved them (Mwipikeni, 2018; Nyagwalla Otieno et al, 2023). The Ubuntu philosophy also emphasizes social justice, contrasting with the neoliberal model that prioritizes

profit-driven exploitation, benefiting the wealthy while undermining the ecological balance and marginalizing communities (Kotz, 2002).

In the postcolonial era, Eastern Africa has continued to witness large-scale development projects, which often threaten local ecosystems and further marginalize communities that reside there (Comaroff and Comaroff, 2001). These dynamics have inspired growing movements for environmental and climate justice, as activists expose the injustices of such projects, including displacement, pollution and pauperization of communities living close to affected sites (Neimark, 2023). However, the prevailing research on social movements, largely shaped by European and North American contexts, often falls short in capturing the unique dimensions of African struggles (Williams, 2023). Engels and Müller (2019) argue that this theoretical limitation becomes problematic when the majority of world understandings of social movements often focused on political protests are implicitly universalized (Engels and Müller, 2019).

Over the years, environmental and climate activists in Kenya and Uganda have harnessed resources and leveraged both local and international alliances to pursue justice. They have, for example, predominantly used public-awareness campaigns and formation of coalitions to pursue justice. Protests have emerged in some instances to complement these strategies. Much of the social-movement theories have, however, derived their understanding from analyzing protests and other confrontational tactics employed by activists (Engels and Müller, 2019). Bayat (2013) challenges these traditional theoretical approaches to social movements by arguing that confrontational activism, and similar forms of organized political protests are not the only methods activists use to achieve social change. Using the concept of 'quiet encroachment', he argues that scholars can learn from other forms of resistance that are taking place in the global south contexts, where grassroots movements, or 'non-movements' as he frames them, are challenging power structures and pushing for transformations through quieter and more subtle means (Bayat, 2013).

This chapter draws on qualitative research and uses scholarly articles and grey literature about the movements taken as case studies. It is informed by original data in the form of interviews and focus group discussions with East African youth activists conducted as part of doctoral research between 2023 and 2024. The study involved 40 climate activists from Kenya (16 female and 24 male) and 22 from Uganda (11 female and 11 male), all aged between 18 and 35, aligning with the youth definition in both countries. Activists were from various regions within each country. Interviews were conducted in person across Nairobi, Kilifi, Kajiado, Nakuru and Narok counties in Kenya, while additional recorded interviews were conducted via Zoom where in-person interviews were not possible. Furthermore, focus group discussions were held in person with indigenous youth climate

activist groups in Nairobi and Narok counties, and with grassroots youth climate activists in Kilifi County. An online focus group discussion, which was recorded, was also conducted with youth activists from Uganda, primarily members of the Uganda Youth Climate Cafe network. Some of the youth who participated in the focus group discussions were also invited to complete an online survey, sharing their reflections on certain aspects of their activism, including their political environment, resources, and external interventions, all of which impact the outcomes of their work. A total of 13 responses were received, with seven from Kenya and six from Uganda. The project is part of my PhD research on youth engagements for climate and sustainability within the East African context.

First, I highlight the political context surrounding the environmental and climate movements in Kenya and Uganda, using the Ubuntu philosophy as a framework that informs my analysis. Second, I illustrate how activists use local coalition networks to resist environmental and climate injustices in both countries. Finally, I discuss how international coalitions have supported local movements in their pursuit of justice, the importance of African values in the international campaigning space and the need for such partnerships to be effectively structured moving forward. Insights from this research will contribute to the broader discourse on social movements by highlighting the power of local organizing and the importance of African cultural perspectives in shaping more meaningful and inclusive climate action worldwide.

Contextual background of environmental and climate activism in Kenya and Uganda

Kenya and Uganda attained Independence during the same timeframe (Uganda in 1962 and Kenya in 1963). However, the political transitions and developments in these countries have not been similar. It is worth noting that the unique political and historical developments of both Kenya and Uganda have influenced how the environmental and climate movements have evolved. Kenya began with the consolidation of a one-party state, under the leadership of Presidents Jomo Kenyatta and Daniel Arap Moi. In 1966, Jaramogi Oginga Odinga formed the first opposition party: the Kenya People Union. Three years later, it was banned due its association with the 1969 heckling of President Kenyatta during a state visit to Kisumu. After Kenyatta's death in 1978, Moi continued with the practice of silencing opposition. However in 1991, Kenya transitioned into a multiparty state following demands for political pluralism, both internally and externally (Nyadera et al, 2020). Since then, Kenya has held seven presidential elections in 1992, 1997, 2002, 2007, 2012, 2017 and 2022. President Moi retained his seat following the very first two presidential elections in 1992 and 1997, however the next elections witnessed changes in political leadership;

President Mwai Kibaki (2002–12), President Uhuru Kenyatta (2012–22) and President William Ruto (since 2023). In Uganda, Milton Obote was its first president until 1971 when he was ousted through a military coup staged by Idi Amin. Idi Amin reigned until 1979 but was forced to flee the country following a successful military intervention with the support of the neighbouring state of Tanzania. Following Amin's downfall, Milton Obote resumed power in 1980, he was however overthrown again through a guerrilla warfare staged by Yoweri Museveni in 1986. Although Uganda transitioned into a multiparty state in 2005, the leadership of President Museveni has not changed in subsequent elections and political opposition is still not tolerated within the country (Abrahamsen and Bareebe, 2016). As outlined above, both Kenya and Uganda began with an authoritarian rule that spanned several decades immediately after Independence.

Oloka-Onyango (1990) observes that this act of adopting a highly militarized approach by these states in the years after Independence had roots in the colonial era, which was marred with violence. The process of establishing a centralized system of government clashed not only with the political structures of the Indigenous communities but also with their cultural and social norms. To suppress any opposition to their rule and to maintain control, the colonial masters largely utilized military force. A key feature of colonial rule in Kenya and Uganda was the transformation of land use from subsistence to commercial farming (Nelson, 2003). They thus introduced cash crops, such as tea and coffee, which would be exported to international markets, with the local communities exploited for their labour (Njau, 2014). This feature of an economically-driven agriculture remained a constant feature of Kenya and Uganda's economic and political landscape even after Independence, which over the years has negatively affected the environment and the climate and played a significant role in the emergence of environmental activism in this region. This is further compounded by economies centred on climate-sensitive sectors that include agriculture, tourism and energy sectors, which are crucial to food security and employment for its population (Parry et al, 2012).

In recent years, unreliable weather patterns have been constant in Kenya and Uganda. Long periods of drought and increased flooding have been associated to climate change. In 2018, the United Nations International Panel on Climate Change (IPCC) issued a special report stating that 12 years remain to take significant action to limit global warming to 1.5°C. Against the backdrop of extreme weather events worldwide (Sorce, 2022), youth climate activists are campaigning for transformative changes in political systems (Hyde, 2023). They are holding current economic, social and environmental policies accountable for worsening the climate crisis (O'Brien et al, 2018). This is also the case in Kenya and Uganda, where youth are engaging in the global fight against climate change (Rowling, 2022). In

recent years, with plans to further extract fossil fuels, such as oil in the East African region, youth activists are calling for multinational corporations like TotalEnergies to cease resource exploitation. They focus specifically on East Africa's oil and mining sectors, as these activities are known to worsen the impacts of climate change as well as cause environmental degradation in the local contexts (Cassegård and Thörn, 2018).

East African youth have been actively engaged in campaigns, such as those against the ongoing Uganda and Tanzania East Africa Crude Oil Pipeline (EACOP) project (Energy Voice, 2023). Speaking of the EACOP project, which is a 1,445 km crude oil pipeline set to transverse the corridors of Uganda and Tanzania, Prisca Kajumba, a climate activist from Uganda, points out the deception and injustices surrounding the infrastructure: We only see the pain that this project has brought and it will only get worse. People have lost their homes while private companies like Total get to benefit at the expense of our future. The government is not supportive either. They tell the people that this pipeline will give us money and those against it do not want us to develop. The problem is some people believe them, which is a big challenge we are dealing with as climate activists. We need to get the community to support us (Interview, 13 May 2024).

Ugandan youth are voicing their everyday struggles caused by projects, such as EACOP, and linking them to the broader struggle against climate change (Vetter, 2022). Joackim Mumbere, a Ugandan climate activist, has also witnessed many people lose their homes and livelihoods as a result of the project. He says:

> We protest to demand the government to release reports on the EACOP project so that the community is aware of the risks they are facing. The expansion of fossil fuels at a time when we can see severe effects of climate change on the environment is unacceptable. For me this fight is personal. Actually, I come from Kasese District which has been affected and has experienced so much flooding in recent years. I cannot imagine how this will be in the next years. (Interview, 30 May 2024)

As well as challenging fossil fuel projects damaging their local communities, Kenyan and Ugandan youth are also joining global calls for Minority World nations, who are the largest carbon emitters (Jabareen, 2023), to contribute to the loss and damages fund, helping the Minority World adapt to and manage the climate crisis (Cassegård and Thörn, 2018). However, Erick Njuguna, a Kenyan climate activist, points out the further injustice of their lack of voice in international forums, media and research. He argues that while Africa suffers disproportionately from the polluting activities and climate inaction of Western nations, the stories of African environmental activists

are often drowned out by activists from the global north (Nwaubani, 2022). This gap has been corroborated by research on youth climate activism, with scholars pointing out the need to expand on scholarship to include African experiences in the fight for climate justice (Neas et al, 2022). This chapter thus examines how mobilization for environmental and climate justice has developed in Eastern Africa in recent years, and turns next to explore the importance of networks of resistance.

Local coalitions as networks for resistance

In Kenya and Uganda, activists are using public-awareness campaigns to advance environmental and climate justice. Here, people are seen as critical resources needed to drive and sustain the movement (Edwards et al, 2018). While not typically viewed as confrontational in social-movement scholarship (Engels and Müller, 2019), this is a critical mobilization strategy, which lays the groundwork for more direct forms of resistance, including coalition building for protests or litigation (Bayat, 2013). Using examples from these countries, I illustrate that the environmental movements that have taken place have significantly benefited from this kind of human capital network to drive their objectives. This approach of networking and leveraging various forms of support to address issues for the common good shows the relational nature of humanity and the benefits of collective action (Chibvongodze, 2016). It also connects with African values inherent in the philosophy of Ubuntu of communality and collective stewardship.

In Kenya, environmental mobilization accelerated in the late 1970s with public-awareness campaigns, leveraging human and institutional resources to sustain campaigns. Under the leadership of the Nobel Peace Prize Laureate Professor Wangari Maathai, the movement mainly used reforestation campaigns and educational workshops between 1977 and 1988 to engage rural women in central Kenya. While focussed on environmental goals, it also addressed intersecting injustices faced by women in patriarchal Kenyan society and the proactive role that women can play in driving change and democratization (Shattuck, 2022). During this period, the movement remained largely nonconfrontational and gained support from the government to fund some of its initiatives, such as conducting educational workshops and implementing sustainable projects, such as beekeeping and agroforestry (Michaelson, 1994).

In the mid-1980s, environmental activism became more confrontational in a more challenging political environment of the one-party state. At the same time, with the political transition, since 1989 Kenya has witnessed new mobilization strategies, particularly coalition building, to confront environmental injustices like the privatization of public land. This year is significant, as Kenya was still a single-party state and on the verge of the

transition to a multiparty system, which took place in 1991 (Ogot and Ochieng, 1995). I use mobilization around two cases – the protection of Uhuru Park and then Karura Forest – to show how the formation of coalitions for environmental resistance relies on favourable political opportunities as social-movement theories purport (Piazza and Genovese, 2016).

Democratization in Kenya, which in part resulted from active democracy and environmental campaigns, occurred against a backdrop of particularly dynamic efforts to protect the environment and green spaces in the Kenyan capital, including the Green Belt Movement (GBM) in Kenya. Founded by Wangari Maathai in 1977, the movement initially focused on empowering women in rural Kenya through tree planting and sustainable development but by the 1980s, it had evolved into a powerful force for political and social activism, challenging government policies that fuelled deforestation and human rights abuses (Muhonja, 2023). In 1989, 2 years before the transition to multiparty politics, the government planned to develop a 60-story business complex in Uhuru Park, a public greenspace in the heart of Nairobi. Wangari Maathai, conducted solo protests in Uhuru Park to challenge these plans. This was after organizations like the Kenya Times Media Trust and Kenya Environmental NGOs hesitated to join her cause due to the politically restrictive environment at the time. Her efforts led to a public outcry and garnered international attention, which ultimately forced the government to abandon the project (Florence, 2014).

Following Kenya's transition to a multiparty state in 1991, the GBM was also involved in a second campaign around Karura forests, a public greenspace in Nairobi. Between 1994 and 1997, the government allocated parts of the forest to private companies. Once again, GBM conducted public campaigns in Nairobi, organized workshops to educate local communities about the impact on the forest loss on their livelihoods and mobilized university students, civil society groups and religious organizations, including the National Council of Churches of Kenya, to protest the deforestation. This time, in a more open democratic space and despite repression, Maathai's persistent efforts to mobilize a coalition of organizations to support protests and pursue litigation against the government were successful. These organizations identified themselves as 'Friends of Karura Forest' and used various strategies, such as community engagement, reforestation activities in the forest, signing of petitions, protests, media campaigns and litigation. Eventually, the government retracted its plans in 1999 (Njeru, 2012). The Ubuntu philosophies of communal responsibility and cooperation are evident in this struggle for social justice, with the positive outcome underscoring the power of collective action for the common good, which ultimately led to the protection of Karura Forest.

In subsequent years in Kenya, environmental and climate activists have used similar approaches to push for transformations, such as was the case in the

Save Lamu campaigns. The movement emerged to challenge environmental degradation arising from the construction of the Lamu Port-South Sudan-Ethiopia Transport (LAPSSET) project in 2012. This project aims to enhance trade and transport links between Kenya, South Sudan and Ethiopia through an oil pipeline from South Sudan to the Lamu port, alongside highway and railway connections. As part of this development, a coal power plant was also proposed to be constructed. Concerned about the environmental implication of this project, the Save Lamu coalition, comprising 40 community-based organizations united to promote awareness in the community, staged demonstrations in both the Lamu area and Nairobi – where Parliament is located – and to send petitions to the companies planning to fund these projects (Ayhan and Jacob, 2022). They also explored legal avenues to pursue justice with support from the Centre of Environmental Justice and Development. Although the project is still ongoing, the coal power plant opposed by activists for its climate impact was abandoned, thanks to their mobilization and litigation efforts (Fallon and Moreau, 2016).

In Uganda, the Advocates Coalition for Development and Environment (ACODE) was one of the first environmental advocacy groups, and was formed in 1999 in response to the government's action of degazetting Namanve Forest Reserve in 1997 (Mwesigwa and Muetsasira, 2021). Degazetting public land refers to the process of revoking its official designation and may include opening it up for private development or transferring its ownership to private entities. Although 500 hectares of this public forest reserve located in Uganda's Mukono district were allocated to individuals and companies by the government in 1997, this action went unopposed and took effect (Van Leeuwen et al, 2014). In 2002, there were further attempts by the government to degazette Butamira Forest Reserve in Uganda's Njinja district by issuing a development permit to Kakira Sugar factory. This time, ACODE opposed the plans by using memoranda circulated in print form and through electronic media to raise awareness and to challenge the plans by petitioning parliament. Their efforts failed as the ruling National Resistance Movement approved the degazettement, resulting in the clearing of the forests within months to make way for a sugarcane plantation. ACODE took the matter to the High Court, which ruled that the government had contravened the law. However, the government ignored the ruling and proceeded with its plans (Van Leeuwen et al, 2014).

Learning from this failed litigation strategy, which did not prevail in Uganda's restrictive political regime, still a one-party state until 2005, later movements for the environment developed sophisticated approaches that leveraged on the power of networks for resource mobilization and diversification. The Save Mabira Forest campaigns, which began in 2007, can be used to illustrate this development. Mabira Forest, located in Uganda's Buikwe district, was threatened by plans to allocate approximately 7,100

hectares of the forest for development to the Sugar Corporation of Uganda Limited. This forest is crucial for the ecosystems of both Lake Victoria and the River Nile (Hönig, 2014). In this campaign, civil society united and shared responsibilities to maximize their impact. Organizations like the Uganda Network on Law and Ethics took legal action against the government and the developer (Nampewo, 2013). Environmental Alert, a Ugandan environmental NGO, published a critical report evaluating the investment project, revealing that the costs incurred by the government nearly doubled the forest's value. This report was featured in *New Vision*, a government-run newspaper, significantly expanding its reach across the country (Child, 2009). NGOs like the Ugandan Anti-Corruption Coalition and Greenwatch also urged the public to boycott products from Lugazi Sugar (Twesigye, 2008). Eventually, after intense campaigns, which took place between April and October 2007, Uganda's parliament suspended the project. The Save Mabira coalition had effectively mobilized public resistance through media campaigns, rallies and a boycott of the developer's products, which were effective strategies of environmental activism in Uganda. The unity of purpose and the collective action of the activists speak to the values of Ubuntu and further demonstrates how the strength of united voices can protect the environment for the common good (Mwipikeni, 2018).

Since 2021, university students in Uganda have united to campaign against the EACOP. They have established various campaign groups, including Students Against EACOP, STOP EACOP Uganda, and Justice Movement Uganda, to express their concerns about the project. Through solidarity networks of support, they also seek to reduce the risk of co-optation by the government or polluting companies. Prisca Kajumba, a climate activist from Uganda, asserts that collaborating in coalitions is the most effective strategy to combat this project. Highlighting their resilience in a repressive political climate, she states, 'In my country, coalitions are very hard to bring down' (Interview, 13 May 2024).

This pipeline, which will be the world's longest at 1,443 kilometres, will transport crude oil from Hoima in Uganda to the port of Tanga in Tanzania (Heede, 2022). The development of this project contradicts global efforts to limit climate change and reduce carbon emissions. It also has significant impacts on communities and local ecosystems across Uganda and Tanzania. The students have been conducting community outreach to rally support from local communities and involve them in demonstrations against the project (Mugabi, 2023). They have also submitted petitions to both Parliament and the companies involved, urging them to withdraw from the initiative, though these efforts have largely been unsuccessful. Additionally, they have participated in protests outside Parliament and at the local branches of companies involved like Total and the Daqing Company, demanding they abandon the project. In the course of these protests, many of the participants

have been either arrested or harassed by the police (Willard, 2024). These students expressed concern about sustaining the movement due to a lack of financial resources. In an interview in June 2024, Abdul Aziiz, one of the climate activists involved in this initiative, speaks of how a lack of finances can expose them to exploitation from the polluting companies: 'These companies look at us and see jobless youths. They bribe us by offering us good jobs, however we formed several student organisations to prevent the entire movement from being swallowed up because some of the activists have been enticed by these offers and have given up the fight' (Interview, 1 June 2024).

As in all the coalitions I highlight – Save Lamu, Save Mabira and Stop EACOP – activists in Kenya and Uganda have also leveraged digital activism to raise awareness, and sought partnerships with international media outlets, climate justice NGOs and global climate movements. In the next section, I examine the potential impacts of these coalitions on environmental and climate movements in Kenya and Uganda.

Globalizing resistance through regional and international coalitions

Environmental and climate campaigns in Kenya and Uganda are increasingly collaborating beyond geographical boundaries. I assessed the impact of regional and international coalitions such as can be seen in Save Lamu, Save Mabira and in the ongoing stop EACOP campaigns on environmental and climate justice in Kenya and Uganda. As I demonstrate, these regional and international collaborations have played a key role in strengthening activist movements in Kenya and Uganda by providing them with financial resources, legal and technical expertise. These partnerships have also helped in elevating the awareness scale of local issues by staging them on global audiences (Keck and Sikkink, 1998). While these interventions often seem beneficial, they can also create challenges, such as overreliance on international support by these movements, which may not only be unsustainable but it could also undermine their independence.

In Kenya's Save Lamu campaigns against the LAPSSET oil pipeline and coal mine project, the movement worked with Natural Justice, a South African organization focused on supporting African communities in securing social and environmental justice (Ogolla, 2016). Natural Justice actively adhere to the African values of Ubuntu in their work to support environmental campaigns across Africa. They aim to support 'the collective rights of people and protect the sacred relationships that indigenous peoples and local communities have with nature'. As well as acknowledging the interconnections of humans and nature, they prioritize the 'values, knowledge and self-determination of the communities with whom they work'. Through this collaboration and using participatory action research and focus group discussions, 47 different

communities, including Indigenous groups, such as the Bajun, Aweer, Sanye, Orma, and Swahili fishermen and farmers, were empowered to voice their opposition (Mohamed and Hadija, 2016). This partnership with Natural Justice gave the communities an African, international platform to articulate their concerns using the Biocultural Community Protocol in 2010, a tool that helped local communities clearly document their concerns regarding the project. Their support also empowered participants to hold the government accountable by demanding an Environmental Impact Assessment: a crucial legal document that had been overlooked. In campaigns against the coal-fired power plant, Save Lamu campaigns also worked closely with international organizations. Accountability Counsel, alongside Natural Justice, provided crucial legal and technical assistance, while UNESCO, Greenpeace International, and Heinrich Böll raised the issue on the international stage, ensuring it received global attention. These international alliances provided much-needed legal, financial and technical resources, which were instrumental in supporting Save Lamu campaign efforts (Kilaka, 2024). Due to the impact of these efforts, the Kenya's National Environment Tribunal revoked the license of the Chinese company Amu in 2019, which was leading the development of coal plant projects (Mahajan, 2023).

In Uganda, the Save Mabira campaigns can be used to illustrate how international coalitions can drive short-term successes but often fail to provide sustained support for local environmental movements (Twesigye, 2008). In April 2007, the Ugandan government proposed to degazette portions of Mabira Forest for sugarcane cultivation, sparking widespread public outcry. The Save Mabira coalition garnered international support from Greenpeace and Friends of the Earth, who elevated the issue globally through reports and press statements. International media coverage from platforms, such as the BBC and Al Jazeera, also documented the campaign. By the end of 2007, the government halted the project in response to the intense protest campaigns (Child, 2009). However, as international attention waned, threats to the forest resurfaced, with new proposals from the government to proceed with the project in August 2011. Again, the international community stepped in. The Forest Governance Learning Group for instance, known for its research-based advocacy for improved forest governance, joined the movement, lending credibility to the campaign. The UK affiliate of the International Institute for Environment and Development (IIED) also helped secure media coverage from outlets like the BBC and Voice of America. Once again, in October 2011, the government put the project on hold due to public pressure, though its position remains ambiguous (Hönig, 2014). The recurring threats to Mabira Forest highlight the short-lived nature of international campaigns. While global attention in both 2007 and 2011 brought temporary victories, the deeper systemic issues – government exploitation of natural resources for profit – remained unresolved. As international focus faded, local activists

were left to confront these ongoing challenges with limited support. This campaign demonstrates that although international solidarity often rallies around the crisis, it often fails to maintain the sustained pressure needed to challenge the very systems driving environmental destruction, leaving local movements to repeatedly fight the same battles.

The stop EACOP movement of Uganda has also attracted both regional and international collaborations and solidarity campaigns from youth movements. As elsewhere globally, African climate activists have highlighted that projects, such as EACOP, are incompatible with global efforts to limit global warming and to reduce carbon emissions (Jabareen, 2023) and against the scientifically backed understanding that fossil fuel companies account for 71 per cent of global greenhouse gas emissions (Grasso and Vladimirova, 2020). During the Africa Climate Summit that took place in Kenya in 2023, youth climate activists took to the street to voice their concerns against the EACOP project and its impacts on the climate and their futures (Ferris, 2023). The summit brought together youth from various African countries who advocated for climate finance, calling on developed nations to commit funds that help Global South countries adapt effectively to the climate crisis (Lees, 2021).

This solidarity in fighting global challenges and the fossil fuel industry's dominance, reflects, in the words of African activists involved, the spirit of Ubuntu, reminding us that we are all connected and that we must come together to protect our environment (Mabovula, 2011). As Joakim, an activist, reported

> Climate issues are global, not just local, and it is everyone's responsibility to work towards a better world. Being an environmental activist doesn't mean I have to be personally affected to take action. If someone in Britain is suffering from climate change, it's my responsibility to fight for them as well. (Interview, 18 September 2024)

International faith-based networks have been instrumental in advancing climate justice across Eastern Africa by leading awareness campaigns and mobilizing communities to demand stronger climate leadership (Tsega, 2016). In Kenya, they have mobilized youth to participate in solidarity strikes for climate justice and oppose the EACOP project in Uganda and Tanzania. This is igniting a wave of transnational activism within the region that demonstrates how the fight for climate justice transcends national borders, as youth unite in the spirit of Ubuntu against exploitation and for the well-being of our planet (Chibvongodze, 2016). Their choice of Kenya is strategic, as the country permits greater freedom for organizing public demonstrations, reducing risks for youth activists (Tripp, 2004). In 2022, GreenFaith International, for example, supported students from various Kenyan universities in a solidarity strike against the EACOP project as well

Figure 2.1: Young climate activists holding their campaign placards at Planet One Ubunifu Hub in Nairobi, Kenya, 30 July 2024

Source: Photograph by Sheila Ronoh

as the broader expansion of fossil fuel extraction. They also demanded the release of Ugandan students who were arrested while campaigning against the EACOP project and called for African leaders to prioritize renewable energy investments (GreenFaith, 2023). Similarly, in May 2024, Catholic Laudato Si' Movement also collaborated with Kenyan youth climate activists to raise awareness about the EACOP project (Laudato Si' Movement, 2024). By supporting these protests, these faith-based networks not only address immediate concerns regarding fossil fuel extraction but also empower young activists to confront systemic injustices, such as political repression and the criminalization of climate activism. Their support has also been assessed positively by climate activists from the region, who have commended the partnership in addressing a global climate crisis:

> We want partnerships. And we want to move together. We want it to be an intergenerational action fighting against a big crisis in our world. I see our world as a system works like the human body, where everything is interconnected. Just as the brain, organs, and nervous system depend on one another, the fight for climate justice requires all parts of society—governments, activists, communities, and international partners—working together. If one system fails it affects everything else. The climate crisis, like a failing body, needs all systems to function in harmony and all actively working towards a shared and liveable planet for many generations to come. (Japheth Orieny, Interview, 14 May 2024)

Internationally, the EACOP movement has also attracted the participation of international environmental organizations, such as Darwin Climax

Coalitions, Sea Shepherd France, Wild Legal, and Stop EACOP. These organizations took legal action against TotalEnergies, accusing the company of 'climaticide' for its plans to drill new oil wells in Uganda. In October 2023, Extinction Rebellion also joined the fight by staging a protest at the offices of insurers in the City of London. They demanded that these companies stop supporting the EACOP project and other harmful projects. Within just 3 months of the legal action, 28 insurance and reinsurance companies announced they would no longer be involved in the EACOP project (Willard, 2024). In this case, we can see once again how global climate activism and international solidarity can serve as a form of resource mobilization that local actors can leverage to influence corporations and financiers who might otherwise be difficult to reach.

International organizations such as Greenpeace International (as can be seen in Figure 2.1) have therefore played an important role in supporting environmental and climate movements in Kenya and Uganda through resources, expertise, and global visibility. The shared values of Ubuntu as embodied by the South African network around Natural Justice also underpin the successes so far. However, it is important to acknowledge that Eastern African activists are aware of the challenges that such international networks present. In my research, activists often emphasized the need for balanced and fair partnerships that can empower local communities to drive these movements, ensuring they represent their own concerns in the fight for environmental justice and develop pathways that lead to the systemic changes they desire. Japheth Orieny, a climate activist with experience volunteering for various international environmental organizations in Kenya, highlights the pervasive issues of exploitation and unequal partnerships within these groups:

> You are volunteers, they tell you, and you are doing it for fulfilment. You are taking care of mother earth. However, for them, they are earning a salary. They get allowances. They get vacations paid by the organization. It is a challenge for us volunteers to get even 1000 Kenyan shillings, which is less than $10 for communication support, to buy data or to pay for Wi-Fi. You have to fight tooth and nail to just get the 1000 Kenyan shillings from them until you come to a point where you tell them, I find it hypocritical for you guys to call out our leaders of hypocrisy yet you are hypocritical. (Interview, 14 May 2024)

These activists also challenge the role of 'Western' media, which plays a key part in amplifying the work of African climate activists but often engages in selective representation, reinforcing power imbalances in gatekeeping practices that determine whose voice gets heard and what forms of African youth-led activism is seen in the global space. This form of selective visibility diminishes the scope of the movement, as it fails to recognize and elevate the

efforts of countless others who are working just as tirelessly for climate justice as explained by Rose Kobusinge, a Ugandan climate activist from Uganda:

> You find that the West has most of the power, and the Western media holds much of that power. They may just decide who to spotlight and who not to, and they do this selectively. This has affected many activists because there are so many who doing amazing work, but if outlets like the BBC or *The Times* decide to feature someone, they typically choose one or two people they prefer, instead of giving space to others and showcasing their work as well. (Interview, 6 May 2024)

Conclusion

This chapter has used Kenya and Uganda as case studies to provide a nuanced understanding of how environmental and climate social movements strategically leverage local and international coalitions to acquire and mobilize essential organizational and financial resources. I have demonstrated how these activists primarily use local coalitions as networks of resistance to advocate for climate justice through various means, such as media campaigns, protests and litigation, and how these strategies have been adapted to suit their unique political contexts. We can learn from such specificities of African movements and intangible resources they increasingly mobilize. Important local coalition networks include the Save Lamu campaigns in Kenya, Save Mabira and the stop EACOP movements in Uganda, which tackle deforestation and fossil fuel expansion through the lens of climate justice. These examples demonstrate that within the Eastern African context, movements employ diverse strategies to advocate for justice. This can enrich the scholarship on African social movements, and wider social-movement studies, by exploring movements that do not always rely on confrontational approaches, such as political protests, to drive transformation (Bayat, 2013; Engels and Müller, 2019).

I have further highlighted the critical role of international coalitions in advancing local efforts for environmental and climate justice within the Eastern African region. The involvement of international actors has broadened the scope of local campaigns and provided crucial financial and technical support. However, African activists argue that we need to critically examine these partnerships to ensure that local communities are empowered to take the lead in the fight for environmental justice, where their concerns are prioritized in advocating for sustainable change. When reporting on youth climate activism in Africa, these activists also recommend that international media should broaden its coverage and collaborate with local media outlets to more accurately portray the diversity of actions being taken by youth climate activists across the continent. Equally important, is the recognition of the principles embodied in African campaigns, such

as Ubuntu and the interconnections of humans and nature, as highlighted by the work of South African organization Natural Justice in supporting East African campaigns. These networks, which draw on philosophies of the interconnected nature of humans, communities and environment, also influence, and have impact on international actors involved in global campaigns. This includes on their strategies to achieve lasting transformations to achieve climate and other forms of social justice globally.

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3

Voice of the Heavens and the Bowels

Arinda Daphine

This is the Citizens' Convention on Extractives;
to reflect, inform, share and account for the wealth
beneath our feet.
The Bowels of the earth are filled with gems and essentials
for digitalization
so we go digging and ploughing for what is already ours
as though it might deplete and we might meet defeat.

Let's talk!

What is the potential of Africa's Mineral Wealth?
Does it lie in the Gold reserves that Gadaffi spoke of?
In the oil of Nigeria?
The forests of the Congo?
If the potential is in Titanium, Marble and Diamonds,
why are we not among the richest like Dubai?

The Elders and Chiefs
Scholars, Philanthropists,
Women, Youth, and Artists;
have gathered to knock on heads,
awaken the ghosts of strategy and
summon the spirits of collective organizing.
They are here convening about Sustainable Continental
Development.

Let's talk!

Where does all the mineral wealth go?
Gold goes back to the earth.
Look into Egyptian Pyramids and you will find tons laying next to mummies of Pharaohs and Royalty.
The greed for what was given in abundance
is the most puzzling human behaviour the Gods have Encountered.

The Chinese know everything down to the number of sand granules in the Lwera
and everyday they collect their loot and everyday the Lwera floods.
When the earth pours forth liquid black gold (petroleum);
the scramble and partition for gallons knows no community nor corporate social responsibility.

The elders say this must Stop!
Senior Inspector of Mines,
you've got something that's mine:
value for money.
The extracts of the earth are quite expensive and yet those who find them,
sometimes with bare hands, are extra broke.

Keep your ears flattering like Elephants'.
Pick up the sound notes in my voice,
the music from my chakras.
I am a Word Goddess, Poetess,
voice of the heavens and the bowels,
and I bare with me scripts of divine inscriptions;
the sayings of our Ancestors, our Gods and Goddesses.

The Poet's Call: Energy, give me Energy
The audience response: Ehhhhh!
The Poet's call: Energy give me Energy
The audience response: Ehhhhh
The Poet's Call: Mwena Ngwe eeeeee
The audience response: Eeeeeeeeee

This is an Indaba
Ndaba ebibunner bya
Ministries of:
Gender, Labour and Social Development
Finance, Planning and Economic Development

Ndbaba ebibanner bya Makampuni:
TOTAL Energy
Uganda National Oil Company
(That's more visible than the oil around which it was incorporated).

What is the potential of Africa's Mineral wealth?
The richest man ever in History is a black man from Mali, Mansa Musa.
He had over four hundred BILLION dollars in gold.
If one man alone could have all that, how much gold is in Africa?
The Holy Books; the Bible and Quran narrate the legend of Queen Sheeba of Ethiopia
and the talents of Gold she gifted King Solomon worth 187 Million dollars

The potential of mineral wealth is so immense,
it's reflected in the lifestyles of the rich and famous in Africa: ancestors and contemporaries!
We all know Mobutu Sese Seko lived like a peacock;
flamboyant and luxurious.
He had twenty thousand tons of Marble at his Xanadu Palace.
To this day there is still plenty of mineral wealth in Africa!
Yet they assume that we only have thirty percent of the earth's mineral wealth!
It's just dark in some places
so every full moon they discover a new depository of diamonds, oils, sand, and Marble;
then corporate giants and government tentacles take over the wealth in our homelands
and riots against land dispossession begin.

The Poet's Call: Energy, give me Energy
The audience response: Ehhhhh!
The Poet's call: Energy give me Energy
The audience response: Ehhhhh
The Poet's Call: Mwena Ngwe eeeeee
The audience response: Eeeeeeeeee

The permanent secretary at Ministry of Energy and Mineral Development,
Community based Monitor at the Local District,
Officers of the East African Crude oil Pipeline,
this is REAL:

REVIVAL OF EAST AFRICAN LADIES
We need oil
As Maya Angelou proclaimed
We 'have oil wells pumping in our living rooms',
between our hills, in our Valleys:
Hoima and yonder
But….we are dry
They call us Nabukalu!

Did you extract the oils from our soils?
Did iron drills reach inside of Uganda?
Did the oils surge like El Nino?

Climate Action Network (ACODE),
Global Rights Alert,
Are you there?
I can't hear you!
Poets's call: Mwena Engweeee
Audience response: Ehhhhhhhh

Like Wangari Mathai we are called to be guardians of the planet
to replenish her wealth, to beautify and embellish her.
It is our divine duty to sustain the wealth of the earth for generations to come

Hear my Voice
A voice from up and below
The heavens and the Bowels
The great SPACE expanse
Hear the call to halt!

Stop for a second and reflect:
have your fingers ravaged a fragile part of the planet
have you shed the blood of others
have you destroyed the shades for the cows, Elephants and Lions?

Stop and reflect;
has your greed had the better half of you?

The poem

This poem was performed in Kampala, Uganda at the *6th Annual Citizen's Convention on Extractives* on 25 October 2023, under the theme 'Shaping

Mineral Wealth and the Energy Agenda'. I summon those in charge and call out ministries, individuals, companies, organizations and agencies charged with roles and duties related to the extractives industry.

The poem was written for performance and borrows from the Indigenous performativity poetry called Ekyevugo among the Bantu tribes in Uganda. Some intimacy undertones are used to speak about oil and the innuendos are meant to rally excitement as any performance should. Mother Earth no doubt is feminine and her hills and valleys bear abundant resources. Nabukalu is a name used to refer to a woman with insufficient natural lubrication. What a contradiction that Mother Earth should be dry even with all these oils. The dryness does not come from 'a lack of', rather from dishonest dealings/delays associated with companies charged with the extraction of oils and petroleum.

Chinese investors are notorious for unsustainably mining sand from the Lwera (Oluka, 2016). The Lwera is a swampy wetland that drains into Lake Victoria, Africa's largest freshwater body. It connects many lakes and rivers and this means it has an abundance of sand deposits particularly silica (white sand) that can be used to make glass (Muhoozi, 2023). Lwera sand is favoured among builders for its coarse texture that is said to perform better in brickwork mortar (Muhumuza, 2023). The wetland is also used for large-scale rice farming notably by Chinese investors. These activities cause flooding.

Small-scale artisanal miners account for 90 per cent of the gold mined in Uganda from districts like Buhweju, Amudat, Moroto, Busia, Namayingo, Kassanda and Kisoro (The Independent, 2024); 400,000 to 600,000 people work in the wider artisanal and small-scale mining sector, with approximately 31,600 involved in gold mining. Although artisanal miners extract 7,081 kgs of gold annually, they earn so little and are often without access to protective gear (National Environment Management Authority, 2019).

In Lake Katwe where salt is mined, male artisanal miners wear condoms all day and women use sanitary pads everyday as protective gear for their reproductive organs (Namara, 2024). Even though the Mining and Minerals Act 2022 mandates the minister of Energy, Mining and Mineral Development to prescribe measures to make artisanal miners' work safer, the law remains in limbo as far as implementation is concerned.

The cycle of mineral wealth discovery is as follows: initial excitement, then an influx of government and foreign bodies that often dispossess the settled communities in the area, those affected riot to demand compensation or simply refuse to vacate the land and consequently violence ensues. What should be a celebration of wealth becomes a dire risk to lives and communities.

Translations

Indaba is a South African word for a conference and one of the famous Indabas is that on Extractives.

Ndaba is a Luganda word for 'I see'.
Ebi means 'these'.
Bya is a possessive article to mean 'of'. *Ebi Banner bya* means 'these banners of…'.
Amakampuni means many companies.

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4

Cultural Resistance Against Environmental Destruction: Oil Extraction and the Banyoro in Uganda

Birungi Robert

Introduction

In June 2024, Stephen Kwikiriza of Uganda's Environment Governance Institute was found beaten as part of an 'alarming crackdown' on environmental activists (Johnson, 2024). This instance demonstrates how contentious oil extraction remains in Uganda. Nearly 20 years before, in 2006, oil and gas discoveries were made in the Albertine Graben region of Bunyoro, Western Uganda. The country has seen substantial success and considerable achievements in the growth of the sector, marked by an increase in discovered oil and gas resources from 300 million barrels in 2006 to 6.5 billion barrels in 2014 (Ministry of Energy and Mineral Development, 2019; The Petroleum Authority of Uganda, 2023). This discovery in the Albertine Graben region has since attracted a number of debates. These include whether oil is a benefit or a resource curse (Lay and Minio-Paluello, 2010; Kiiza et al, 2011; Vokes, 2012), how this oil and gas discovery has enabled land dispossession and displacement through deeply affecting the meaning and content of land access, ownership and control, particularly for the Indigenous community in Bunyoro (Uganda Land Alliance, 2011; Muhereza, 2015; Nyanzi, 2015), how oil exploration and exploitation has affected biodiversity consequently paving way for land degradation (Wass and Musiime, 2013), and the special focus on oil governance (Lay and Minio-Paluello, 2010; Uganda Wildlife Society, 2012).

In the context of the environment and ecology, studies have placed focus on the environmental implications of the oil and gas discovery on the socioeconomic livelihoods of the Indigenous Banyoro ethnic community[1] (AFIEGO, 2020; Oxfam, 2020). These studies explore how the oil and gas discovery pose negative impacts on the environment, such as greenhouse gas emissions, loss of biodiversity, disruption of agricultural activities and oil spills. Others indicate that issues of contamination are on the increase, especially in the areas of Buliisa and Hoima, as land, pastures and water sources are increasingly becoming vulnerable to poorly disposed and managed wastes from oil drilling among which include drill and mud cuttings, solid and liquid wastes (International Alert, 2013; Wass and Musiime, 2013). The discoveries have also enabled huge land dispossessions and displacements; the December 2010 Balaalo evictions is a widely covered instance of peasant dispossession and eviction by the Ugandan state (Museveni, 2007; Muhereza, 2015).

However, the agency of the Indigenous Banyoro ethnic community in countering and resisting the adverse effects of the oil and gas discovery by employing Indigenous cultural knowledge systems that encompass cultural norms, clan systems, values and belief systems remains understudied. These cultural resistance measures embedded within the clan system are crucial to the fight against climate change in Bunyoro, as the community is obliged culturally to abide by the customary rules to protect the sanctity and sacredness of nature (Beattie, 1960; Doyle, 1998). This approach is in tandem with the Intergovernmental Panel on Climate Change in its fifth assessment report (IPCC, 2023), which advocated for the use and utilization of indigenous cultural knowledge and practices in climate-change adaptation. This chapter, therefore, explores how the marginalized community of Bunyoro has effectively utilized local knowledge systems traceable to the precolonial era, to respond to and resist the adverse climate-change risks posed by the recent oil and gas discovery in the area. The chapter takes a critical analysis of the clan system and its feasibility in resisting climate change. I argue that sustainable development should prioritize the cultural authenticity, attachment and knowledge of Indigenous communities and thus transcend the myopic view that treats the environment as a mere physical infrastructure. This inquiry is primarily guided by the following questions: how do we historically link African identity with ecological balance? How are precolonial African traditional practices relevant to the prevailing 21st-century environmental challenges?

The remainder of the chapter unfolds as follows. First, the chapter introduces the research location and methods employed in the study. Secondly, the chapter delves into the theoretical foundation and discussions that inform Indigenous knowledge systems as a form of cultural resistance, and as an adaptation to climate change. Thirdly, the chapter undertakes a critical analysis of the specific case of the oil and gas discovery in Uganda.

This section examines the negative environmental impacts this discovery and its attendant economic developments pose on the Indigenous Banyoro community and the flora and fauna in the area. Fourthly, the chapter concludes with the findings of the study that summarize the various efforts undertaken by the local community in the name of resisting and mitigating the impact of climate change being felt and observed in the area.

Location and methodology

The location under study is the Bunyoro region, which is in the mid-western region of Uganda. It is composed of eight administrative districts: Hoima, Kibaale, Masindi, Buliisa, Kiryandongo, Kakumiro, Kikuube and Kagadi (UBOS, 2024). The total area of the Bunyoro region occupies 7.7 per cent of the total area of Uganda. The population of the Bunyoro region as based on the estimations made by the 2024 Uganda National Population and Housing Census is 2,792,123 people. The districts of Hoima and Kikuube were purposively chosen out of the eight districts given that they are home to the headquarters of the Bunyoro Kitara Kingdom, home to the people who identify themselves as authentic Indigenous Banyoro, and home to the biggest oil fields. They are also home to the biggest urban centres of the Bunyoro region (most affected by rural–urban migration), home to the natural forests of the Bugoma, Budongo and Itohya Chimpanzee sanctuary, which have undergone extensive deforestation and ethnic tension. Finally, the two are part of those districts that will be utilized to provide land for the construction of the 1,443 km East African Crude Oil Pipeline (EACOP) that runs from the Lake Albert oil fields to Tanga in Tanzania.

The qualitative research was carried out between 2021 and 2023. Key informant interviews were conducted with 15 clan leaders in the Hoima Nyoro community. The clan leaders were selected due to their deep knowledge of clan systems, values, beliefs and customs. Additionally, their wide knowledge of the harmonious relationship between nature and humanity in precolonial Bunyoro, broad knowledge of the study's objectives and their influence on the people in the area was also considered. The interviews were conducted in the Runyoro-Rutooro language, audio recorded and then transcribed orthographically, reproducing all spoken words and sounds, including hesitations. Comments of significance were documented for future investigation. The data underwent transcription in Runyoro-Rutooro and subsequent translation into English prior to the analysis process. The study also consulted secondary sources of data among which included textbooks, archival data, newspapers, journal articles and documentary evidence from the Internet. The thematic analysis approach, which involves the process of identifying patterns or themes within the qualitative data (Braun and

Clarke, 2006) was employed to qualitatively analyze the generated data, with a specific emphasis on inclusion of verbatim quotes.

Cultural resistance

Cultural resistance generally entails the utilization of culture as a space to resist dominance, oppression and exploitation by a dominant force or power (Duncombe, 2007: 5). In such an instance, culture becomes a site of struggle and liberation from oppression, exploitation, subjugation and domination, as cultural values, beliefs and norms become worthy tools of resistance. It involves the application of territorial rights and ethnically mobilized resistance means, measures and mechanisms against the external use of environmental resources.

Within the context of environmental preservation and protection, Indigenous communities are often pushed to the periphery and marginalized by rapid social and economic developments. They turn to cultural resistance to preserve their cultures as well as their intricate relationship with nature. This kind of resistance that privileges the continuum between nature and culture has been evidenced among a wide range of communities such as the Ogoni community in Nigeria (Saro-Wiwa, 1995), Kayapo farmers in the Amazon (Hecht, 1990), and Indigenous farmers in Cochabamba, Bolivia (Perreault, 2008). It has also captured the attention of the UN Department of Economic and Social Affairs who has stated that:

> Indigenous peoples are stewards of the world's biodiversity and cultural diversity. Although they account for only around 5 percent of the world's population, they effectively manage an estimated 20–25 percent of the Earth's land surface. This land coincides with areas that hold 80 percent of the planet's biodiversity and about 40 percent of all terrestrial protected areas and ecologically intact landscapes. Indigenous peoples therefore play a key role in efforts to protect the planet and biodiversity. (United Nations Department of Economic Affairs, 2021)

Therefore, Indigenous knowledge is an important resource for climate-change adaptation (Pareck and Trivedi, 2011; Adger et al, 2014) as it solidifies this continuum (nature–human beings) in a capitalistic world whereby climate change is not merely environmental but something biocultural and largely arises from the commodification of nature

Cultural resistance as an adaptation to climate change

According to the IPCC (2022), adaptation is the process of adjusting to the actual or expected climate and its effects. Adaptation to climate change in

agriculture has become critical, particularly for agriculturally reliant people in the Majority World. Climate change has the potential to dramatically impair agricultural output without appropriate adaptation, which might have serious consequences for food security in poor countries (Nelson et al, 2009). There is significant literature on how communities respond to types of climate stresses, with an emphasis on how farmers can adapt to the uncertainties of a changing climate by changing their farm-management practices, such as changing their cultivation calendars, changing the variety of crops they grow, investing in irrigation, or growing drought-resistant crops. Farmers around the world have to make changes to their agricultural systems to adapt to a changing climatic backdrop. Climate-change adaptation in agriculture is widely characterized as the modification of agronomic practices, agricultural processes and capital expenditures in response to actual or anticipated climate-change concerns (Easterling et al, 2007). Agricultural adaptation differs in time (short-term vs long-term), scale (farm vs national) and kind. For example, Smit and Skinner (2002) divided farm-level adaptations into three categories: changes in farm-management practices, farm-level technical advancements and farm-level finance management for farm protection. Several adaptation techniques have been discovered based on these main categories. Changes in agricultural-management practise, for example, include crop diversification, shortening or lengthening of growing seasons, changing planting dates, changing land under cultivation, and increasing or decreasing irrigation use; technological developments may include using new crop varieties, adopting soil and water-conservation techniques, and adopting weather information and forecasts (Kurukulasuriya and Mendelsohn, 2006). Local contexts like social, cultural and political factors have an impact on the farmers' ability to adapt. Their quick judgments are based on seasonal climates.

In the African context, cultural resistance mechanisms against climate change are firmly anchored within Indigenous knowledge systems that are understood as 'a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment' (Berkes, 2012: 7). Traditional Indigenous knowledge systems are strategically employed by Indigenous communities to counter and resist huge industrial developments. Indigenous knowledge encapsulates a rich body of knowledge accumulated over time that can ably provide important insights into the development of adaptation and mitigation strategies to handle environmental changes (Gómez-Baggethun et al, 2013; Savo et al, 2016). These communities have an in-depth awareness of their local ecosystems and carry valuable insights into sustainable resource management, adaptation strategies and practices that foster resilience. Their experiences and viewpoints play a crucial role in the development of effective

climate policies and strategies that are contextually pertinent and inclusive. Indigenous communities that significantly depend on this knowledge and these practices to manage the challenges posed by extreme weather on their natural resource-based livelihoods are notable in Africa (Gyampon and Asante, 2011; Fabiyi and Oloukoi, 2013; Theodori, 2014).

Indigenous groups can ably mobilize Indigenous knowledge systems and their relationships to ecosystems as an avenue of countering economic development that threatens their survival and escalates the effects of climate change. The chapter demonstrates that the ongoing lethal outcomes to the environment arising out of the ongoing oil extraction disempowers and alienates the Indigenous community, undermines their livelihoods and productive capacities, and creates a condition of vulnerability and openings for resource agitation, resistance and activism. The chapter will now examine how this has occurred in Uganda.

Oil in Uganda

When the National Resistance Movement government under Yoweri Kaguta Museveni seized power in 1986, it began working with international oil companies to undertake extensive exploration around Lake Albert. Uganda's estimated petroleum reserve capacity is currently 6.5 billion barrels, of which 1.4 billion barrels are projected to be recoverable. Several developments have since taken shape among which include the construction of the Kabalega International Airport whose construction began in 2018 and was completed in 2024, the ongoing construction of an oil refinery at Kabaale in Buseruka subcounty in Hoima District (Magona and Angom, 2017) and the ongoing construction of newly tarmacked roads around the region (Agaba, 2017).

However, this oil discovery has directly led to unprecedented environmental destruction in the area (Ogwang et al, 2017; Mbabazi et al, 2020; Nuwagaba and Lukamba-Muhiya, 2021). This has further distorted and marginalized the symbiotic and harmonious relationship between the Bunyoro ethnic community and nature. Previous studies conducted in the area extensively show how the oil and gas discovery has negatively impacted the environment (Oxfam, 2020; Terre, 2020). These negative impacts include greenhouse gas emissions, loss of biodiversity, disruption of agricultural activities, and oil spills. Issues of contamination are equally on the increase especially in the areas of Buliisa and Hoima, as land, pastures and water sources are increasingly becoming vulnerable to poorly disposed and managed wastes from oil drilling among which include drill and mud cuttings, solid and liquid wastes (International Alert, 2013; Wass and Musiime, 2013). In response, however, the Banyoro have adopted cultural-mitigation measures to combat the impact of these changes. This is broadly discussed later in the Findings section.

Current debates about the benefits and challenges of oil in Uganda largely centre on the EACOP. The EACOP is a petroleum export pipeline system whose construction is still underway and will run from the inlet flange at Kabale in Hoima District in Uganda to the marine export terminal at Chongoleani, Tanga District in Tanzania (EACOP Act 2021). The approximately 1445 km EACOP pipeline is worth US $3.55 billion and will traverse ten districts in Uganda (Petroleum Authority of Uganda, 2019: 5). It is estimated that it will have the capacity to transport 216,000 barrels of oil per day (Kamoga, 2017). To ease its transportation, the waxy consistency of the crude oil from Tilenga and Kingfisher requires the pipeline to be heated to a temperature of 50°C or more, and if completed, the EACOP would be the longest electrically heated pipeline in the world (Inclusive Development International, 2022, 1).

However, this level of emissions exceeds that set by the Paris Agreement and the findings published by IPCC in April 2022 (Inclusive Development International, 2022: 1). The EACOP project is expected to worsen environmental degradation, increase greenhouse gas emissions and intensify land alienation in the Bunyoro area (AFIEGO, 2020; Oxfam, 2020; Heede, 2022). It should be noted that official Ugandan government and oil company reports concerning the EACOP do not acknowledge the full climate impact of the crude oil in as far as emissions from the end use of carbon fuels, emissions from maritime transport of the crude oil to global markets and its refinery into petroleum products (Heede, 2022). This is in total disregard of the fact that the oil fields and its attendant EACOP project are situated at the heart of an ecologically diverse area that consists of Lake Albert, Murchison Falls National Park, the River Nile as well as the Congo River (Inclusive Development International, 2022: 2). This places the water resources relied upon by many Indigenous communities at risk of oil spills and carbon emissions. It also endangers the flora and fauna in the area as it is exposed to environmental damage. Secondly, the legal framework and the legislation about the environmental impact of the EACOP is weak as 'it prioritizes the interests of the EACOP project developers at the expense of Ugandans' social and economic well-being as it gives supremacy to the EACOP (Special Provisions) Act of 2021 over other environmental-related legislations, such as the National Environment Act 2019, the Uganda Wildlife Act 2019 and the Climate Change Act 2021 (Banktrack, 2022). This will in turn disable environmental protection and enforcement in the Albertine Graben area as well as the areas affected by the construction of the oil pipeline.

Findings

Based on the analysis of qualitative data collected through key informant interviews, the study finds that the lived experiences of environmental destruction in the Bunyoro region manifest in the changes registered in

the rainfall patterns, extreme heat levels, severe storms, extreme cases of hailstorms, floods, longer phases of the dry season, the decreasing number of fish in Lake Albert, the unexplained reduction of earthworms and other soil organisms, disappearance of a rare fatty *nswa* (white ants) that announce the genesis of rains, competition of humans and chimpanzees for drinking water as well as the unexplained explosion of wildfires.

Clan totemism and cultural resistance

The study established that the cultural-resistant measures of upholding the sacred nature of the environment as upheld under clan totemism enables preservation, protection and promotion of the sustainable use of the environment of the natural resources. Being historical rainmakers, the Bachwezi clan members have led the struggle amidst economic changes to preserve and protect the environment. They have equally actively advocated against deforestation and have since pushed for afforestation programmes in areas adversely affected by deforestation. A clan leader among the Bachwezi noted that 'As you know many Banyoro people were killed during Kabalega's war of resistance against the British. It's their blood that decomposed and fossilized to give us the oil we have today. However, the same oil gifted to us by the blood and sweat of our own forefathers is being used to destroy our existence. This blood is calling us out to protect Bunyoro, its nature and its people.'

Their efforts to preserve nature have been vigorously supported by the Basengya clan – the historical preservers of rainwater who culturally believe that forests play a crucial role in rainfall formation. The Bafumambogo clan members whose other totem is the Nsenene (grasshopper) raised a concerning worry pointing at the late appearance of grasshoppers that normally signify an end to the September–November rains and the beginning of the December–January dry season. Grasshoppers that normally appear at the beginning of November delayed their appearance till the early days of December – a sign that points at the appalling effects of climate change. The clan leader of the Basengya noted that 'The delayed appearance of grasshoppers is a prophecy of doom to my clan. What will happen to us when they stop appearing?'

The Bawongo clan members whose other totem is running water, have taken the lead to preserve, protect and promote the sanctity of Rivers Nkusi, Wambabya and Kikonko waterfalls. A clan leader among the Basengya observes that:

> Water is like blood. Once blood is flowing freely, the body is alive and once it stops, death follows. The same with water … once water is flowing, mankind and nature is bound to flourish. Once water stops

> flowing, Bunyoro will perish. Us the Basengya can't sit back and watch on, despite the economic benefits oil may bring us. Survival of Bunyoro is supreme.

Knowledge of the history of the Bunyoro Indigenous community

Additionally, the study established that knowledge of the Indigenous community history is critical to climate-change adaptation and preservation. This was evidenced among the Bagungu and Banyakibiro people who inhabit the areas that surround Lake Albert who believe that the responsibility to protect the lake locally known as *Mwitanzige* (the one that kills locusts) was passed on from generation to generation since the days of the Bachwezi dynasty that governed the Bunyoro Kitara empire 1,000–1,500 years ago. They pride themselves in the capacity to communicate with the lake, and thus its destruction through oil exploration and mining is a great blow to their identity. An elder and clan leader among the Banyakibiro noted that '15–20 years ago, it was possible to talk and listen to our fish. The fish would equally speak and listen to us. Today, it's impossible to either talk or listen to our own fish. It must be extinct by now. We must return to our cultural roots to fight this oil thing that has depleted our very own.'

These cultural-resistant measures embedded within the clan system are crucial to the fight against climate change in Bunyoro, as the community is obliged culturally to abide by the customary rules to protect the sanctity and sacredness of nature. However, it must be noted that the global and national politico-economic dynamics could potentially diminish their effectiveness and usefulness in sustaining Bunyoro. It is therefore imperative to incorporate these mitigation measures within the conventionally accepted environmental protection measures to enable the longevity and survival of the marginalized Banyoro population.

The clan leader's perception of climate change

The awareness of climate stresses is a critical first step for adaptation. Based on the data collected from the key informant interviews, it was clear that there was widespread awareness of climate-change issues among the respondents in the area under study. When asked about agriculture and livelihoods, the respondents independently brought up climate change as an issue of concern. Respondents were aware of climate change based on a range of experiences. Respondents described climate-change issues, such as higher temperature, longer drought duration, irregular rainfall patterns, lesser rainfall precipitation and increased rainfall intensity in a short time, leading to floods. The interviewees highlighted climate change by comparing the present day with the time in their younger lives, for example a clan leader among the

Bafumambogo noted that 'It feels like it is getting hotter and hotter year after year and the signs of raining days cannot be predicted (based on local knowledge) like when I was young.'

Some of the Indigenous knowledge systems as deployed as cultural resistance mechanisms and measures can be ably considered as useful tools in promoting climate adaptation in the Bunyoro region, where the Indigenous community is witnessing various changes – economic activities, such as the EACOP, migration, oil exploration and drilling, rapid urbanization, ethnic tension, land evictions and enclosures springing up for economic development. These are appropriate measures commended, especially when technology-driven climate-adaptation strategies are absent. Based on some of the findings addressed earlier, it is revealed that most of these cultural resistance measures are effective in mitigating and combating the impacts of climate change escalated by the oil and gas discoveries in the Bunyoro region.

Conclusion

This study primarily focused on historicizing contemporary climate change from the vantage point of Bunyoro. As a region, it has witnessed extensive environmental destruction right from days of colonialism, neoliberalism and the prevailing context of natural resource extraction of fossil fuels. In the event of this, the chapter interrogates the efficacy and efficiency of the clan system that has been utilized as a device over time to resist the destruction of natural infrastructure. The study thus revealed that the people of the region have suffered adversely from the oil-mining activities and had to turn to their clans for means of adapting and surviving the adverse impacts presented by the oil discovery. Among these strategies included advocacy for afforestation, reafforestation, the cultural bridging of rivers and petitions. However, these measures are adopted at the basis of a clan system among a highly marginalized Indigenous community, and thus run the risk of being abandoned in the face of the raging climate change. Additionally, these mitigation measures are neither recognized nor incorporated within the conventional environmental scientific measures, which in turn means that they may register little success in averting the extreme proportions of climate change posed by the oil discovery. The study therefore recommends that the government acknowledges and supports these cultural climate-change resistance measures and local initiatives among the Banyoro rather than deeming them as irrelevant and unscientific. The study also recommends the government to enact laws and policies that minimize the occurrence and impact of climate change in the oil-rich region of Bunyoro. The study also calls upon government and all the other relevant stakeholders to empower clans with tools, knowledge and capacity to advance their locally informed climate-change-resistant measures.

Note

[1] The Nyoro people identify as Banyoro (singular: Munyoro), their language as Runyoro and their ethnic community as Banyoro.

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5

Atmospheric Alchemy: Rethinking Paradigms of Water Abundance and Extraction

Eileen Jahn

Introduction

Classified as a basic human right by the United Nations in 2010 (UN General Assembly, 2010), water is an indispensable resource critical to the survival and sustenance of all living organisms. At its core, water facilitates essential physiological functions within the human body, including digestion, circulation, temperature regulation and waste removal. Beyond its biological importance to all living things, water assumes multiple roles with far-reaching social, economic and political implications intricately woven into the fabric of societies and global dynamics.

In the face of water scarcity-driven conflict, climate-induced vulnerability, drought, and limited access to clean drinking water, Kenyan innovator Beth Koigi emphasizes that 'the world is looking for decentralized water sources' (Koigi, 2024, cf. Worland, 2024). *Majik Water*, from Beth Koigi, American environmental scientist Anastasia Kaschenko, and British economist Clare Sewell, offers hope: a breakthrough technology that addresses water scarcity by harvesting potable water from the air. Using advanced air-to-water technology, the system operates by capturing humidity from the air and using advanced condensation techniques to produce clean drinking water, making it particularly valuable for off-grid communities, where water sources, such as groundwater or piped water from elsewhere, are scarce or unreliable.

Majik Water's systems function effectively in a variety of environments, from arid and semiarid regions to more humid areas. The units require a sterile storage tank for optimal performance. Their air-to-water systems cater to three different groups: businesses, nongovernmental organizations

and private households. While corporations and NGOs can utilize the units for water consumption or industrial purposes, such as cooling, individual households can benefit from smaller units as paid water dispensers (Farooqi, 2021). Providing a sustainable and decentralized solution to water scarcity, *Majik Water* operates approximately 37 large and small 'Atmospheric Water Generators' that collectively generate over 200,000 litres of potable water per month in the arid regions of Kenya. The residential model produces 25 litres, the medium model up to 120 litres and the industrial version 500 litres per day. Currently, these systems provide over 1,900 people with a reliable source of clean drinking water (Majik Water, n.d.). This technology not only addresses an urgent need but also promotes environmental sustainability by using solar energy to power the water-extraction process.

This chapter addresses the pressing issue of water scarcity in Eastern Africa, highlighting its profound social, economic and political implications, such as deepening socio-economic inequalities caused by unequal access to water, while critically discussing the limitations of relying solely on technological solutions – where Beth Koigi's invention, *Majik Water*, is an exemplary departure point among a growing number of air-to-water solutions worldwide. My commentary begins by underscoring the critical importance of access to clean water, especially in marginalized communities, and explores the social, economic and health impacts of water scarcity, with particular emphasis on its effects on women and girls. I also highlight water's significance in global economic activities and its potential to spark geopolitical conflicts. The chapter then transitions to innovative solutions for water procurement, ranging from low-tech methods like dew condensers and fog collectors to more advanced technologies such as *Majik Water*'s air-to-water systems. Moving beyond technological fixes, I critique the tendency to over-rely on technological solutions without addressing systemic challenges, such as governance, infrastructure and the equitable distribution of resources. The chapter explores the potential risks of commodifying water technologies and the broader environmental and social consequences of resource extraction. It then concludes by reflecting on the historical context of resource exploitation, including its colonial roots and contemporary forms, advocating for a fundamental reconsideration of humanity's relationship with natural resources. I call for ethical considerations and equitable access to ensure that solutions to water scarcity are both sustainable and inclusive.

Scarcity of essential water in Eastern Africa

Access to safe drinking water is a fundamental requirement for human health and well-being and defines health and sanitation standards within communities. However, the unequal distribution of water resources exacerbates social inequalities and disproportionately affects marginalized

peoples (Sultana, 2020). Water scarcity has serious implications for dignity, health and reproductive health, especially in marginalized communities where access to safe water and sanitation is already limited. Women and girls often bear the burden of water collection, which exposes them to physical risks – including harassment and violence while traveling to and from water sources – impedes education and economic opportunities, and exacerbates gender inequalities by trapping women and girls in cycles of poverty (Cornwall and Rivas, 2015). The lack of clean water and adequate sanitation has a direct impact on reproductive health, as women face increased risks during menstruation, pregnancy and childbirth (Collins et al, 2018).

At the macro level, water is central to the global economy and serves as a linchpin for economic activities. It is critical for agriculture, such as crop irrigation, as well as for industrial processes and energy production. As a result, water scarcity poses significant economic risks, triggering downturns that affect agricultural production, industrial productivity and market stability. In addition, water has long been a source of contention and conflict between and within nations and communities. Disputes over transboundary water sources, river basins or shared aquifers often lead to geopolitical tensions. Political agendas, policies and governance frameworks surrounding water management in turn have a profound impact on regional stability and global relations.

Eastern Africa faces persistent challenges related to water scarcity, quality and distribution that significantly impact communities in different countries. Scarcity-driven conflicts, climate-related vulnerabilities, rapid urbanization and exponential urban growth without corresponding water infrastructure development are exacerbating the region's water crisis. Climate change intensifies the strain on water resources, leading to prolonged droughts, intensified floods, erratic rainfall patterns, and, in some areas, the depletion of natural water sources. These climatic shifts, coupled with the uneven distribution of limited water resources, further amplify social disparities, and aggravate challenges in accessing clean water, impacting agriculture and livelihoods. Therefore, recognizing the paramount importance of water and promoting responsible stewardship of it remains imperative for a sustainable and equitable future, in Kenya, Eastern Africa and beyond.

Innovative water solutions: harnessing nature's processes to counter scarcity

Amidst global concerns over water scarcity, an array of innovative solutions has emerged. In the quest to harness and replicate natural processes for sustainable water procurement, the spectrum of extraction methods ranges from low-tech, nature-inspired structures to high-tech, energy-dependent machines. These methods rely on natural processes to harvest water.

Dew condensers, fog collectors and rainwater harvesting systems are examples of methods utilizing simple, locally available materials and requiring minimal to no energy input. Fog collectors, for instance, mimic certain plant surfaces, capturing moisture from fog-laden air. Rainwater harvesting systems collect rain runoff from surfaces and rooftops, utilizing natural cyclical processes, such as condensation, precipitation and humidity. Aerial wells or towers and water condensers require more elaborate designs and materials, yet they still function without substantial energy sources. They collect atmospheric moisture by using condensation principles to obtain water from the air. Finally, dehumidifiers and advanced air-to-water technologies extract moisture from the air and convert it into liquid water. These methods often require a constant energy source for operation. Despite their technological variance, all these methods fundamentally rely on natural processes. By tapping into the water cycle, they harness humidity, condensation and other atmospheric phenomena to source water. Even the most advanced technologies derive their basis from nature's inherent mechanisms of water collection.

Air-to-water technologies, such as those developed by Beth Koigi – a Kenyan social entrepreneur who co-founded *Majik Water*, a company that provides technical solutions to water scarcity by using air-to-water technology to produce clean drinking water in arid regions – use advanced mechanisms to condense atmospheric moisture into usable water, often relying on electricity for operation. Koigi's technology, by relying on the surrounding air as a water source, bypasses the need for conventional water supply systems – infrastructure, such as pipelines or surface water sources – offering a decentralized option for water production. This makes it particularly suitable for off-grid locations. Additionally, through the utilization of renewable energy sources, such as solar panels, it provides a sustainable solution for energy production. The aim is not only to ensure access to safe water for consumption but also to alleviate the challenges associated with cooking, sanitation and hygiene, thereby positively impacting the health and well-being of individuals in underserved regions who face acute daily water-related challenges (Farooqi, 2021).

In Kenya, air-to-water technology represents more than just a technological innovation; it embodies a reclamation of agency over natural resources and a challenge to the colonial legacy of exploitation. The historical and cultural significance of air-to-water technology traces back to indigenous knowledge and traditional practices of harvesting water from the environment. Countless indigenous communities in arid regions globally have long relied on ingenious methods to collect water from the air, such as dew condensers rooted in knowledge passed down through generations and imitating practices observed in living organisms (Oweis et al, 2004; Nakashima et al, 2012; McHugh et al, 2015). These methods were born out of necessity and a

deep understanding of the local environment. However, during the colonial era, control over natural resources, including water, was often centralized, and exploited for imperial interests. This exploitation left lasting scars on local communities, disrupting traditional practices, and often leading to environmental degradation across communities (Blaikie and Brookfield, 2015). With the introduction of air-to-water technology, these age-old practices are revived and modernized. By incorporating modern technology, Koigi channels the wisdom of indigenous water-harvesting methods into a contemporary, scalable and impactful solution that addresses the challenges of water scarcity in a sustainable manner.

Overall, Beth Koigi's air-to-water technology represents a significant stride in addressing water scarcity, showcasing a blend of indigenous knowledge, modern engineering and sustainable practices to provide tangible relief to remote communities grappling with water-related challenges. By reintroducing an approach to harness atmospheric water, air-to-water technology reasserts a sense of ownership and control over this vital resource. It aligns with efforts across Kenya and other postcolonial contexts to reclaim sovereignty over natural resources, such as land, and challenge the exploitative legacy of colonialism (Barrett et al, 2013). Therefore, it embodies a blend of technological advancement and reclamation, offering not just a practical solution to water scarcity but also symbolizing a reclaiming of control and a departure from the colonial past while honouring indigenous knowledge to actualize sustainable practices.

This example of air-to-water technology illustrates how innovative solutions can be meaningful for marginalized and off-grid communities to regain control over vital resources incorporating not only environmental but also sociopolitical approaches to alleviating the problems associated with the climate crisis. Combining modern engineering with age-old water-harvesting practices offers a decentralized and sustainable approach to the environmental challenges of water procurement in arid and semiarid regions while promoting local autonomy in climate-change adaptation.

Beyond technological fixes: addressing systemic challenges in water scarcity

Even though the proliferation of such technologies represents a beacon of hope in regions grappling with water scarcity, particularly in off-grid or remote communities, concerns must be considered. With these technologies potentially being scaled up, questions arise about equitable access and affordability concerning the prioritization of technological solutions over grappling with systemic issues. While these technologies offer potential solutions to water scarcity, they may not be universally applicable due to varying climatic conditions, technological accessibility

or cost-effectiveness – a 500 litre *Majik Water* unit costs $12,500 (Farooqi, 2021), which potentially exacerbates existing social disparities.

Relying solely on technological fixes might divert attention from broader systemic challenges, such as governance, infrastructure development and equitable distribution of resources. Overlooking the root causes of water scarcity and failing to address underlying socioeconomic and environmental factors, such as decreasing groundwater levels and irregular rainfall due to the exacerbating effects of the global climate crisis, could inadvertently perpetuate an unequal status quo. Similarly, the commercialization of these technologies prompts questions about affordability, ownership and inclusivity.

Initially focused on communities affected by drought and sanitation issues in Kenya, *Majik Water* has since expanded its operations to South Africa and India and is now also offering units to larger corporations operating in water-stressed regions (Farooqi, 2021). The commodification of harvesting atmospheric water, even through innovative means, when picked up by profit-driven companies, runs the risk of prioritizing profit margins over ensuring universal access to a basic human necessity, rendering access to clean water a privilege rather than a right. Examples of water privatization and commercialization from Chile (Baer 2017), South Africa (Ruiters and Bond, 2024) and the Philippines (Torio, 2016), among others, underscore that the result is unaffordability, inaccessibility, and poor water quality and services (Baer, 2014; Fletcher et al, 2018).

The application of methods for atmospheric water extraction and its possible upscaling in the future, necessitate a critical examination of our relationship with natural resources and must be mindful of ecological systems. Such technology often relies on energy-intensive processes, raising concerns about sustainability and environmental impact. High-tech air-to-water systems, requiring constant energy sources, may contribute to increased energy consumption, contradicting efforts toward sustainability and reducing energy usage. The European Union's green hydrogen production project in Lüderitz, Namibia, to be built in the protected Tsau Khaeb National Park, exemplifies the continued disregard for sustainability in one area over achieving net-zero emissions targets in another, as well as neocolonial patterns of resource extraction. Among other concerns, the project threatens a globally significant biodiversity hotspot, risks water pollution and restricts local fishermen's access to the Lüderitz Peninsula and its waters, disregarding the impact on local livelihoods (Grobler et al, 2023). Overextraction of atmospheric moisture may disrupt natural water cycles, possibly exacerbating environmental degradation and unintended ecological consequences, impacting local ecosystems and people's livelihoods. Balancing technological innovation with environmental conservation becomes pivotal in mitigating any potential adverse effects on the environment.

While these innovations offer potential solutions to water scarcity, their implications extend beyond mere technological advancements. Addressing socioeconomic disparities, minimizing environmental impact, expanding our view to incorporate animals and plants, as well as establishing equitable access, are crucial facets of harnessing these technologies for sustainable and equitable water procurement. As the examples in this section have demonstrated, critical reflection and holistic approaches are indispensable in navigating the multifaceted implications of atmospheric water extraction beyond singular innovations, especially concerning the underlying logic of extraction.

A cautionary note: rethinking resource paradigms and the logic of extraction

The growing trend of (sustainable) technologies, which focus on maximizing available resources and tapping into atmospheric moisture as a viable alternative water source, showcases a departure from conventional centralized water-supply systems, offering self-reliant solutions that are particularly well-suited for remote, off-grid or underserved regions. *Water Majik* resonates with broader efforts to advocate for community-driven and environmentally friendly approaches to water scarcity (Mulwa and Fangninou, 2021; UNDP Kenya, 2023), with some praising that 'the possibilities for solutions are sky-high' (Alexander, 2019). By providing a reliable source of clean drinking water, this technology not only addresses immediate water needs but also fosters self-sufficiency, adaptability and resilience in remote regions prone to water scarcity. With a third of the materials used to build the *Majik Water* devices sourced from Kenya and locals hired to assemble them, this technology aims to 'provide local solutions to a local problem' (Farooqi, 2021) and to 'empower […] a person to earn an extra income' (Koigi, 2024, cf. Worland, 2024). Its emphasis on capturing atmospheric moisture reflects an uptake in nature-based solutions leveraging renewable energy to mitigate environmental impact, while simultaneously incorporating modern technology.

However, the logic behind resource extraction from the natural world warrants critical examination, particularly regarding paradigms of resource extraction, abundance and usage. Humanity's historical trajectory often champions resource exploitation as a means of progress and development – fueling imperial expansions, colonial theft of land and wealth – and technological innovations promising our species' survival and ensuring the comfort of some. This approach to resource utilization necessitates scrutiny considering its societal and environmental repercussions.

Central to this chapter's critique is the prevailing perception of resource abundance, which suggests that natural resources are inexhaustible and

readily available for, predominantly or exclusively, human appropriation. Even though there are issues of water scarcity in Kenya, Eastern Africa and beyond, air-to-water innovations challenge this notion of scarcity by expanding access to water beyond traditional sources, such as rain, rivers and groundwater, to the often unperceived atmospheric water plains, which is estimated to be six times more abundant than all of Earth's rivers combined (Li et al, 2022). This change suggests a potential paradigm shift from viewing water as a scarce resource, even in arid regions, to recognizing its broader availability, albeit primarily for human needs. In turn, the perception and logic of abundance, rooted in colonial, extractivist, capitalist and neoliberal frameworks, continues to underpin industries dependent on continuous resource extraction – usually in the Global South – and for economic growth – usually in the Global North.

The history of resource exploitation in Kenya, dating back to British colonial rule, illustrates how colonial capitalist interests have long prioritized resource extraction for economic gain, with lasting negative impacts on both the environment and local communities. Practices rooted in colonialism, global neoliberalism and extractive capitalism continue to manifest themselves, among others, in the large-scale exploitation of land, water, forests and minerals (such as soda ash, oil and gas), often driven by foreign investment and multinational corporations (Schilling, 2021; Kiprono et al, 2024). A prominent example is the titanium mining in Kwale County, managed by *Base Titanium*, which has prioritized profit over community welfare, resulting in displacement and limited local benefits, perpetuating a colonial model of resource extraction and promoting unsustainable patterns of extraction and accumulation. The result of these colonial–extractivist–capitalist practices is significant environmental degradation, reduced biodiversity, marginalization of indigenous peoples and escalating ecological imbalances, including water scarcity, resource depletion, ecosystem destruction and climate crises.

Addressing water scarcity in Eastern Africa and beyond requires more than innovative technologies and sustainable resource-extraction methods; it calls for fundamentally rethinking our relationship with natural resources. Earmarking atmospheric water as an abundant resource for human consumption and disregarding its role in hydrological cycles and for other living beings, could open up the technology to be scaled up industrially to focus on extracting financial profits rather than alleviating water-scarcity problems, such as sanitation, health and equitable access to clean drinking water, and to depleting atmospheric water sources with unexpected devastating effects for ecosystems. While air-to-water technologies like *Majik Water* provide immediate relief to communities facing water shortages, they must be coupled with efforts to address systemic issues such as equitable governance, social equity and justice, and environmental sustainability for generations to come. Without this integration, even

well-intentioned technologies risk becoming part of a neoliberal, colonial, capitalist framework that treats (natural) resources solely as commodities for economic gain, ignoring their intrinsic value and their role in sustaining ecological systems for planetary survival. History has shown that unchecked resource extraction often leads to long-term environmental degradation and increased social inequality. It is therefore essential to combine technological advances with ethical considerations to ensure that solutions are both sustainable and equitable. This holistic approach is critical to ensuring that access to clean water is a universal right, not a privilege, and that resources are managed in a way that treats human needs and ecological well-being as inextricably linked.

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6

Queer Mothers Putting Inclusivity, Gender and Economic Justice at the Heart of Climate Adaptation in Zimbabwe

Lungelo Ndhlovu

Climate change has had a considerable impact on Zimbabwe, which is located in Southern Africa, worsening existing environmental issues. The country is dealing with a variety of climate-related concerns, such as rising temperatures, irregular rainfall patterns, extended droughts and flooding. According to the Intergovernmental Panel on Climate Change (Trisos et al, 2022), southern Africa's average temperatures are expected to rise by 1.5°C to 2°C by 2050, with serious consequences for agriculture, water resources and biodiversity. Meanwhile, the intersectionality of climate change impacts with LGBTQIA+ rights creates unique vulnerabilities for these communities. During crises such as droughts or floods, marginalized communities, such as LGBTQIA+ people, often receive less attention in disaster response efforts. This exclusion can stem from societal biases that prioritize heterosexual norms over inclusivity or from a lack of understanding about how climate impacts affect diverse populations differently. Given the prevalence of discrimination against LGBTQIA+ persons in Zimbabwe (Cospe, 2022), climate-related disasters have the potential to worsen social tensions, leading to increased discrimination against LGBTQIA+ people and other vulnerable groups (Kanga, 2022).

Takudzwa Saruwaka, a transgender woman from Mutare's Chitakatira village, explains how LGBTQIA+ people in rural Mutare experience stigma and discrimination from other community members, as well as the effects of droughts caused by climate change, where transgender persons are accused of causing these droughts and other disasters experienced in

the rural setting where Mutare's Manicaland province's maize production fell by 28 percent as a result of the dry spell in February 2024, which was exacerbated by El Nino-induced weather that defined the agricultural season (Relief Web, 2023).

However, despite these challenges, Takudzwa currently has a steady income from her role at Mother's Haven, where she receives a small stipend each month to buy groceries for her home, including vegetables for her relish: 'Here at Mother's Haven, we are currently growing tomatoes in a greenhouse. Last year, we grew some sweet potatoes and some did not grow well because of drought. We sold some to the community for $7 a bucket to get money for groceries at home,' she explained.

Mother's Haven is a small LGBTQIA+ charity based in Zimbabwe's rural Manicaland Province near the border of Mozambique, that advocates for the well-being of lesbian, bisexual and transgender (LBT) mothers and their children. LBT women face stigma and discrimination and abuse from community members they live among, which includes relatives. To make things even more difficult, most mothers and their offspring stay with their families or the children's father. This sometimes results in violent situations.

To address this issue, the organization frequently organizes workshops on topics such as developing self-awareness, sensitizing LBT mother's families, wellbeing and leadership. Discussions also address stigma and discrimination and abuse directed against LBT mothers and their children, as well as training queer, transgender and cis women in how to cultivate sweet potatoes, sugar beans and tomatoes to assist them adjust to the economic effects of climate change.

Tsitsi Chiwa, the director and founder of Mother's Haven said she started the organization after the realization that there is discrimination against the LGBTQIA+ community, particularly if someone is LBTQ and has children:

> So we realised that besides looking at the issue of being part of the LGBTQIA+ community, stigma and discrimination goes back to the families that you have. Within the rural space we have, we realised that there is an issue of patriarchy which is an issue of gender mainstreaming which is affecting most of the LBTQ persons especially in the rural communities. This affects their livelihoods, their well-being and at the same time gets into the point where their mental health is affected. Some get to a point of experiencing corrective rape, of which you can't report it to anyone, because what we believe in within the rural space, it's about community, it's about family.

Tsitsi Binde, a mother of three, but not a member of the LGBTQIA+ community, who is currently a beneficiary of the Mothers Haven initiative, stated that life was difficult before joining the project since she relied on

buying and reselling tomatoes and vegetables in the Chitakatira community to eke out a living, which proved to be unprofitable:

> It was very difficult from the outlook of this environment, where to get money was very difficult. So, by buying and selling tomatoes, sometimes I would only get just one United States Dollar and sometimes I would push my vegetable produce on a credit basis as people had no money, therefore life was very difficult to continue. In 2022 I had to ask Mothers Haven to give me a piece of land to grow some sweet potatoes after clearing the land. In 2023 I harvested my sweet potatoes and they were very healthy, big and 100% organic and no fertilisers used. I sold those sweet potatoes to the community at $7 per bucket and I was able to send my kids to school from the proceeds.

Tsitsi Chiwa first launched the Mother's Haven project in Mutare:

> We began working on the project with sweet potatoes at first. In order to obtain the yields, we had to fortunately obtain water access to the closest borehole, which is located near the police station. This was a project we started with extremely limited resources, but with volunteers who were eager to help. During the process we also managed to yield sugar beans and thanks to funding from a non-government organisation Thousand Currents, when they came through they greatly appreciated our project from what we had done on limited resources.

Tsitsi's initiative in Chitakatira village is benefiting 50 people, but some are only indirectly involved due to physical and personal security concerns from families, society and the rural community. As she explains:

> most people are not yet comfortable coming through to be part of the process because of their own physical and personal security reasons: from families, society and the community at large. Right now we work with eight volunteers here at Mother's Haven, who are looking after their families through this initiative.

With the realization of climate change, Tsitsi acknowledges that there is a lot needs to be done in the rural communities of Zimbabwe:

> There is going to be a gap between the issue of gender in our context as a rural community. We are looking at the issue of patriarchy: societal norms which some of the norms we can't control. We realised that there was a need for us to look at the issue of equal land distribution and at the same time we also looked at the issue of how best can we

empower ourselves. During that process… at Mother's Haven we realised the need was: how can we create conversations around the issue of gender mainstreaming? Around the issue of queer women, especially in the rural context? We realised agriculture was the best approach that can create conversations, because when looking at agriculture you are looking at conversations that's talked about with anyone, regardless of who you are, gender identity, irregardless of sexual orientation … agriculture is a very important empowerment tool that creates generations and can take care of generations to come. So, this is a conversation in which we realised that it can be in any sphere within the space. It can be political, it can be economical, but it's a conversation that needs to be talked about, but how can we be in those spaces so that we also have our voices heard? This is how we started all these projects we are working on.

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7

Sustainable Sudan: Documenting the Past and Visioning the Future Through Graffiti and Environmentalism

Josepha Wessels

Introduction

This chapter explores grassroots perspectives of graffiti artists and environmentalists on sustainable futures in Sudan, a country in social upheaval at the frontline of climate change. This study, which took place between 2020 and 2022, applies a co-creative methodology of future visioning exercises and the use of 360° video for documentation. The study is situated in the wider context of a wave of renewed antigovernment protests that emerged in the South West Asian and North African Region in 2019 and 2020. In January 2020, the 2019 revolt in Sudan appeared to be seemingly the most successful uprising in the Arab world to date. The 2019 Sudanese revolution ousted Sudan's dictator Omar al-Bashir after decades of authoritarian rule. In the words of its own revolutionaries, this is thanks to a strong commitment to nonviolent values, a vibrant artistic public sphere on the streets and its connection to online digital dissidence. The Sudanese Professionals Association (SPA) was instrumental in the revolution, uniting professionals from all sectors of Sudanese society. This included the doctors' syndicate, lawyers, artists, writers and critical and activist environmentalists (Wessels, 2024).

Since the establishment of the Institute of Environmental Studies at the University of Khartoum as early as 1977, Sudan has known a growing body of environmentalists who have been very active in Sudan. In 2005, critical environmentalists criticized the then government of Omar

al-Bashir of greenwashing the Sudanese genocide in Darfur (Darfur; Earth, Wind and Fire, 2005; Wessels, 2024). A younger generation of educated environmentalists, both academics and activists, took the opportunity to make their voices heard. In 2013, they had formed youth groups to help with the humanitarian crisis caused by heavy rains and flash floods and also joined protests against fuel prices, which were brutally cracked down (Kushkush, 2013a; Kushkush, 2013b). In 2019, they joined the Sudanese Revolution.

The Sudanese Revolution also caused an explosion of a vibrant art community who expressed their thoughts and voices through mural paintings and graffiti (Dahir, 2019). Through extensive photographic documentation of revolutionary graffiti street art, ArcGIS StoryMaps and interviewing young revolutionary artists and environmentalists in combination with organizing a collaborative visioning workshop, this study has documented past and future visions of Sudan's revolutionary youth (see Figure 7.1). Environmentalist communities and Sudanese revolutionary youths have been given the prospect to develop feasible Sustainable Future Youth visions together to enhance collaboration between them.

This study investigated the role of young environmental activists and graffiti artists in the Sudanese Revolution, to give a broader perspective on social movements in Sudan. It is a study in social movements and ongoing political, economic and social configurations even continuing in the current diaspora. In particular, the ongoing transformations at political and social levels aimed at sustainable development.

Background

Since the establishment of the Institute of Environmental Studies (IES) at the University of Khartoum in 1977, Sudan has known a growing body of environmentalists who have been politically active in Sudan. As well, the Faculty of Environment Sciences at Omdurman Ahlia University (OAU) has been pioneering environmental studies at country level (Wessels, 2024). In 2005, some of these environmentalists, such as foresters from Darfur, were vocal in their critique towards the Omar al-Bashir government (Darfur; Earth, Wind and Fire 2005). In the revolution of 2019, a younger generation of educated environmentalists, both academics and activists, connected through the SPA and took the opportunity to make their voices heard, including their visions and plans for a better and more sustainable future for Sudan (Wessels, 2024).

At the same time, mural and graffiti artists have used the walls of the cities in Sudan to commemorate martyrs, document and archive the revolution and paint visions for a New Sudan. The creative and imaginary capacities of Sudanese revolutionaries to imagine Sudan's future, form the basis for this study that explores collaborative storytelling and future making through

Figure 7.1: One piece of graffiti from the cocreation that took place in the future workshop, Khartoum 2022

Source: Photograph by Josepha Wessels, 2020

bringing together Sudanese graffiti artists and environmental activists for future visioning exercises. In January 2020, I started documenting Sudanese revolutionary graffiti using ArcGIS storymapping in which murals are geolocated and presented interactively to explore important relations between places, spaces and stories.[1]

The 2019 Sudanese revolution started as a movement of civil disobedience and uprising on 13 December 2018 in Al-Damāzīn, the capital of the Blue Nile province (El Khazen, 2019; Mustafa and Abbass, 2020; Zunes, 2020). It was a reaction to austerity measures imposed by the authoritarian government,

as well as the deterioration of the economy and the high prices of living in Sudan. However, in the same month, the regime, and their Rapid Support Forces (RSF) used brutality against protesters, resulting in 250 casualties and 'at least 1,000 arrested. Protesters have been brutally beaten and sexually abused. Hospitals, homes and universities have been raided and looted' (Diab, 2019). In January of 2019, a Declaration of Freedom and Change was undersigned by opposition groups, forming the Forces of Freedom and Change (FFC).

On 6 April 2019, the SPA, consisting of 17 associations, including the Unions of doctors, lawyers, workers, artists and so on, invited people to demonstrate and organize a mass sit in at Al Qiyada square in front of the Headquarters (HQ) of Sudanese Armed Forces (SAF) in central Khartoum (Wessels, 2024). They demanded the downfall of the Sudanese president Omar al-Bashir and his dictatorial regime. The army chose the side of the protesters and Omar al-Bashir was ousted by a military coup d'état on 11 April 2019. This process resulted in what is called today the Transitional Military Council (TMC), a combined civilian and military government that rules the country for an interim period of 3 years.

After ousting president al-Bashir, sit ins however persisted for months despite calls of the military elements of the TMC to stop the protests, which led eventually to the 3 June massacre that was committed by the Rapid Support Forces (RSFs) and other paramilitary forces still loyal to the old president. More than 100 protesters were killed in the massacre, with at least 300 injuries: 'At least 40 bodies were pulled of the Nile River where paramilitary forces disposed of dead bodies. In addition, residents reported rapes and robberies at the hands of paramilitary forces. Others have been arrested, sexually abused, brutally beaten and even urinated on' (Diab, 2019).

On 9 June, the SPA called again for a massive civil disobedience as a demand to transfer the political power to the civil government in the TMC. Civil rule is one of the main demands of the Sudanese revolution. After a long negotiation process and a mediation that included Ethiopian meditator Mahmoud Drir, an agreement was reached: 'On 17 July 2019, FFC and TMC signed an agreement to establish a joint 11–member military-civilian sovereign council that will rule the country by rotation for a period of at least three years and three months' (Diab, 2019).

In August 2019, the Transitional Government was established in an interim agreement between the TMC and the FFC for a period of 3 years (Mustafa and Abbass, 2020). However, the process of transition was slow and frustrating for many on the street. The arrival of the international community and the slow grind of the transitional governance, frustrations and nepotism, grew into a volatile situation. Exacerbated by political differences between the governing parties, the difficulties of the COVID-19 lockdowns and deterioration of the economy, the instable situation reached its peak on 25 October 2021, when the military leadership decided to stage a coup and arrest

the civilian prime minister Hamdok and many civilian representatives in the transitional government, upending the political progress that was made after the Sudanese Revolution (De Waal, 2021). The military claimed to 'safeguard' the revolution. However, a 1.5-month-long Internet shutdown followed, including an increase of crackdowns of the responding street protests, arrests of revolutionaries, artists and members of the opposition increased. The RSF fired into the protests with live fire, resulting in several civilian casualties. Ever since, the country returned into an increasingly unstable and volatile political situation. Despite these political challenges, Sudanese revolutionaries, artists and environmentalists, continued their resistance against military rule after the coup (Bajec, 2021). Ever since, the situation in Sudan has deteriorated. Since mid-April 2023 the country has been engulfed in a brutal civil war, when generals Burhan and Hemedti turned on each other. It resulted in the worst humanitarian and displacement crisis in the world in 2024 (Schaar, 2024) at the time of writing this chapter, more than 12 million people were forcibly displaced, 8.6 million internally and the rest outside of the country with new arrivals increasing every day in the Central African Republic, Chad, Egypt, Ethiopia, Libya, South Sudan and Uganda (UNHCR, 2024).

Sudan at the frontlines of climate change

Sudan is currently witnessing rapid urbanization as a result of decades of protracted conflict, which has displaced millions of people inside the country who have migrated to urban centres like Khartoum (Pantuliano et al, 2011). Moreover, it is envisaged that the country will increasingly become severely affected by upcoming climate change with projections of rising temperatures by over 3°C in 2060. Projections also indicate that in South Sudan, global warming will be felt 2.5 times more than the global average (Stalon and Choudhary, 2017). In addition to hotter climate, the country is also challenged by erratic rainfall, drought and extreme flooding events, dust storms, thunderstorms and heat waves.

Khartoum specifically, as the largest urban centre in Sudan, suffers from desertification. Already in the 1980s, research showed that rapid urbanization puts more pressure on the natural resources in the immediate hinterland, thus further accelerating the desertification process (Babiker and Omer, 2014). Greater Khartoum is densely populated and highly vulnerable, with 64 per cent of the country's urban population residing in the area (Zakieldeen, 2009).

Revolutionary graffiti in greater Khartoum: 'ḥanabnīḥo' – 'we will build'

The Sudanese revolution of 2019 involved a nationwide group of Sudanese youth who wanted to see change in their country. These visions for

change can be seen and observed in the large body and collections of graffiti art and mural paintings throughout the public space in the city of Khartoum (see Figure 7.2). Some of these murals give a clear picture of how the revolutionaries see and envision the Sudan they want to build (ḥanabnīḥo = *'we will build'*) (Wardi, 1985). The term ḥanabnīḥo derives from a Sudanese poem written by Mahjoub Sharif and famously sung by legendary Nubian Sudanese singer Mohammed Wardi (Wardi, 1985; Sohonie, 2018). The song says 'We will build Sudan, how we dreamt it every day, homeland of goodness, homeland of democracy' and it was sung during the 2019 Sudanese Revolution. It became an important song for Sudanese environmentalists as well.[2] The ḥanabnīḥo youth initiative (مبادرة حنبنيهو الشبابية)[3] is one of those groups who emerged during the Sudanese Revolution with the aim to clean, rehabilitate the common areas and take care of the environment.

During the 2019 Revolution, youth-led environmental startups in Khartoum emerged, who were involving students, software developers and entrepreneurs to develop initiatives to improve the living conditions for Sudanese and help the environment. The initiatives varied from installing solar panels, efficient waste management, to reforestation and the rehabilitation of Sudan's ecosystems to counter desertification (Baxter, 2019).

Figure 7.2: Revolutionary graffiti in the streets of Khartoum depicting the vision of the New Sudan

Source: Photograph by Josepha Wessels, 2020

In January 2020, the Mutasim Nimr Centre for Environmental Culture in Khartoum won the Climathon Global Awards for Local Climate Innovation among five city nominations. Their project integrates local knowledge and solutions with scientific methods and technology. Their project documented local climate knowledge that is stored in songs, practices and stories and transferred from generation to generation. They are also active in organizing Climathons whereby groups of young environmentalists in Khartoum come together to think about solutions for battling the climate-change impacts in Khartoum.

Sustainable Sudan, documenting the past and visioning the future through graffiti and environmentalism

The aim of this study is to contribute to the documentation of the many different dimensions of the Sudanese Revolution and to enhance the development of future sustainable visions for Sudan. Using original and innovative participatory methods, the project visually documented revolutionary street art, carried out interviews with revolutionary environmentalists and brought Sudanese urban graffiti artists and the environmentalists together for visioning exercises about a sustainable future for Sudan.

Urban street art is a powerful tool not only in revolutionary movements but also in everyday encounters, opening ways of visioning and allowing a creative dialogue between the artist, the spectators and society at large. Environmentally engaged urban street art reconnects the social and the natural worlds, rewrites the urban environment in providing an alternative vision of the world, provoking and acting as a catalyst force for transformative social change (Tunnacliffe, 2016). In this sense, the potential role of environmentally engaged urban street art is very important.

The following research questions were posed to investigate visions and scenarios for a sustainable future of Sudan and the role of environmentalists in the Sudanese Revolution of 2019:

- How did Sudanese revolutionaries document the past and visions for the future for Sudan in the public space?
- What role does environmentalism play in the Sudanese Revolution?
- How can Sudanese revolutionary artists and environmentalists work together to create future visions for a sustainable Sudan?

To answer these questions, this study employed a mixed method approach consisting of three main fieldwork activities:

Image-based research and documentation of revolutionary street graffiti. In January 2020, I started to systematically document important street graffiti with film and photography during a field visit to Khartoum in January 2020.

During this visit, I took 231 geotagged photographs of most of the graffiti present throughout the city centre of Khartoum. A selection of these images were mapped out using ESRI ArcGIS story-mapping application.[4] The story mapping was complemented with a follow-up visit to some of the mural locations during the field visit in February 2022. The mapping was complimented with photosolicitation interviews both online and in person with graffiti artists, discussing their documented murals and their stories.

Semi-structured interviews with selected graffiti artists, environmental activists, professionals and students. The core of the fieldwork for this study consisted of conducting 13 semi-structured interviews in February 2022 that I conducted with environmentalists and artists on their role in the Sudanese revolution and their future visions for the new Sudan, related to sustainability and the environment. The interviews were audio recorded with consent of the interlocutors, transcribed and translated from Arabic into English. Additional interviews with graffiti artists (a total of five), and a discourse analysis of a selection of 75 murals, were carried out by Ahmed Naji, MA student at the Peace & Conflict Studies at the Faculty of Culture and Society at Malmö University, for his BA thesis 'Graffiti as Voice for Voiceless People – Critical discourse analysis of Sudanese graffiti during Sudanese revolution 2019' during Spring Semester 2020.[5]

A participatory future workshop in Khartoum, bringing together graffiti artist collectives and environmental activists for visioning exercises to develop visual sustainable future plans for Sudan. Next to the regular ethnographic fieldwork and interviews, I facilitated a visionary workshop on 12 February 2022, in collaboration with the Center for Economic, Legal and Social Studies, Khartoum (CEDEJ), the Downtown Gallery (Khartoum 2), a Sudanese Art Collective (al ḥalf al fān), The Higher Council for Environment and Natural Resources, and the Sudanese Environmentalists Association in which Sudanese revolutionary graffiti artists, environmental activists and professionals collaborated in developing creative visions for Sustainable Futures. The workshop was documented on video and 360° video. This kind of documentation enabled me to describe and capture the group dimensions, interaction and discussions during the workshop, as well as documenting the creative process of the production of the murals.

All data described was anonymized, compiled and analyzed using Qualitative Data Software QSR nVivo 1.2. A final database will eventually be included in the Sudan Revolution Archive at CEDEJ as well as the publicly available ArcGIS story map.

Due to the changing political circumstances throughout the course of this study, extra care has been exercised to protect the identities of the interlocutors of the research. For all interviews and recordings, a purposely made informed consent form (ICF) was signed by each interlocutor and research participant in the study. Anonymization of interlocutors' identities was safeguarded where

needed. In the case of well-known Sudanese artists, explicit permission was requested to use their names, if required. Video recordings with interviews of the revolutionary artists in January 2020 have not been published publicly until personal safety can be guaranteed in the light of changing political circumstances. These videos can only be accessed by the project researchers. At the time of writing this report, this kind of personal safety cannot be guaranteed due to the volatile political situation and while the country has not yet transferred to full civilian rule and implementation of a democratic government.

Field study and results

In this section, a brief overview will be given of the study implementation and research activities. In January 2020, I spent initial fieldwork time to conduct transect walks throughout the city of Khartoum to digitally document the mural paintings and graffiti whereby the images would be geolocated to be included in a story map. Between 25 and 27 January I also had meetings with young environmentalists and the Sudanese Environmentalist Association at the SPA. These meetings were insightful to follow the debates between revolutionary activists and the environmentalists on the future of the environment in Sudan and how to develop a national action plan for the country. It was clear that a lot of work needed to be done because the previous government did not give the environment as a national priority.

I identified a body of graffiti art in and around the revolutionary public spaces in Khartoum and artist collectives active in Khartoum. Some of them are related to the SPA[6] through their representation of artist unions. Furthermore, six environmental groups and initiatives were identified as target groups that eventually were involved in the project:

1. Sudanese Environmentalists Association[7]: an association that is part of the SPA, an important body that played a vital role in the Sudanese Revolution of 2019. The Sudanese Environmentalists Association brings together a national network of young Sudanese environmental professionals who are currently working on both state and regional level in Sudan. They are also leading the monitoring of the transitional government regarding environmental and climate justice, as well as developing environmental policies and monitoring criteria. The Association also has active citizen journalists who provide information and coverage of important events through their YouTube channel with a total of 259,000 subscribers.[8]
2. Sudan Youth Organisation on Climate Change: a network of young environmental activists who work on environmental conservation, wildlife protection and fisheries in respect to climate change in particular.
3. Sudan Environment Conservation Society[9]: officially registered in 1975, this is the oldest environmental association in Sudan, which

relies mainly on volunteers with an emphasis on youth members. Their mission is focused on environmental rehabilitation, good management of natural resources, elimination of harmful environmental substances and prevention of environmental violations and malpractices.

4. Omdurman Ahlia University – Faculty of Environmental Science Students Union: established by the students of the Faculty of Environmental Science this union brings together environmentalist students who also have been active in Sudan's revolution.
5. University of Khartoum Sudanese Environment Society: established by the students of the Institute of Environmental Studies (IES), this society brings together environmentalist students who also have been active in Sudan's revolution.
6. National Climate Change Action Empowerment Team (ACE): this initiative consists of environmentalists and professionals brought together within the framework of the international Dialogue on Action for Climate Empowerment led by the UNFCCC secretariat (UN Climate Change) established in 1992, when countries adopted the United Nations Framework Convention on Climate Change (UNFCCC) at the Rio Climate change convention. Several members of this team have been active in the Sudanese Revolution.

After the brief visit to Khartoum in January 2020, the global COVID-19 pandemic prevented me from travelling back to Sudan. In the original research proposal, fieldwork was planned for October 2020. COVID-19 restrictions prevented any researchers from Malmö University to travel abroad, as well as the in-country restrictions in both Sudan and Sweden. This derailed the initial plan to carry out fieldwork. Hence another tactic was chosen to keep in touch with the field by using digital ethnography and distance communication using Zoom interviews. The video material and short on-site interviews, which were recorded in January 2020 were translated and described. A start was made to develop and build a specific story-map project (ESRI ArcGIS) for the documentation of the georeferenced graffiti imagery and videos that I had carried out in 2020.

In the meantime, the collection of images of the mural paintings and revolutionary graffiti inspired Ahmed al Naji, a bachelor student at Malmö University, to focus his thesis topic on this collection of images of the revolutionary murals. Ahmed is Syrian and has Arabic as his mother tongue and he therefore carried out an in-depth discourse analysis of murals selected from the digital collection, compiled by me. He carried out five semi-structured long interviews with graffiti artists through Zoom.

Finally, the fieldwork was planned for November 2021 after a travel application was approved by the Dean of the Faculty of Culture and Society at Malmö University and in consultation with the Director of CEDEJ and

the ambassador of Sweden in Khartoum. However, just before travelling, on 25 October 2021, the military coup was carried out in Sudan and prevented yet again field travel from Sweden to Sudan. After regular consultations with the director of CEDEJ, a new fieldwork period was planned and finally, in February 2022, I could travel to Sudan and conduct ethnographic fieldwork with environmentalists and mural and graffiti artists in Khartoum.

My 2022 fieldwork consisted of participant observation with artists and environmentalists in Khartoum, conducting interviews and the organization of a sustainable futures workshop on 12 February 2022. Participatory future workshopping as an innovative method was applied during the fieldwork to bring together young environmentalists and artists in Khartoum. The workshop took place at the CEDEJ library in Khartoum 2. The goal of the future workshop was to creatively explore how Sudanese graffiti artists and environmentalists can co-create sustainable future visions for Sudan. Both groups exchanged knowledge, discussed Sustainable Development Goals (SDGs), sketched together and collaborated in telling their stories for earthly survival and human rights with the walls as a canvas. In total five environmentalists and six artists participated in the future workshop. The morning of the workshop was focused on a lecture on climate change in Sudan and exploring the Sustainable Development Goals 2030, see Figure 7.3.

Figure 7.3: Future workshop group work with the SDGs 2030

Source: Photograph by Josepha Wessels, 2022

Figure 7.4: Future workshop group work in the morning

Source: Photograph by Josepha Wessels, 2022

The environmentalists worked together in mixed groups with the artists. The groups started with a discussion on climate-change impacts and problems in Sudan and their hopes and fears concerning climate change (see Figure 7.4). The group work was followed by a plenary session where the groups shared their ideas and conducted a brainstorm on solutions. These included institutional reforms, Ministry of Environment, more information about solutions and environmental communication on solutions, integrating the environment into education, teaching kids and politicians, sustainable water-supply infrastructure, Indigenous knowledge, learning from past solutions, ecofriendly solutions, planting trees, water harvesting, Integrated Water Resource Management (IWRM), sanitation, waste management, housing and building codes, hydropower, wind energy, solar power and renewable equipment, and showing another way of thinking about nature and the planet.

After lunch, the artists presented their work and started sketching together in their work groups as seen in Figures 7.5 and 7.6. The groups worked on the inspiration from solutions, ideal futures and hopes. This was followed by the production of six different mural paintings at one of the walls in the CEDEJ house (see Figures 7.7 and 7.8). The future workshopping process was documented with photographs, video recordings and also using 360° video in order to be able to analyze and experience spatial dimensions of the workshopping exercise.

Figure 7.5: Sketching work in the afternoon of the future workshop

Source: Photograph by Josepha Wessels, 2022

Figure 7.6: A first sketch during the afternoon session in the future workshop

Source: Photograph by Josepha Wessels, 2022

Figure 7.7: Empty canvas wall primed for new murals

Source: Photograph by Josepha Wessels, 2022

Figure 7.8: Mural artists painting the wall with six different paintings

Source: Photograph by Josepha Wessels, 2022

Figure 7.9: Final six mural paintings on the canvas wall

Source: Photograph by Josepha Wessels, 2022

The final mural paintings at the inner wall of the CEDEJ centre was the result of the future workshop on 12 February (see Figure 7.9). The blue dot and the colour blue is a uniting theme in the murals, in the sense that the colour blue signifies blue for Sudan, to commemorate the martyrs of the revolution as well as the blue dot, as a metaphor for our blue planet, that needs to be taken care for (Griffin, 2019; Latif, 2019). The top left painting in Figure 7.9 symbolizes the new future with bright flowers, while the top middle painting is the ideal future, which is green and blue as well as the blue drop of water, the source of life. Below left is a mural in typical Sudanese mural style where a human figure is holding the blue planet close to the heart and a third eye keeps watch that this blue dot is kept safe. The middle below mural symbolizes public awareness of climate change, it connects the Sudanese revolution, with the artists and the role of environmentalists to inform the people. The below right painting stands for looking ahead with hope for a bright and sustainable future for Sudan.

The participants of the workshop expressed deep appreciation of the activity, the artists mentioned that they learned a lot from the environmentalists and the environmentalists were surprised and impressed by the professionality and talent of the artists. All participants expressed a desire to carry out these kinds of activities further to Sudanese communities.

Figure 7.10: Visit to studio of artist Galal Yousef

Source: Photograph by Josepha Wessels, 2022

Throughout the field visit in February 2022, I carried out semi-structured interviews with artists and environmentalists who had also participated in the future workshop. These interviews took place at the CEDEJ centre as well as in the guesthouse and on location at artist homes and galleries. Participant observation took place with artist collectives, artist studios (see Figures 7.10 and 7.11) and at the downtown gallery in Khartoum 2.

The field visit was concluded with a seminar on environmental and climate-change issues in Sudan on 23 February 2022 at the CEDEJ centre for a majority Sudanese audience. Among others, I screened and presented my BBC World film from 2005 ‘Darfur: Earth, Wind and Fire’ and my research on resilience and social cohesion, focusing on social cohesion in times of extreme weather and climate-change events in Sudan, such as floods and droughts. The seminar was attended by a group of artists and environmentalists and also enjoyed the participation of Professor Abdelgasim Seif El Deen, from Omdurman Ahlia University, a longtime environmental activist from Darfur. It generated a good and meaningful discussion between the participants and Professor Seif El Deen, see Figure 7.12.

Upon return from my fieldwork, I started to document and register field notes, video and photography and the 360° video recordings. Further development was done on the story map, which is currently in the final stages.[4]

Figure 7.11: Visit to studio of artist Galal Yousef

Source: Photograph by Josepha Wessels, 2022

Figure 7.12: Professor Abulgasim Saif el Deen discusses environmental and climatic challenges in Sudan with workshop participants

Source: Photograph by Josepha Wessels, 2022

Conclusion

Despite the difficulties of the global COVID-19 pandemic, a military coup and the increasingly volatile situation in Sudan following the Sudanese revolution, this study into the role of environmentalists and graffiti street artists in the Sudanese Revolution largely succeeded. Due to the delay in the actual implementation of the fieldwork, it also created time to develop the digital depository and give opportunity for a student from Malmö University to carry out a discourse analysis of the Sudanese revolutionary graffiti. The COVID-19 pandemic forced me to make use of digital means to investigate visuals on the ground. The support of the CEDEJ was invaluable in this fieldwork both logistically as well as research support. The ability to have conversations with CEDEJ staff and fellow researchers within the confines of the CEDEJ centre and guesthouse was a true added value to the research.

This study shows that the Sudanese environmentalists played an important role in the societal and social transformations that took place in Sudan. United in the Sudanese Environmentalists Association as part of the SPA, they were integrally involved in the revolutionary activities on the street as well as in their respective professional places of work (Wessels, 2024). Sudanese revolutionary artists have clearly expressed through their mural art what their visions for a better Sudan are, as documented in the visual digital depository in the form of a story map of the graffiti art in Khartoum. However, the two groups of revolutionary youth, artists and environmentalists, had not been regularly communicating or collaborating with each other, even during the revolution itself. They learned from each other and the exchange of thoughts, expertise and ideas proved to stimulate an informed understanding of how to cocreate the murals and their symbolic meanings together.

The future workshop further proved to be a useful approach and method to connect the two revolutionary activist groups, which led to visions for a sustainable future of Sudan. It remains to be seen how this approach can be further applied on a wider scale. The participants have expressed a willingness and desire to continue collaborating with each other in this fashion. Despite the current restrictions to be able to travel back to their country and ongoing war, which currently is raging through their country, this study shows that the revolutionary youth in Sudan continue with their resistance against the military regime, each in their own ways, perhaps less visibly on the streets but even more so by working within their professional fields towards a better future and more sustainable, and democratic, Sudan.

The findings of this study also show that both groups, the Sudanese Environmentalists Association and mural graffiti artists, are active in working for social change and climate justice for Sudan and are concerned about similar overlapping intersectional challenges for Sudan's sustainable future. In the interaction between the groups during the future workshop it was clear

that their grassroots activism has played a significant role in the Sudanese Revolution of 2019. At the time of the workshop in 2022, the participants however were vigilant about the political situation after the military coup in 2021. Therefore the futures workshop was organized in the CEDEJ compound rather than in a public space because military units filled the streets and graffiti was being removed (Wessels, 2021; Tunali and Wessels, 2025; Wessels and Al Naji, 2025).

> The artists expressed an eerie sense of apprehension not knowing where the political boundaries were going to be placed. They met clandestinely again, to not attract certain regime loyalists who were (re)gaining more and more power positions in the military-led government. The artists were questioned, occasionally arrested, and interrogated about their political activities, to induce fear into the revolutionary movement (Wessels and Al Naji, 2025).

The outbreak of war in April 2023 put a total stop on the grassroots activism by both groups on the ground. Most of the participants from the future workshop are currently displaced outside Sudan, at the time of writing of this chapter. Sudan is now the largest forced displacement crisis on the African continent and the country is at the brink of collapse, while the international community is slow to act (De Waal, 2023). The Sudanese artivists and graffiti artsts are working from outside Sudan, such as artist Galal Yousef, who from exile in Nairobi, Kenya, paints his pain and sees it as his mission to turn his personal experience into a collective visual narrative, into paintings such as 'Man with a Heavy heart' (Enaishe, 2023; Wessels and Al Naji, 2025). How the environmentalists and artists can continue their activism from abroad during the current war in Sudan, remains to be seen. However, many are still working digitally for change and climate justice in their country.

The activism, resilience and resolve of both the artists and the environmentalists, while being in a diasporic condition, relates as well to their determination for climate justice and adaptation, protesting the extractivism by the military rule in Sudan. A significant causal element in the outbreak of the war in Sudan in 2023, was the competition over natural resources between the two military power holders: General Hemedti and General Burhan, whereby the former owns a major stake in Sudan's multibillion dollar gold industry, namely gold mine concessions in North Darfur negotiated after the comprehensive peace agreement in 2011. Sudan is the third largest in Africa and tenth largest gold producer in the world, and therefore the major power position in Sudan's gold industry, is not something that Hemedti wants to give up (al Farhad, 2022; Collins, 2019). It signifies that the military rule in Sudan has little interest in working for a sustainable future of the country and the road for climate justice and change will be very long.

Notes

1 Available at: https://arcg.is/0ajT8z
2 Personal communication with members of the Sudanese Environmentalist Association, 27 January 2020
3 See also their Facebook page: https://www.facebook.com/Hanabneiho/
4 Available online: https://arcg.is/0ajT8z
5 Available online: https://www.diva-portal.org/smash/get/diva2:1529127/FULLTEXT02
6 See also their Youtube channel: https://www.youtube.com/channel/UCR9_A7gtCtxWoAl5MxlkuRA/videos
7 See also their Facebook page: (تجمع البيئيين السودانيين) https://www.facebook.com/SdnEnvsAssociation/
8 The YouTube channel ايوب البيئي Ayoob environmentalist, broadcasts Arabic language video produced by a young environmentalist revolutionary activist called Ayoub. Among others during the revolution, he posted several videos of the demonstrations and the sit-in area: See also: https://www.youtube.com/watch?v=-O5z0zhfeCo&t=2s
9 See also their website: http://secs.org.sd/

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8

Contested Urbanization in Uganda: Saving and Growing Masaka's City Trees

Antonio Kalyango and Neil J.W. Crawford

'As Uganda urbanises, a significant proportion of our engineers and planners appear to be thinking short-term. In thinking short-term. In their quest to create space for steel, concrete and glass structures they have lost a sense of connection to plans for a green city. In particular, they seem to have forgotten one thing: the street tree,' writes photographer Katumba Badru Sultan in his beautifully crafted photo essay 'Street Tree' (Crawford et al, 2023). Katumba argues that urban trees are vital to both the ecological and social well-being of cities, yet they are being sacrificed for urban development, resulting in significant environmental, cultural and practical losses. Katumba continues 'Trees are more than just for shade – they also create memories of love and help with navigation. And from a scientific standpoint, they're great neighbours. A mature tree absorbs about 25 kgs of CO_2 each year and reduces the risks of floods by storing gallons of water after rains. They also reduce stress levels and noise pollution. By absorbing lots of pollutants from the environment, what better way to have healthier cities?'

Katumba's essay raises important considerations about contestations that occur in rapidly urbanizing locations in Uganda and beyond. The country's urban population is projected to nearly double between 2010 and 2030 (UN-HABITAT, 2023: 2). In May 2019 the Government of Uganda approved city status for 15 towns across the country. One of the initial ten to be granted city status in July 2020, and the only one in Central District, was Masaka. As 'one of the oldest municipalities in Uganda' (UN-HABITAT, 2010: 1), Masaka has a rich urban history and an important future, due in part to its strategic location between Uganda's capital, Kampala, and Western Uganda, Tanzania,

Rwanda, and Democratic Republic of Congo. 'Our city is the turning point for the entire region,' asserts Masaka's Mayor, Florence Namayanja, while suggesting that official census data drastically underestimates the population of the city, which she believes to be between 380,000–400,000 people (Magembe, 2024a). Despite this growth, Namayanja claims that the 'city does not have enough staff for urban planning, and the few who are here lack the necessary funding', highlighting issues in effectively managing the transition to a more urban country (Magembe, 2024b), as 'people are settling in these cities faster than infrastructure investments can be made' (Haas, 2021: 1). However, secondary cities like Masaka 'can have a larger impact on poverty reduction than primary cities' and there have been calls to shift away from Kampala's urban primacy and prioritize supporting 'liveable and sustainable secondary cities' in Uganda, while acknowledging that there is a relatively small window of opportunity to ensure urbanization in these locations is well-managed and fair (Haas, 2021: 1,19).

Within the context of rapid urbanization and increased policy and political focus on secondary cities, there are questions of how the infrastructure that sustains these new urban inhabitants is enacted, and how it works alongside what is already there. In Uganda, tree cover dropped to 9.5 per cent from 24 per cent in the 1990s, with tree-planting initiatives bringing the number up to 13.3 per cent (Wafula, 2024). While advocating for the need to reverse the trend to diminishing tree cover, Charles Byaruhanga, Assistant Commissioner of Forestry Sector in the Ministry of Water and Environment argues that more needs to be done 'against the poor land-use planning, especially urban planning which is exacerbating the impacts of climate change like flooding in cities' (Wafula, 2024). This brings us back to the question of the trees that inhabit urban space – trees which, in some cases, have existed for decades before many new urban inhabitants were born. At a point of rapid urban change, cities, such as Masaka, can develop and change in ways that embrace inclusive greening practices that address environmental challenges and contribute to efforts to address the climate crisis. These choices are also often not the easiest option – private interests can trump the public good, a fact we can see in the contest over the preservation of existing city trees, and the planting of new trees in urban space. Katumba alludes to some of these struggles: 'Trees that have survived generations are cleared so apartments can stand in their stead. Every day they are felled to create room for utilities including water pipes and electricity lines, to satisfy the needs of the middle-income earners of the city.'

The remainder of this short chapter will explore the challenges and possibilities that occur at pivotal moments in the histories of emerging cities, by looking at the case of trees in Masaka. It will do so by focusing on short excerpts from an interview conducted in December 2022 with Antonio Kalyango, the Executive Director of Biodiversity Conservation Foundation

(BCF), a community-based environmental organization operating in Greater Masaka.

'Whenever you plan to cut down our trees, show us the plan of replacing that tree'

BCF's first initiative was on 6 June 2020 – World Environment Day. Staff planted trees to mark this important day and contribute to Uganda's broader efforts to repopulate the country with trees. The event took place in Ssaza, near the end of the tarmac road in town, where over 500 trees were planted. The second initiative focused on waste management in vulnerable communities, particularly in Nyendo, the northeastern part of the city, which has seen extensive growth of people living in informal settlements. Nyendo has long been said to have higher rates of pollution than other areas (UN-HABITAT, 2010: 31). BCF collaborated with garbage collectors, discussing their methods and exploring improvements. They also engaged local community leaders, including those from Nyendo Market, LC1 (Local Council – the lowest level of government administration), and the village council of Nyendo Kacaafu, fostering a collective effort toward better waste-management practices.

A key site for BCF's work has been along Kizungu Road, one of Masaka's oldest and earliest paved roads. This historic route runs across a hill that once hosted the colonial administration, with the now-defunct Masaka golf course on one side. Kizungu Road begins at the edge of Masaka's bustling Central Business District (CBD) and leads up to Masaka Hospital. It was the site of the colonial administration in Masaka and is lined with towering Indigenous trees, which have been there for over one hundred years. However, as part of road reconstruction and upgrading, the council proposed cutting them down.

In February 2020, BCF unexpectedly discovered plans to cut down the historic trees. The Municipal Council had not officially announced the plans or consulted the local community. Although we were not invited to any consultation meetings, BCF learned of the plans through their work. At the time, Kalyango was a journalist, and during interviews with officials, he pressed them for details, which led them to uncover the information. A few weeks later, they noticed spray-painted 'X' marks on the trees, signalling the planned removal. As Kalyango recounts 'then we decided to take action'.

Recognizing the power that comes with strength in numbers, BCF quickly teamed up with EcoBrixs, a Masaka-based nonprofit focused on plastic waste and unemployment in Eastern Africa. EcoBrixs had already begun a tree-planting campaign and BCF decided to collaborate rather than duplicate the project. Together, they launched a series of stories through traditional radio and various online news platforms. They also petitioned the Municipal

Council, which was transitioning to a City at the time, urging them not to cut down the trees. The petition recommended revising the road design to avoid damaging the trees. The pressure paid off, and the Council responded positively. After months of campaigning, in September 2020, BCF learned that the council had revised the road design to preserve the trees, bringing the campaign to a successful conclusion. As Kalyango notes 'We couldn't allow the little green component which we have in the CBD from being taken away'.

Over 2 years later, BCF is satisfied with the results of their efforts to preserve the historic trees. They achieved their goal and urged the authorities to plant additional trees, which they were assured would be included in the plan. The plan involves planting more young trees, as requested in their petition. BCF had emphasized that if the trees were to be removed, a replacement plan should be provided. During a benchmarking trip to China by officials, it was learned that when trees become too large, they can be excavated, relocated and carefully maintained to prevent them from withering or drying out. BCF recommended using this technology if preserving the trees in place was not feasible. As Kalyango reflects 'We told them that whenever you plan to cut down our trees, show us the plan of replacing that tree or those trees.' Ultimately, the authorities agreed not to cut down the trees, but instead to plant more in the gaps between them, as the trees are already spaced in a way that allows for additional planting.

BCF's efforts aimed to balance infrastructure upgrades in the city with preserving the historic trees, ensuring the process respected their environmental importance, and the broader benefits of green urban spaces for all of Masaka's residents and visitors. The road-widening project was adjusted to avoid cutting down trees by slightly reducing the width in areas where trees were present and expanding more in sections without them. Additionally, measures were taken to prevent tree roots from damaging the roads. Workers dug deep to remove large surface-level roots that could disrupt the tarmac while preserving the deeper root systems that supported the trees without harming the infrastructure. These modifications allowed the trees to remain intact. BCF focused on the environmental aspect of the project, and the authorities assured them that existing trees would be protected and new ones would be planted, aligning with their goal of enhancing green spaces.

Preserving existing trees is just one challenge in a rapidly growing city like Masaka – planting and protecting new ones is equally critical. Katwe Road, which begins at Broadway Road, skirts the eastern side of the Golf Course, and intersects with Kizungu Road near Masaka Hospital, has seen successful efforts to establish new trees, many of which are thriving. However, some trees have been lost due to neglect, damage by animals or vandalism, as the Golf Course is occasionally used for informal grazing of livestock. Despite these setbacks, trees are routinely planted along roads after construction is

completed. Attention now turns to Nyendo Road, which was included in the tree-planting plan. Although BCF's application to manage tree planting along this road was not accepted, they remain vigilant, observing the implementation of these plans and waiting to see the final outcome.

The inclusion of new trees in road construction or redevelopment projects often depends on the funding source. Some projects are financed by the Government of Uganda, while others receive funding through the World Bank-supported Uganda Support to Municipal Infrastructure Development (USMID). For instance, the Masaka-Kampala Road, which transitions into Broadway Road near the CBD, is a government-funded project. Although greening provisions are outlined in government-funded plans, implementation often falters due to corruption. Officials may claim trees have been planted on paper while failing to carry out the work in reality, exploiting weaknesses in accountability and transparency within government systems. As Kalyango explains 'those technocrats have a tendency of bending the laws for their personal gains. You could find it in their books, they could show you that they contracted someone, and the trees were planted, but in actual sense there is no tree on the ground.' Delays in completing the Government-funded Masaka-Kampala Road raise concerns, especially since it contrasts sharply with projects funded by the World Bank, where tree planting is mandatory and strictly enforced. The Masaka-Mbarara Bypass, for example, includes newly planted trees lining the route into Masaka and beyond, reflecting adherence to the funder's requirements. In contrast, greening components of the Masaka-Kampala Road were neglected due to lax oversight, with funds allocated for environmental enhancements likely misappropriated. Despite initial plans, which included planting over 2,000 trees in road reserves and nearby areas following the gaining of city status (Jingo, 2022), these provisions remain largely unfulfilled. The central government's lack of commitment to environmental priorities and systemic corruption are major barriers to successful implementation. As Kalyango notes, 'the central government they have not realised the value of the environment, they end up shunning the green component of the project'.

Protection of trees relates to BCF's other environmental protection work. Masaka is blessed with an abundance of wetlands and streams, including the Nabajuzi and Nakayiba wetland systems, which provide essential water resources for its residents. Nabajuzi, in particular, plays a critical role in regulating local weather patterns and serves as the primary water source for the National Water and Sewerage Corporation. Despite their significance, these wetlands face relentless pressure from human activities, such as construction and farming. In 2022, for instance, BCF raised concerns about an army officer illegally dumping marram – used to surface minor roads – at night in the Kamirampango wetland, which buried two community wells. Although city authorities intervened and halted the activity after

BCF sounded the alarm to what was happening, the dumped soil remains uncleared, highlighting ongoing challenges in wetland conservation.

Efforts to protect these ecosystems are often undermined by powerful individuals and entities who flout regulations to pursue personal interests. Local residents report intimidation and fear when confronting offenders, while authorities sometimes target low-impact activities by poor dwellers rather than addressing large-scale degradation by influential parties. This destruction has far-reaching consequences, including the loss of unique bird and animal species like the Shoebill, Papyrus Gonolek, and Sitatunga antelope, which once attracted significant tourism revenue. Speaking with local residents revealed that these birds and animals migrated as a result of attacks on wetlands, or they were poisoned by farmers, who sought to cultivate the edges of the wetlands (Kalyango, 2023). The decline in biodiversity, coupled with deforestation, has exacerbated environmental challenges. To combat this, BCF advocates for tree-planting initiatives to enhance green cover, mitigate pollution, and demarcate wetland boundaries, deterring encroachment. These campaigns also send a strong message against plans to degazette forest reserves, such as the Kkumbu Central Forest Reserve, underscoring the commitment to preserving Masaka as a sustainable and ecologically vibrant urban centre.

Gaining public support for environmental initiatives requires consistent and effective sensitization efforts, though limited resources often pose a challenge for BCF. When the wider population is well-informed, they are more likely to join campaigns. However, resistance arises when projects threaten people's livelihoods, even if those activities violate environmental laws, making it difficult to secure their cooperation. Media has been a vital tool in all of BCF's campaigns, contributing significantly to BCF's successes. Kalyango, after all, is a journalist as well as an activist. From his experience, successful local activism starts with thorough planning, gathering adequate information on the issue, identifying reliable collaborators, and ensuring sufficient resources. For instance, BCF's 'Save Mujuzi Forest Reserve' campaign faltered due to resource constraints. Nevertheless, past successes, such as the campaign to save Masaka's old trees inspired by a message from a concerned elder, remind us that rising against community injustices is a collective responsibility. These experiences also highlight that well-organized, formal processes can influence authorities to reconsider their positions and respond to public demands effectively.

'These trees are part of the fabric of the city': Uganda's environmentally just future cities

Looking to the future, Kalyango hopes for a 'Masaka which is beautiful, clean, and an environmentally beautiful City, resilient to disasters'. Achieving this vision hinges on strong, dedicated leadership that prioritises the city's

long-term well-being. Preserving existing trees and expanding green spaces will be essential to realizing this future, creating a city that can adapt to climate change while maintaining its natural beauty and ecological balance. Returning to Katumba's essay:

> Street trees support a rich and diverse range of wildlife, providing important connectivity between isolated pockets of fragmented habitats, and mitigating the adverse effects of urbanisation for birds and other wildlife [...] A passenger waiting for the next taxi, a jobseeker waiting for her interview, or a boda boda guy at his stage. These trees are part of the fabric of the city, its parks and recreational areas, which simultaneously allow us to forget we are in the city.

Urban trees are a vital component of a just city, and it is important for engaged residents to actively advocate for their preservation and growth.

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9

Intersectional Climate Action and Disaster Resilience for Women's Empowerment in South Sudan

Sneha Krishnan, Philomena Wambui and Nitesh Lohan

Introduction: An intersectional climate-justice framework for South Sudan

In South Sudan, women are perceived often as passive agents in the context of climate and disaster risks, or as victims of conflict and ethnic violence. In many cases, women are also used as weapons of war. For instance, during crisis, women are violated or abducted as a form of retaliation, attack against opposite tribes or revenge. These violations are especially prevalent in areas that are socioeconomically dependent on cattle herding, which sparks high-fatality cattle raids and new waves of violence-induced displacement, further compounded by flood-related displacement and distress (Wild, 2018). Abducted women and children are often auctioned or exchanged for cows, while young girls are forced into marriage. The emphasis on women in our discussion of gender and intersectionality stems from the recognition that women in South Sudan face multiple and intersecting forms of discrimination and oppression due to their gender, ethnicity, age, disability, socioeconomic status and displacement status, among other factors. These factors influenced their vulnerabilities and capacities in the face of COVID-19 and climate-related and environmental disasters, as well as their access to basic services, protection, participation and decision-making opportunities. Women in South Sudan who face these overlapping crises have a wealth of valuable experiences, needs and contributions that are frequently overlooked or marginalized by dominant patriarchal and conflict-affected structures and systems.

Several studies describe opportunities and barriers faced by South Sudanese women and young girls to meet their personal needs (Atari et al, 2024); others

engage with traditional narratives of women's roles (LeRoux-Rutledge, 2020), and their participation in peacekeeping (Adeogun and Muthuki, 2017). Studies have found that school-going young girls face political, cultural and attitudinal barriers impeding their access to basic services for menstrual hygiene management and information (Atari et al, 2024). LeRoux-Rutledge (2020) describes how parents use traditional narratives about women to argue against the education of their daughters, or to limit women's public participation in decision making.

South Sudanese women therefore continue to struggle with existing patterns of reproduction and injustices of care, as well as the cycles of violence and oppression while rebuilding their families through recurring cycles of overlapping disasters. South Sudan has experienced conflicts over limited resources, resulting in frequent mass displacement. The country is home to more than 60 cultural and linguistic groups (WHO, 2024), with Dinka making up 40 per cent and Nuer 20 per cent of the population and the rest comprising of Zande, Bari, Azande, Nubian, Beja and Fur groups. Edwards (2014) argues that a range of societal, historical and political processes have led to a situation where gender inequalities in South Sudanese society have become entrenched and disadvantage women in social, economic and political realms alike. Despite South Sudan's ethnic diversity, patriarchal social norms and conditions for women continue to be major barriers in women's access and participation in the public sphere (Edwards, 2014). This becomes important to understand women's achievements in heteropatriarchal African political systems. IfiAmadiume (1997) defined patriarchy as a 'social and political [ideology] which directly decides the role and status of women in society, how society is to be organized, and how social subjects are related to one another'. The combination of multiple vulnerabilities and women's exposure to multiple, overlapping crises highlights the critical need for intersectional and gender-sensitive climate actions and policy in South Sudan. In this chapter, we adopt intersectionality as a critical lens for understanding South Sudanese women's responses and policies determining their access to basic services, protection, participation and decision-making opportunities.

Climate change and recurring disasters, for example, aggravate women's access to health services and their overall health outcomes. Studies show that environmental stressors and social vulnerability widen existing health disparities (Morello-Frosch et al, 2011; Hayes and Poland, 2018). Kane et al (2016), for example, found that women across all age groups reported having little choice but to meet the childbearing demands of husbands and their families. Their study discusses how women, both young and old, and elders, were frustrated about men and society letting them down and how they are left to bear the reproductive burden. The contraceptive prevalence rate is only 6 per cent, and maternal mortality is among the highest in the world, with 1,223 deaths per 100,000 live births (WHO, 2024). Literacy rates

for women and girls over 15 are only 16 per cent, compared to 40 per cent for men (World Bank, 2023). Access to menstrual health information and supplies is also restricted, particularly during floods. Many women in Ayod and Fangak, which are counties in Jonglei State of South Sudan, do not have access to sanitary products, so they use old rags or let menstrual blood flow, increasing their risk of infection and indignity (Atari et al, 2024). Cultural taboos surrounding menstruation, as well as gender-based violence, limit women's ability to manage their health needs effectively. These experiences and vulnerabilities are further reproduced and reinforced during overlapping crises including natural hazards such as flooding, health emergencies like the COVID-19 pandemic, or climate-change extreme events and consequences such as droughts and displacement (see Krishnan et al, 2025, forthcoming).

In 2018, 26.7 per cent of women aged 15 to 49 experienced physical and sexual violence from a current or former intimate partner (UN Women, 2024). Sexual and gender-based violence (SGBV) is prevalent during crises. In 2020, conflict-related crimes against women included abduction (41 per cent), murder (28 per cent) and sexual violence (18 per cent) (UNICEF, 2019). Early and forced marriages are common; 52 per cent of girls marry before the age of 18 (UNICEF, 2020). Women with disabilities are especially susceptible to domestic violence and sexual assault (SSWEN, 2021). For instance, in Fangak, a perpetrator of sexual violence may be forced to marry his victim or pay a certain number of cows as penance (UNMISS, 2023). Customary laws, as well as a lack of medical support for survivors of SGBV, contribute to a culture of impunity for perpetrators (LAW, 2016). Other grave rights violations against women and children include maiming, revenge killings, rape and abduction, among others (UNMISS, 2023).

These challenges highlight the critical need for gender-sensitive policy responses and adaptable strategies to assist women in South Sudan. This chapter goes beyond describing the plight of South Sudanese women facing conflict and displacement to provide an intersectional analysis of climate-change adaptation policies and disaster-response interventions that tackle their vulnerabilities, address their needs and empowers them. Empowerment and intersectionality emerged as key foundational concepts in climate and disaster studies. In this framing, we rely on Naila Kabeer's (1999) conceptualization of empowerment, which means increasing people's ability to make strategic life decisions through agency, resources and accomplishments. Kimberley Crenshaw (1991) developed the concept of intersectionality to criticize what she perceived as a white, middle-class woman's perspective dominating the mainstream feminist movement. Evolving from feminist theory, intersectionality aids a feminist understanding of power and knowledge production. When used as an analytical tool, it can be used to understand how structures of power emerge and interact. As Davis (2008: 68) notes, it is 'the interaction between gender, race and other categories of difference

in individual lives, social practices, institutional arrangements, and cultural ideologies and the outcomes of these interactions in terms of power'. The concept has also evolved in the context of environmentalism as ecofeminism and feminist political ecology (see Gaard, 2015; Krishnan, 2022). Kaijser and Kronsell (2014) adopt intersectionality to critique underlying power relations and institutional practices relevant for climate issues and to generate alternative knowledge crucial in the formulation of more effective and legitimate climate strategies. Amorim-Maia et al (2022) put forth a conceptual framework that highlights the need to (1) tackle underlying reinforcers of racial and gender inequalities; (2) redress drivers of differential vulnerabilities; (3) take politics and ethics of care seriously; (4) adopt place-based and place-making approaches; and (5) promote cross-identity forms of activism and community resilience building. Existing literature on intersectional climate justice are either normative or focus on gender and resilience in Minority World case studies, with notable exceptions, including works like Crawford et al's (2023) *Climate Justice in the Majority World: Vulnerability, Resistance, and Diverse Knowledges*.

In this chapter, we build on recent scholarship that acknowledges the need for intersectional approaches to climate adaptation (see Djoudi et al, 2016). An intersectional policy analysis is needed to identify actions and policies in South Sudan that address inequities experienced by vulnerable groups, accounting for multiple identities (Hankivsky and Cormier, 2011). In the following sections we will therefore look at how humanitarian and government organizations have addressed these issues. We investigate adaptive strategies and policy responses for addressing the disproportionate impact of climate change, disasters and displacement on women in South Sudan. The country, which has experienced severe and recurring flooding, ongoing conflict and political instability since its independence, is an important case study for better understanding how overlapping crises affect women, and how humanitarian actors – international, national and local – are responding. Building on previous analyses of women's vulnerabilities during and after flooding (Krishnan et al, 2025), our chapter delves into the specific solutions and responses implemented by humanitarian and government organizations to address these issues using an intersectional climate-justice framework.

Methodology

This chapter uses data gathered in 2021 (phase 1) and 2023 (phase 2) using semi-structured interviews, household surveys, focus group discussions (FGDs) and key informant interviews (KIIs) as part of a study on humanitarian responses to COVID-19 in Jonglei state. In 2021, Krishnan was commissioned to undertake the study with Christian Aid (CAID) and their partner, African Development Aid (ADA), focusing on nongovernmental organization

(NGO) responses to COVID-19 in Ayod and Fangak counties. Ayod and Fangak were hard hit by the overlapping crises of COVID-19, conflict, displacement, flooding and food insecurity in South Sudan. Wambui was the programme lead at ADA, the South Sudanese partner organization, which was implementing the humanitarian response programme to COVID-19 in Jonglei in 2021. During phase 1, Wambui led the data collection with three investigators from ADA (two men and one woman) who conducted a needs assessment using a mixed-methods approach in July 2021. In this phase, the data-collection instruments – interview, FGDs with topic guides, and household survey – were developed by Krishnan and refined based on feedback from CAID and ADA staff. The ADA field team undertook field visits to Ayod and Fangak and undertook FGDs to discuss women's needs during COVID-19 and floods. They also gathered perspectives from community members and leaders in the payam (an administrative division in South Sudan, similar to a subcounty) through KIIs. Nineteen KIIs with NGO staff, technical experts on protection, international donors and field team members were held from May to July 2021. A semi-structured discussion guide was developed to elicit the views and experiences of community members, particularly women and other vulnerable groups, such as persons with disabilities, mental challenges and older people (>60 years). Six FGDs were conducted separately for men and women, as well as for various age, ethnic and displacement groups. There were two separate FGDs conducted in Ayod with seven male and female members in each. While four were held in Fangak – two each with separate male and female members. In total, 29 people participated in the FGDs.

Women comprised the vast majority (95 per cent) of respondents to the household survey, with the remainder (5 per cent) completed by men. The households included respondents who self-reported as follows: people with physical disabilities (12.72 per cent), people with mental health issues (5.89 per cent), elderly persons (>60 years) (26.60 per cent), pregnant or lactating women (32.81 per cent), and caregivers for children under the age of two (21.98 per cent). The data also includes the respondents' marital status and level of literacy. Most respondents (69.28 per cent) were married, with 8.87 per cent widowed and 5.63 per cent separated or divorced. The data also shows that a significant number of respondents (91.77 per cent) are unable to read. A demographic breakdown of research participants can be found in Table 9.1.

During phase 2, in December 2023, Krishnan visited Juba and conducted interviews with key informants and stakeholders who were responding to floods, displacement, and chronic food insecurity. An additional 22 KIIs were conducted with local government representatives, health workers, community leaders, women's groups, youth groups, and humanitarian NGO staff in Juba, including the International Medical Corporation, Impact

Table 9.1: Demographic data on household survey respondents in Ayod and Fangak

Household respondents	Percentage (%)
Distribution by gender	
Male respondents	5
Female respondents	95
Distribution by location	
Ayod	56.28
Fangak	43.79
Languages spoken	
Nuer	99.78
Dinka	12.36
Households consisting of	
Persons with physical difficulties (mobility, sight, hearing)	12.72
Persons with mental challenges	5.89
Elderly persons (>60 years)	26.60
Pregnant or lactating women	32.81
Caregivers for children under 2 years	21.98
Household composition	
Married respondents	69.28
Widowed	8.87
Separated/divorced	5.63
Unable to read	91.77

Initiative, NGO Forum, Concern, Save The Children, Nile Sustainable Development Organization, Accounting and Corporate Regulatory Authority (ACRA), Rise Initiative for Women's Right Advocacy (RIWA), Alliance for Action Aid, HESS-1 and HESS-2 (Humanitarian Emergency in South Sudan), Catholic Relief Services, African Development Bank, Water Aid, and Norwegian Refugee Council. KIIs helped gather detailed information on how various actors are responding to the challenges of disasters and displacement and issues faced by women in South Sudan. These were conducted primarily in English and lasted between 40–50 minutes.

All the study participants were informed about the study, prior to any data collection, in their own language or in English when feasible. There was no monetary compensation for participation. The field team observed steps to ensure confidentiality and anonymity of responses and assured the respondents that their participation was voluntary, and they were free to

withdraw at any time. The respondents were assured that the information collected were to be kept confidential and would only be used for purposes of the study. ADA team members conducted KIIs, which were recorded in handwritten notes and then transcribed and translated. All databases, field notes and typed transcripts were stored in password-protected computers with access only to the research team. In the following section, we present the thematic analyses drawing from these interviews and FGDs that evidence how intersectional climate and disaster responses are impeded, and highlight what are the emerging pathways towards intersectional climate resilience pathways.

Factors hindering intersectional climate and disaster-response initiatives

Several key informants underlined the contextual and programmatic barriers that hindered access to humanitarian aid and funding. These factors were shared across actors working in shelter, health or water, sanitation and hygiene (WASH) programmes, as well as those working in governmental institutions. In the Ayod and Fangak provinces, the onslaught of floods since 2020 and waterlogging was a grave concern, while COVID-19 was considered a remote risk. The multiplicity of disaster and health risks challenged the programme and field teams to address the emerging needs. A programme staff member stated

> Social distancing and handwashing with soap was essential for COVID-19, but in floods where they are displaced in small spaces for safe shelter, how can they ensure protection from the virus? According to the needs assessment reports, plastic sheets were provided, so that family members did not live in crowded homes, and they could maintain certain measures. We also included mosquito nets. We had to add because floods meant breeding ground for mosquitoes, posing severe health risks. If COVID-19 came on top, it will be a huge risk for the population. (KII 09, Juba)

Humanitarian actors found it challenging to reach the water-logged areas due to logistics and security concerns, which further delayed any relief or aid distribution in the payams – and hiring canoes to transport relief materials further added to the costs. However, the lack of humanitarian funding and increasing and overlapping crises diverted attention and dissuaded donors from committing money. As one stakeholder reported 'Capacities (of humanitarian NGOs) are not adequate and need support, ourprojects' funding will end in the next six months. The working environment is not conducive, and transportation of donations affect our organization since they are pushed to hire canoes to support distribution or mobilization' (KII 006,

Ayod). The local administrative authorities shared their concern regarding lack of funds and mobilizing of resources for the flood affected: 'As the government, our main challenge is lack of funds and support from the main government. There is no way we can address it, we just wait for peace to prevail and hope that more support will be channelled to us once we have peace' (KII 001, Ayod).

During the survey, a majority of the respondents mentioned accessing information on health from community leaders (17 per cent), community health workers (16 per cent) and the NGO ADA (12 per cent). Besides these community and civil society organizations, they also received inputs from teachers, friends and neighbours. Regarding the spread of awareness or crucial information on COVID-19, it is known that only three NGOs – ADA, Action Contre la Faim and Health Care Foundation Organization – had raised awareness among the community members. From a provider's perspective, a key informant mentioned the following challenges in providing quality health services:

> The County Health Department (CHD) has a clinic that serves a population of about 14,000 with a pocket of staff supported through CHD. The facility is not well equipped to respond to the health challenges hence affecting access due to lack of drugs. The few businesses that run pharmacy face the same challenge of supplies. In a situation of a major emergency its only God who can rescue the community or patients. The other issue that affects access is the lack of roads. (KII 005, County Education Director)

A community health worker with Action Contra Le Faim shared the steps taken during COVID-19:

> When COVID struck, it was hard for us to implement as usual because of the operating procedures set by the MOH [Ministry of Health]. First, we had to reduce the attendance of patients coming to the facility per day to reduce overcrowding. For OTP [Outpatient Therapeutic Program] food rations, we had to distribute two weeks rations instead of one-week rations. Then for TSFP [Targeted Supplementary Feeding Program], we had to distribute full month rations instead of biweekly rations. We had to cancel all the group gatherings such as mother-to-mother support groups, which are very instrumental in managing malnutrition. Mass screening had to also stop (one MUAC [Mid-Upper Arm Circumference] tape could initially test the entire village). We later invented Mother MUAC/ family MUAC and built the capacity of mothers to screen their own children. We distributed the MUAC tapes to the mothers. However, we ensured to rescreen the children

> again at the facility during visits. We sanitized the MUAC after every single screen. (KII 003 health worker)

The constant displacement and influx of Sudanese refugees adds to the programmatic complexities faced by international NGOs:

> We recently undertook a needs mapping of the returning refugees in Renk – those who had left South Sudan and gone to Sudan but the second generation is now coming back. For them, social cohesion will be necessary, they will need livelihoods support. Actors like GIZ [German Society for International Cooperation] is working with South Sudanese government and undertaking assessments of local governments' efficiency. Beyond the relief phase, longer-term integration is necessary. Currently, these refugees are living in the biggest camp in Sudan['s] border and are waiting to see if the situation improves. There is a similar strategy for climate. There are two perspectives here: the country is facing multiple crises, which are humanitarian crises as well as the larger climate crises. There is a need to focus only on life-saving interventions and build critical infrastructure, while on the other hand…The recently launched nexus approach by UNOCHA provides a three-year plan. Then there is reality. There is a massive funding cut. Only critical life-saving interventions will be funded. There is an upcoming election next year and there are massive security concerns regarding this, as it will happen for the first time. (KII, 010, Juba, 2023)

The United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) released the nexus approach, which aims to strengthen collaboration, coherence and complementarity between humanitarian, development and peace actors (OCHA, 2021). This approach proposes new metrics and a set of indicators for 157 countries, home to over 99 per cent of the world's population, to evaluate the risk of conflict brought on by climate change. As the top-down policy and programmatic initiatives continue to evolve depending on the rising challenges of overlapping crises, their ability to adopt an intersectional, inclusive approach remains very limited and constrained. In light of these, the opportunities are presented through the responses and initiatives taken by local NGOs and grassroots movements.

Pathways for building intersectional climate action and disaster resilience

Historically, South Sudan has faced numerous challenges, including protracted civil wars, which have significantly shaped its humanitarian

landscape. The country's independence in 2011 marked a new era, yet internal conflicts and severe environmental crises, such as recurrent floods and droughts, soon followed (UN News, 2022). Throughout these conflicts, women have been particularly vulnerable, facing atrocities such as sexual violence, abduction and forced marriages (Gatimu, 2018). Women and girls have often been used as weapons of war, subjected to brutal acts of violence and exploitation. These events have necessitated a complex humanitarian response, characterized by efforts to build resilience against overlapping crises. This historical perspective provides a deeper understanding of the current challenges and the need for intersectional approaches in addressing them.

In response to the above challenges, different types of activism and adaptation strategies have emerged in South Sudan. Women-led organizations and grassroots movements are leading the way in advocating for women's rights, protection and empowerment. Initiatives such as community-based disaster-risk-reduction programmes, women's leadership training and legal reform advocacy are critical in increasing women's resilience to crises. For example, the South Sudan Women Empowerment Network (SSWEN) has played an important role in providing survivors of SGBV with legal and psychosocial support. Furthermore, adaptation strategies such as promoting climate-smart agriculture, improving water management systems, and creating safe spaces for women and children during disasters have been critical in increasing resilience. In one of the FGDs, a local women's leader stated 'During the floods, we formed small groups to support each other. We organized community clean-ups to prevent waterborne diseases and created safe spaces for women to gather, share their experiences, and provide emotional support' (FGD3, Ayod, a local women's leader)

This grassroots initiative not only improved immediate living conditions, but it also boosted community bonds and resilience. Another participant stated 'We used the plastic sheets and mosquito nets provided to construct temporary shelters and protect our children from malaria. The assistance from ADA and Christian Aid helped us get through the most difficult times' (FGD4, Fangak). They offer critical support services to survivors of gender-based violence, such as legal aid and psychosocial support, and advocate for legal reforms to protect women's rights (SSWEN, 2021). These examples demonstrate the critical role that women play at the grassroots and organizational levels in building resilience and driving transformative change.

Women have also taken part in formal and informal peacekeeping processes: 25 per cent of the South Sudanese delegates who signed the Resolution of the Conflict in the Republic of South Sudan (R-ARCSS) were women, and Chapter 1 stipulated that at least one of the Vice Presidents should be a woman and that women should hold at least 35 per cent of executive positions (Bazugba et al, 2020). Adeogun and Muthuki (2017) describe the efforts of four women's organizations – Central Equatorial

Women's Association (CEWA), Voice for Change (VFC), Saint Monica Women's Organization and the United Nations women – to argue that while the goal for 30 per cent women representation in peace building is yet to be achieved, these women-led organizations face constraints, such as high level of illiteracy, lack of funds, poor infrastructures and working within a patriarchal context. Patriarchal norms, practices and institutions, which continue to dominate South Sudanese society, have frequently overlooked or undermined women's contributions and capacities (Odhiambo, 2020).

International solidarity has also helped to boost activism. Organizations, such as UNICEF and UN Women, have launched programmes aimed at increasing women's participation in disaster risk reduction and climate resilience projects. These programmes teach women leadership skills, provide them with knowledge of sustainable agricultural practices, and encourage their participation in local government (UN Women, 2024; UNICEF, 2023). Furthermore, the World Bank points out that South Sudan remains one of the most vulnerable countries to climate change due to its reliance on climate-sensitive natural resources for survival. The country's National Adaptation Plan is a step toward addressing these vulnerabilities and promoting sustainable development (World Bank, 2023).

Local NGOs could apply for the South Sudan Humanitarian Fund, which provides a readily available pool of resources that streamlined many of the technical barriers for writing proposals and gathering multiyear funding through UN agencies. For instance, ADA successfully secured funding from the SSHF in 2022 to implement a flood response programme in Jonglei State. This funding enabled ADA to distribute emergency relief supplies, such as plastic sheets, mosquito nets and hygiene kits, to over 5,000 affected households, significantly enhancing the community's resilience to flood impacts. The South Sudan Humanitarian Fund's (SSHF's) mission is to assist national and international NGOs in providing prompt, efficient humanitarian aid to individuals in need (UNOCHA, 2021). However, gender sensitization, and representation of women and disabled people in NGO committees or village-level fora is negligible.

One of the positive aspects of humanitarian agencies that enabled them to adapt to the overlapping crises was donor flexibility in terms of which crises needed attention. For CCAID and ADA, 3 months into the response in 2020, they requested to the donor Disasters Emergency Committee that there were urgent and emerging needs due to the floods related to health, WASH and livelihoods. Flexibility and adaptability of programme activities enabled field staff to understand and respond to the needs of the various groups within these communities. For example, in Ayod, community members emphasized the urgent need for plastic sheets, mosquito nets and cooking sets. A participant, mentioned 'Floods affected many people here, including me, destroying our homes and properties' (FGD3, Ayod).

Another participant from FGD4 noted 'The intervention by ADA provided shelter Non-Food Items (NFI), but the items were not enough, showing the need for more comprehensive support' (FGD4, Fangak). These insights allowed humanitarian agencies to tailor their responses more effectively to the immediate and evolving needs of the affected populations.

Enabling policy changes for intersectional climate action and disaster response

South Sudan has made significant efforts to combat climate change and improve disaster management. The First National Adaptation Plan (NAP), established in 2021, refers to climate-change adaptation efforts and reducing community vulnerability. It aims for three outcomes, namely, building climate-resilient communities, a climate-resilient economy and development trajectory, and a climate-resilient environment and ecosystems (UNDP, 2023). To address these challenges, the South Sudanese government, in collaboration with UN agencies and other partners, has implemented several policy measures, including the Environmental and Social Management Framework, the National COVID-19 Response Plan, and the Humanitarian Response Plan. These policies have not sufficiently incorporated a gender perspective, which is critical for understanding women's and men's different needs and experiences, as well as ensuring that interventions are gender-responsive and equitable. As a result, the gender mainstreaming process in the health system, as well as policy formulation, implementation and evaluation, need to be strengthened. Incorporating these gender perspectives is essential for creating holistic climate-change adaptation strategies that ensure sustainable and equitable resilience for all community members.

The South Sudan government's health policy, known as the National Health Policy 2016–2025, emphasized universal health coverage, the quality and safety of health services, human resources for health, health financing, and stronger partnerships (Ministry of Health, 2016). Furthermore, the Health Policy for the Government of Southern Sudan (2006–2011) defines the vision and guiding principles for Southern Sudan's health sector, with an emphasis on achieving results within a specific timeframe (Ministry of Health, 2016). The country director of one of the international NGOs based in Juba highlighted some of the few examples of positive women's leadership and representation in the local NGO (LNGO) forum:

> There is a need to have women leadership at various levels in the South Sudan NGO sector to inform policies to tackle gender-based violence, displacement, and its effects on women. We are working with women-led organizations and identified their need to develop organizational mechanisms for ensuring participation, representation,

> and visibility. Several of the women in these NGOs are returnees themselves, they need support. Currently the way INGOs function, they focus only on the needs of women in floods, COVID-19, or displacement. Several other gender issues get blindsided in the way policies are drafted. (KII, 023, Juba)

Therefore, although policies exist that could potentially reduce the impact of COVID-19 and climate-related and environmental disasters on the healthcare system and population, the key stakeholders interviewed in 2023 reported a severe lack of implementation and outreach of these policies due to the eruption of ethnic violence, lack of government staff and services in remote provinces and transportation of aid to distant regions. Enhancing policy implementation and outreach, especially through capacity building and infrastructural development, is essential to address these challenges and ensure effective health interventions.

Conclusion

This chapter goes beyond describing the plight of South Sudanese women facing conflict and displacement, and provides an intersectional analysis of climate-change adaptation policies and disaster response interventions that tackle their vulnerabilities, address their needs and empowers them. This chapter has used empirical evidence to frame the problems faced by humanitarian response providers, disaster practitioners and policy makers to understand the need for an intersectional approach. The chapter describes the conceptual framework for intersectional climate action and disaster resilience followed by the critical analyses of the historical and contextual evolution of disaster and humanitarian response in South Sudan. It underlines the role played by various actors towards developing pathways for an intersectional response but are limited through funding constraints, multiplicity of disaster events and limited access to remote, far-flung areas, such as Ayod and Fangak counties.

Our findings show there are several programmatic and contextual challenges while responding to various disaster and climate risks in South Sudan. These overall inhibit the opportunities to achieve intersectional climate action and resilience. Women belonging to different ethnic groups, such as Dinka and Nuer, are deprived of basic health services, while humanitarian and health-service providers face challenges of funding and limited access to the far-flung provinces. The multiple overlapping crises add to the existing vulnerabilities of women without providing them with opportunities to overcome their impoverished lives, sustained processes for generating income, and ensuring continuous access to basic health, education and nutrition services while at young age. INGOs and NGOs adopt approaches to identify women

beneficiaries, undertake multisectoral needs assessment to understand their overall needs but fail to design integrated approaches for rebuilding lives – including shelter, livelihoods, health, education and protection needs for women across different ages, ethnicities, displacement status and proximity to river sources.

Climate action must undoubtedly be intersectional, addressing and challenging the patriarchal and other structures, postcolonial, neoliberal, global capital, and so on, that perpetuate many of these barriers against women. It is one thing to take an intersectional and inclusive approach; however, without transformational action, structural inequities will undoubtedly persist. While women's participation in formal and informal peacekeeping processes, as demonstrated by the R-ARCSS, has increased their roles in leadership and decision making, humanitarian efforts frequently fall short of achieving this inclusivity. To achieve true equity and empower all women, effective intersectional climate action and disaster resilience must be transformative, addressing systemic barriers in South Sudan.

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10

Identifying Prospects for Action on Climate Change and Sexual Reproductive Health and Rights in Umzingwane District, Zimbabwe

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Introduction

The global environment and humanity, particularly the Majority World, are facing significant threats from climate change. This phenomenon jeopardizes the lives of millions of people, exacerbating poverty, causing mass displacement and fuelling conflicts (Banwell et al, 2018), while posing a critical challenge to the achievement of the Sustainable Development Goals (Smith and Leiserowitz, 2014; Adhikarai et al, 2018). Over the past two decades, climate-related issues have become increasingly central to political, civic and social discourses. As the world experiences rising temperatures, increased aridity, more frequent extreme weather events and sea level rise, climate change acts as a threat multiplier. It disrupts livelihoods, drives displacement and migration, intensifies natural resource scarcity, potentially leading to violence and conflict, and increases pressure on state-citizen relations and the governmental capacity to promote development (IPCC, 2007; Klein et al, 2014).

The origins and consequences of climate change as well as the actions necessary to address them are closely tied to issues of justice and equity. Those who are already systematically excluded and marginalized are the most vulnerable to climate-change effects and are disproportionately affected (Olsson et al, 2014; Women Deliver, 2021). Although climate change

impacts people of all genders, girls and women face heightened vulnerability largely due to gender inequality (Chan, 2021). This inequality influences both social and economic factors. This bidirectional relationship results in unequal access to basic social goods and natural and financial resources, reduced food security, imbalanced decision-making power, and obstacles to building the capacity to enhance individuals' resilience to extreme weather events (Burns and Mutunga, 2024).

The Intergovernmental Panel on Climate Change (IPCC) (2018) underscored the potential of climate change and gender-insensitive climate interventions to worsen gender inequality. Climate-related loss or change in livelihoods, as well as displacement and migration, increase the risks of gender-based violence (GBV) and harmful practices, including child marriage. GBV represents a critical intersection of sexual and reproductive health and rights (SRHR) and climate change that should be addressed in relevant climate policies, programming and action. GBV is known to increase during periods of insecurity, stress and scarcity in pandemics and subsequent disasters (IPCC, 2018). Climate change also exacerbates the existing drivers of child marriage, including as a coping mechanism in times of insecurity and poverty, or as extreme weather events make it harder for families to feed their children (Banwell et al, 2018). Adapting to a changing climate must include action on GBV and harmful practices, such as child marriage.

It is widely acknowledged as one of the most severe threats to public health (Watts et al, 2021), and scientists are increasingly concerned about its impact on individual and community health (Chitongo and Casadevall, 2019). Climate-related emergencies cause major disruptions in access to health services and life-saving commodity supply chains, including contraceptives (Behrman and Weitzman, 2016); affecting sexual and reproductive health and the realization of basic human rights (Banwell et al, 2018).

SRHR play a vital role in building adaptive capacity and resilience against climate-related challenges (Women Deliver, 2021). Achieving SRHR helps reduce disparities and enhance the resilience of individuals and communities to climate change, ensuring that no-one is left behind as climate impacts worsen (IPCC, 2018). These rights have become increasingly important in unstable environments (Ahmed et al, 2019). Bolstering women's adaptation and resilience to climate effects through the political and financial backing of SRHR services, family planning and education will enable families and communities to better cope with climate impacts, build resilience, and secure gender and climate equity (Olsson et al, 2014). As a crucial component in strengthening resilience, SRHR enable individuals, couples and communities to exercise their human rights, make informed choices appropriate to their situations, and protect themselves and their communities from harm. Failure to support comprehensive SRHR and prevent gender-based violence and harmful practices will hinder women's and girls' involvement in climate

action and policy making, directly affecting the realization of human-centred objectives (Women Deliver, 2021).

This chapter will examine and assess the links between climate change and women's SRHR, particularly during humanitarian crises. We adopt an intersectional lens in seeking to improve inclusive and gender-responsive climate actions and policies in Umzingwane District, Zimbabwe. Specifically, we explore how climate-change inequalities and vulnerabilities are caused by and perpetuate oppressive patriarchal and capitalist systems, leading to the suppression of women's sexual and reproductive health rights and bodily autonomy. In the process, this chapter seeks to (i) assess how climate risks and associated uncertainties affect various aspects of women's access to SRHR; (ii) explore how existing SRHR gaps increase women's vulnerability to climate change and variability, and how they create barriers to women's participation in and access to adaptation and mitigation efforts; and (iii) determine strategies to enhance women's access to SRHR and services, thereby improving their resilience and involvement in climate action.

To do so, we draw on our study in Umzingwane District, which lies just southeast of Bulawayo City, the second largest city in Zimbabwe, and south of Umguza District of Matabeleland North. Within Matabeleland South, Umzingwane district borders the districts of Insiza, Gwanda and Matopo. The population of Umzingwane is 71,680, of which 52 per cent are women (ZIMSTAT, 2022), and is rated as the most densely populated in the province, with 50 persons per square kilometre in the communal lands. The district is susceptible to periodic seasonal drought owing to its agroecological location and annual rainfall of no more than 400 mm, which is insufficient for cropping.

Our study adopted a qualitative approach given its appropriateness in exploring the experiences and lived histories of participants on climate change and SRHR (Creswell, 2013; Creswell and Creswell, 2017). Focus group discussions, document reviews and unstructured interviews were used as data-collection tools. We employed a two-pronged approach that blended stratified and purposive sampling methods to identify wards, groups and participants, and 60 women aged 18–65 years participated. This age range catered for varying SRHR access, experiences and needs, which varied by age and socioeconomic status. The collected data were cleaned, qualitatively coded, and analyzed. In compliance with ethical considerations in the research, the study prioritized informed consent, issues of do no harm, privacy and confidentiality of data.

An intersectional approach to SRHR and climate change

Scholars in feminist geography and political ecology have emphasized the necessity of examining intersectionalities to comprehend the formation

of varying vulnerabilities, which are contingent upon existing societal inequities and power dynamics (Nightingale, 2011). Initiatives such as 'Fridays for Future' and 'Extinction Rebellion' are drawing attention to the uneven impacts of climate change on disadvantaged groups (Tomnyuk et al, 2023). Nevertheless, local perspectives often remain unrepresented in climate negotiations, resulting in top-down resolutions that fail to address community-specific needs. The ethical quandaries and injustices exposed by an intersectional approach, as well as its foregrounding of local and context-dependent knowledges about the production of differential vulnerabilities (Garcia and Tschakert, 2022; Garcia et al, 2022) are crucial for a deeper understanding of emerging threats to communities, required solutions and their implementation in resilience practices (Garcia et al, 2022). For example, numerous adaptation strategies disregard Indigenous wisdom and community-driven approaches (UN, 2020; Aylward, 2010). An intersectional approach rooted in critical race theory and feminist studies demonstrates how social characteristics, such as gender, class, ethnicity, race, disability and sexual orientation intersect, propel and reinforce systems and practices of oppression, discrimination and privilege (Salem, 2018; Valentine, 2007). Jakobsen and Bernstein (2022) elucidate that conflict and struggles over control of 'sexual access, its resources and products' define the domains of sex and gender, giving rise to related disputes that structure power in relations of domination, exploitation and conflict.

As climate change disproportionately impacts vulnerable and marginalized groups, an intersectional approach is necessary to explicitly address existing obstacles and inequalities to promote the full realization of SRHR, with corresponding advantages for climate adaptation and resilience. Those facing barriers to fulfilling their SRHR requirements are often more severely affected by climate change (Ahmed and Byker, 2019). Identities and other social factors are experienced as overlapping and intersecting drivers of marginalization. An intersectional approach is therefore crucial for tackling existing SRHR inequalities and maximizing the potential of SRHR to build adaptive capacity and resilience to climate change (Banwell et al, 2018). It allows us to shed light on how climate change intensifies the social subjugation of women through the suppression of their SRHR; and shapes how climate policy matters and agendas are conceived, contextualized and acknowledged by policy makers and governments. Funding schemes often favour technological remedies over direct aid for vulnerable groups, leaving them poorly prepared to manage climate consequences (Sack and McLean, 2024). Addressing these disparities requires integrating local perspectives into policy making, ensuring that funding mechanisms prioritize equity, and foster collaboration between global and local initiatives (Mtyelwa et al, 2022). Bolstering local governance and involving communities in climate-related decision making is vital. Advocating inclusive policies, as seen in grassroots

movements in South Africa, can ensure that marginalized voices are heard and considered in climate plans (Sack and McLean, 2024). Tackling these challenges is essential to realizing an equitable and enduring future.

Climate change and sexual and reproductive health and rights

Populations that are more vulnerable to climate change and those that encounter political, social and cultural obstacles to achieving SRHR share many similarities (Chan, 2021). This overlap must be acknowledged to remedy the current disparities. The adaptive potential of vulnerable populations declines if these challenges are not addressed; hence, SRHR must be included in adaptation. As we have shown, climate change affects health determinants, such as access to food, water and housing, and consequently, physical and mental health (Trummer et al, 2023). Maternal health is negatively impacted by climate-change challenges, which also foster an environment that leads to a rise in GBV, including harmful customs, such as child marriage (Tanner et al, 2021).

The East and Southern African (ESA) region has made significant progress in advancing SRHR and eliminating GBV, and has the second best-performing indicators across most parameters in Africa, second only to the North African region. However, these indicators rank some of the worst globally (Lowcock and Kanem, 2020), and in recent decades, investment has been insufficient to address the growing and unmet needs of the population. ESA has one of the highest fertility rates of any region in the world at 4.28 births per woman, a high maternal mortality rate, and increasing cases of GBV and child marriage.

Women's SRHR are affected and exacerbated by climate-change-induced events and variability in various ways (Campbell, 2015; Onyango and Heidari, 2017). Climate change leads to unpredictable rainfall and prolonged droughts that affect water availability. Water scarcity in Zimbabwe hampers access to clean water, which is crucial for maintaining hygiene during menstruation and childbirth. For instance, during the 2019 drought, many communities faced severe water shortages, impacting their ability to manage menstruation safely. The outcomes can worsen when access to SRHR is disrupted or limited by climate-related events (CRE) (Logie et al, 2021). Changing climate patterns disrupt agriculture, leading to food insecurity. Malnutrition can increase the vulnerability to reproductive health problems. For example, in areas where maize crops fail because of drought, women may experience higher rates of anaemia, which complicates pregnancy and childbirth. (Brok, 2019; Ryan et al, 2016). Consequently, service users experience service access and quality challenges (Onyango and Heidari, 2017).

Climate-induced hazards, such as floods, droughts and rising sea levels in Mozambique, have the propensity to compromise and complicate water

supply, sanitation and hygiene (WASH) services. Climate-induced migration can lead to overcrowded living conditions and increase the risk of GBV. In Zimbabwe, as families move to urban areas because of failed crops, women and girls often face increased harassment and violence, affecting their mental and physical health (Khan et al, 2011). Clean water is also needed during pregnancy and childbirth as well as during the administration of particular types of contraceptive methods (Campbell, 2015). Nyahunda and Tirivangasi (2021) emphasize that women need clean water for their reproductive needs, menstrual hygiene and childbirth. Climate change can further damage infrastructure, including health facilities. For instance, in 2020 (ZIMSTAT, 2022), Cyclone Idai devastated parts of Zimbabwe by destroying clinics and disrupting their services. This has led to decreased access to contraceptives and maternal health services, thereby affecting SRH outcomes.

Climate-change events, such as extreme temperatures, droughts and floods, have been associated with negative maternal and newborn health outcomes, increased GBV, and impacts on fertility decisions (Arunda et al, 2024). Bekkar et al (2020) posited that air pollution and heat exposure are strongly linked to rising infertility rates, preterm births, stillbirths and low birth weight. Moreover, climate change can expand the range of vector-borne diseases, such as malaria, which disproportionately affects pregnant women. An increase in malaria cases during warmer months can lead to higher maternal morbidity rates, as observed in regions such as Manicaland and Zimbabwe. As a result, women's decisions and bargaining power on whether to use SRH services, contraceptives or give birth at a health facility have been compromised. Thus, more than 20,000 women of reproductive age are at risk of unwanted pregnancies and sexually transmitted infections in the wake of a cyclone (UNFPA, 2021; Langnel et al, 2021).

CRE continues to aggravate pre-existing inequalities among marginalized communities and groups facing climate-related risks and hazards. Moreover, climate impacts can disrupt the traditional practices and community structures that support SRH education. Educational disruptions due to climate-related events can hinder the dissemination of vital information regarding reproductive health. The intersection of climate change and SRHR is therefore a critical area of concern, particularly in low- and middle-income countries, such as Zimbabwe. In Zimbabwe, these issues are compounded by the existing challenges in addressing SRHR. Zimbabwe faces ongoing debates about marriage laws and their impact on women's SRHR (Muyangata, 2022), and gender-based violence remains a pervasive problem affecting women in the country (Mazhambe and Mushunje, 2023). Sociocultural, religious and economic factors often impede the realization of SRHR, even when supportive policies exist (Chireshe, 2022). Current economic challenges have also led some women to engage in transactional sex, further compromising their SRHR (Chireshe, 2022).

There are, however, opportunities for positive change. Strategic coalitions, framing SRHR issues to counter opposition, collaboration with the government and strategic opportunism have been identified as effective strategies for advancing SRHR in African contexts (Oronje et al, 2011). Additionally, engaging teachers and community-based health workers to address adolescent SRHR problems has shown promise (Chilambe et al, 2023). In light of these complex dynamics, there is a need to explore the specific intersections of climate change and SRHR in local contexts, such as the Umzingwane District. Our study therefore aimed to identify potential actions that could address both climate-change impacts and SRHR challenges, contributing to the achievement of Sustainable Development Goals 3 and 5 in Zimbabwe (Chireshe, 2022).

Maternal and neonatal health care in Umzingwane

Our study participants were asked about their climate and maternal healthcare. Female respondents noted that Zimbabwe's maternal health sector has declined since the year 2000. Facility deterioration has been exacerbated by an economic downturn over the past 3 decades. Thobekile (all names we used here are pseudonyms) stated 'The country faces challenges in maternal and neonatal health, with the situation being particularly dire in rural areas like Umzingwane District, which bears a higher burden of maternal, neonatal, and child mortality than other districts.'

According to the 2022 Housing and Population Census Preliminary Results from ZIMSTAT, Zimbabwe's maternal mortality rate is 363 per 100,000 live births, equating to 1,589 maternal deaths out of 437,478 live births, yielding a national maternal mortality ratio (MMR). The findings indicate that MMR is more pronounced in rural areas, with 402 deaths per 100,000 live births compared to 298 deaths per 100,000 live births in urban areas. The primary cause of these fatalities is eclampsia (high blood pressure), a condition potentially linked to extreme heat, stress and malnutrition associated with poverty. Further research using bioscientific evidence is required to substantiate this claim.

Our study participants also suggested that the collapse of livelihoods due to failed rain-fed agriculture and fees for maternal and neonatal care have worsened the situation for women, who are disproportionately represented among the impoverished in the Umzingwane district. Young women find it increasingly difficult to access these services due to their limited purchasing power. This has led to an increase in home births because many expectant mothers cannot afford maternity fees. Young pregnant women are typically advised to wait for their mothers' shelters to become available in most maternal health clinics. However, these facilities do not provide food or other necessities as women are expected to bring their own (Chan, 2021). Women reportedly shunned these facilities because they could not afford to

meet the cost of living during their waiting period. Home births have seen an increase in childbirth complications and injuries, such as obstetric fistulas and stillbirths. In such cases, postnatal care becomes impossible to access, leaving women with life-threatening conditions, as they cannot afford to be attended to by medical practitioners at local health centres.

Our evidence suggests that Umzingwane District has only one large public hospital that is often fully booked or inaccessible to pregnant women due to financial and transport constraints. Traditional chiefs pegged fines in the form of goats for every birthday. This further complicates women's financial positions as they are forced to find ways to pay these fines. This deters women from getting their babies immunized or officially documented, thereby increasing the number of undocumented children in Zimbabwe. Mandlenkosi reflected 'Challenges emanating from climate change such as water shortages frustrate pregnant women with little energy to walk distances. It becomes difficult after giving birth when a lot of water is needed for hygiene purposes, such as washing the newborn.'

Livelihoods, GBV, adolescent pregnancies and child marriages

Umzingwane district continues to experience prolonged periods of drought and low rainfall, while cases of GBV are also notably on the rise. This can be attributed to stress, resource scarcity and humanitarian crises caused by climate-change extremes, which consequently increases the rate of GBV. GBV, human trafficking and child marriages have been reported to increase following droughts and the rise of artisanal mining in the district. Women and adolescent girls are exposed to the risk of sexual and physical violence as they travel unreasonably long distances to fetch water and firewood, work in mines, gather food, and access health facilities and business centres.

The disruption of livelihoods due to drought exposes communities to poverty-induced conflicts, as people fight over the control of resources at both the household and community levels (Chan, 2021). Women's communities and environmental activists also face the risk of being physically and sexually assaulted or killed while defending their territories, assets and people's rights. Concerns have also been raised regarding the rise in child marriages, sexual exploitation of young women, teenage pregnancies, HIV and other sexually transmitted infections among girls and women. Undoubtedly, climate-change shocks and the COVID-19 pandemic have exacerbated gender inequalities and deepened women's vulnerability to GBV and related socioeconomic risks. Sinikiwe reported:

> The impact of climate change is complex for women in this community. Gender-based violence cases have increased in the area, with most

> women beaten on food-related challenges faced by households. Some women have raped because of the distance they travel in search of water. Recall that some boreholes have run dry in most communities, and this has not only created gendered burdens for women but also exposed them to violent abuse.

Umzingwane grapples with a high incidence of adolescent pregnancies and child marriages due to the upsurge of illegal gold mining in the district. Although mining is the most viable sector in the context of climate and humanitarian crises, it remains a multiplier of women's poverty and discrimination in local and mainstream economic activities. Girls are sexually abused by artisanal miners in exchange for food, money and sanitary ware. A considerable number of girls were sexually abused at the water points by the same group of men. In 2022 alone, the community recorded over 100 teenage pregnancies in schoolchildren with ages ranging from 12 to 17 years. The most worrying trend is that most of these learners are beneficiaries of bursaries from development partners who would pay their school fees. Some adolescent pregnancies remain unaccounted for, and in such cases, it is suspected that relatives choose not to report these incidents to protect rapists who could be male members of the same family (Trummer et al, 2023).

During the peak of the COVID-19 pandemic, the number of adolescent pregnancies skyrocketed. When schools are closed due to enforced lockdowns, it is alleged that adolescent girls spend too much time loitering in public areas, thereby exposing themselves to sexual abuse by men, who offer them money in return. In one focus group discussion, Nomazwe posited that:

> Climate-induced poverty is increasing in teenagers. As households grapple to find food and other necessities, we have seen a rise not only in child rape cases, but also in child prostitution in this area. You recall that our district is leading in terms of HIV cases and other sexually transmitted infections.

Climate change causes shocks to livelihoods, which can lead to child marriage as a coping mechanism and means to secure the family's economic future. In the aftermath of environmental crises, increased conflict and violence, including sexual violence, are common. This may result in child marriage, as families seek to protect their daughters and family honours. Climate justice cannot be achieved of women's SRHR are not upheld, which means acting on child marriage. The UNFPA calls for action to build resilience and tackle the complex issues of rights, health and justice to ensure sustainable development where no-one, especially girls, are left behind.

Umzingwane also observes a sizable number of women who cross borders daily to buy their wares in neighbouring countries. Despite the economy

being highly informalized, the sector remains illegalized and undervalued by the Zimbabwean authorities. During arrests, women are subjected to degrading body searches that violate their bodily integrity and dignity and are further thrown into inhabitable confinements. In the process, their wares are confiscated and expected to pay cash fines or be given sexual demands by customs officials or public police. Nondumiso stated the following: 'These issues are difficult for women. Apart from the problem of unemployment in the area, we face additional challenges in our informal livelihood options. Sometimes, women are forced to offer sex to protect themselves from officials. It is sad because it exposes people to infection and emotional harm.'

Sexual and reproductive health and rights and climate action

As the health delivery system deteriorates largely due to governance and climate-induced challenges in Zimbabwe, Umzingwane community women are not spared from the crises. Investing in education, particularly for girls and women, leads to a greater awareness of reproductive health options. The focus should be on educating young women on their rights and family planning (Tomnyuk et al, 2023). Some women are aware that this violates their rights to basic, accessible and adequate health services, as enshrined in the Constitution of Zimbabwe. Adequate financing of family planning services enables couples to make informed choices regarding childbearing. In regions such as Zimbabwe, where rapid population growth can exacerbate climate impacts, promoting family planning through accessible clinics and contraceptives can help manage population size and reduce strain on resources, such as water and land (Mavodza et al, 2022).

The Zimbabwe National Family Planning Council (ZNFPC) has expressed concerns over low contraceptive utilization in southern Matabeleland. Vulnerable communities can cope better with climate change by financing comprehensive SRHR services. For example, women with control over their reproductive health can place their pregnancies in healthier and more resilient communities (Tomnyuk et al, 2023). This is especially important in areas prone to climate stress, such as droughts or floods, where fewer dependents can enhance a household's ability to respond to shocks. This has resulted in several women going as far as getting injectable contraceptives from unprofessional dealers in the 'black market', resulting in long-term health complications. During floods there was a notable increase in stillbirths, preterm births, water-borne diseases and anaemia.

The inability of residents to pay their service delivery bills and council taxes leads to the failure of the Umzingwane local council to deliver adequate health services and to construct more maternal health clinics in the district. While the Green Climate Fund (GCF) aims to support developing countries

in climate adaptation and mitigation, many Southern African nations, such as Zimbabwe and Mozambique, struggle to access these funds because of their complex application processes and bureaucratic delays. Consequently, vital projects remain unfunded, which hinders local adaptation efforts. Women are forced to walk between 8 and 16 km to the nearest health facility. In one case a woman delivered a baby in a scotch cart while on her way to the clinic, as there were no ambulances in the whole district, coupled with public transport issues and poor road and mobile phone network challenges. Clinics in the district face several challenges that hamper their provision of quality health services, including inadequate maternal equipment and medical staff shortages as nurses leave for greener pastures. While mental health problems caused by climate change remain undiagnosed and untreated (Tanner et al, 2021). Several clinics do not have water, and expectant mothers must bring their water when they give birth. For instance, Lethukuthula one of the affected women remarked 'With pain from my fresh stitches soon after delivery, I had to leave the delivery bed to carry a 20–litre bucket of water from outside the clinic building to bath, drink, and wipe the new-born baby.' Some were turned away from some health facilities because they failed to bring a bucket full of water, a requirement before they were admitted.

Integrating SRHR financing with climate-action initiatives can create synergies (Burns and Mutunga, 2024). For instance, the integration of family planning into climate resilience programmes has been shown to empower women, leading to better health outcomes and enhanced community resilience to climate impacts (Tomnyuk et al, 2023). This holistic approach ensures the availability of health services in the context of climate change. Climate action is interconnected with the Sustainable Development Goals, particularly Goals 3 (Good Health and Well-being) and 5 (Gender Equality). Effective climate policies that include SRHR can contribute to achieving these goals, fostering holistic community health, and empowering women.

Advocacy for increased funding of SRHR services is crucial (Burns and Mutunga, 2024). Climate finance mechanisms often focus on mitigation and adaptation, ensuring that these funds also address health and education and can create a more comprehensive approach to climate action. For example, initiatives such as the Women's Environment and Development Organization (WEDO) advocate integrating gender and SRHR into climate financing discussions (Toor, 2023). Climate justice emphasizes that vulnerable populations, often marginalized women and girls, are disproportionately affected by climate change. Ensuring equitable access to resources and decision making can help address SRH disparities. In rural Zimbabwe, as we have shown, women who lack access to resources often bear the brunt of climate impacts, making their voices essential in leading and designing climate action. Efforts to adapt to climate change must enhance women's economic empowerment, girls' education, and health systems to (in)directly help SRHR.

Climate actions must consider the diverse needs associated with SRHR. For instance, integrating reproductive health services into climate-adaptation strategies can help communities prepare for climate-induced migration, thereby ensuring that health services remain accessible. This was captured by Ndodana, a local leader who is 45 years of age: 'We have governmental and non-governmental initiatives that focus on climate change and resilience building in this community. However, most of the focus is on food, water, and livelihoods in general, with limited incorporation of sexual issues.'

Much international climate finance tends to prioritize large-scale renewable energy projects, such as wind and solar farms, often in urban areas. However, rural communities, which face the brunt of climate impacts, frequently receive less attention (Tomnyuk et al, 2023). For instance, while major solar initiatives in South Africa have been funded, local community-based projects that provide direct benefits to vulnerable populations have been overlooked. By integrating SRHR into climate policies, we can pre-emptively address health challenges, such as increased maternal mortality rates during climate-related disasters, such as floods or droughts. Investments in SRHR can lessen the effects of climate change on people by strengthening health systems, enhancing health, and providing SRHR services in the wake of climate-related catastrophes. Including SRHR in climate strategies empowers women, helping them make informed choices about their health amidst climate stressors. For example, access to contraception can help women place pregnancies in place, thereby enhancing their resilience to economic shocks from climate change. To ensure that people can deal more effectively with the effects of climate change, their SRHR must be realized. Financing SRHR services and family planning is therefore a vital component of climate action, as it empowers individuals, reduces resource pressure, and builds community resilience (Burns and Mutunga, 2024). Such an intersectional and integrated approach can lead to sustainable development outcomes that benefit both the people and the planet.

Conclusion

The intersection of climate change with SRHR necessitates a comprehensive, integrated approach that simultaneously addresses environmental sustainability and protection of reproductive health rights. Climate change, particularly in low-income and rural regions, exacerbates existing vulnerabilities, disproportionately affecting women, girls and gender-diverse people who already face barriers to realizing SRHR. This intersection is shaped by socioeconomic, ecological, cultural, and political factors that compound the challenges faced by marginalized communities, making it critical for policy makers to understand the nexus between these domains to foster resilience and empowerment.

Climate change is not a gender-neutral phenomenon. Its effects are deeply gendered, with women and girls bearing the brunt, especially in disaster-prone areas, such as Zimbabwe. Climate-induced stressors, such as droughts, floods and heat waves, intensify maternal health risks, increase GBV, and exacerbate economic instability, which in turn leads to higher rates of early marriage, transactional sex and other forms of exploitation. These issues reinforce the need to address SRHR through a climate justice lens, acknowledging that the climate crisis disproportionately impacts those who are already marginalized by structural inequalities, such as poverty, limited access to education, and harmful cultural practices.

An intersectional approach is essential for designing effective strategies to address climate change and SRHR. Policy makers must prioritize inclusive participatory decision making, particularly from the most affected and marginalized communities, to ensure that the needs and experiences of women and girls are central to climate planning and adaptation processes. Empowering women to participate in climate resilience strategies, such as sustainable agriculture and water management, has been shown to improve both SRHR and climate resilience. Furthermore, aligning funding streams for climate resilience and SRHR is crucial to ensure the sustainability of reproductive health services amid climate challenges, particularly in low-resource settings. Ultimately, addressing SRHR within the context of climate action creates a sustainable feedback loop. Healthier populations are better equipped to manage climate stress, leading to enhanced economic stability and resilience. By integrating SRHR into climate policies, we lay the foundation for a just, equitable and sustainable future where climate action and human rights are inextricably linked, ensuring that the most vulnerable populations are supported and empowered.

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11

Framing Climate Justice from a Youth Perspective: Intersectional Activism in Uganda

Antje Daniel

Introduction

Climate youth activism in Uganda became globally recognized after an incident in January 2020, when a number of youth activists who had been active in the recent wave of the global Fridays For Future[1] protests attended the World Economic Forum in Davos. Among them was Vanessa Nakate, who was inspired by Greta Thunberg and founded the Rise Up Movement Uganda. During the Davos press conference, five women posed in front of the camera for climate activism: Thunberg, Nakate, Luisa Neubauer (Germany), Isabelle Axelsson (Sweden) and Loukina Tille (Switzerland) (Rafaely and Barnes, 2020). However, Nakate was cut out of the picture when it was republished around the world. This caused a furore and raised questions as to the extent to which Fridays For Future was really a global movement in which voices from the Majority World were heard and recognized. This was in line with witnesses to a form of climate coloniality, which reproduces dominant Western concerns and narratives in climate and environmental politics and even in environmental activism (Nelson, 2003; Sultana, 2022). Responding to the controversy, Nakate argued 'You didn't just erase a photo. You erased a continent' (post on Twitter/X on 25 January 2020). She accused the reporter of racism and argued that climate activism is perceived as predominately addressing 'white' and 'European' concerns (Locke, 2023: 121). Against the backdrop of this experience, she wrote the book *A Bigger Picture*, in which she draws attention to climate struggles in Uganda.

The Rise Up Movement and the Fridays for Future Uganda, founded by Hilda Flavia Nakabuye, belong to the most recent wave of youth climate

activism of Fridays For Future. They are at the forefront of addressing the climate crisis and are able to mobilize masses for climate justice (Almeida, 2019; De Moor et al, 2021). With Fridays For Future, a new form of youth activism emerged, unique in its global scope and the low average age of the activists (Daniel and Deutschmann, 2020; De Moor et al, 2020). Youth climate activists have become important players in global environmental politics and in many national contexts, including Uganda. Their work for climate justice shows that aspiring to an ecologically and socially just future has become a central field of conflict in contemporary Uganda and even in East Africa (Nakabuye et al, 2020; Nakate, 2021). Embedded in global and frequent waves of climate strikes, climate activism in Uganda gained public recognition nationally and internationally. While all protests take place under the globally shared 'master frame' of climate justice, the demands of Ugandan youth vary. The aim of this chapter is to use framing theory (Snow and Benford, 1988; Benford and Snow, 2000), developed in social-movement studies in relation to Erving Goffman (1974), to explore how youth activists frame the climate crisis. In so doing, the questions I seek to address are as follows: Who are the young people engaged in the climate justice movement? What motives drive activists, given the fact that the climate crisis in Uganda is not only a natural crisis, but also linked to social conflicts and injustices? How do activists frame the climate crisis in relation to youth, gender or global inequality?

The framing of youth climate activism is important to comprehend the relevant climate conflicts and their political negotiation by young people in Uganda. Even though there is a great wealth of literature on the climate youth movement in the Minority World, after more than 5 years of mobilization, there has been hardly any academic attention to climate activism in Eastern Africa and elsewhere in the Majority World (cf. Neas et al, 2022; Daniel and Dannecker, 2024). In general, this region's social movements are not considered scientifically in respect to their context-specific features such as their framing or their particular form of organizing and protest (Daniel and Neubert, 2019; Daniel, 2022). Thus, it is essential to explore climate crisis and climate activism from the perspective of the Majority World as impacts of the climate crisis are and will be felt most disproportionately in equatorial, tropical and subtropical areas, mostly in Africa, South Asia, and Central and South America and on small islands (Michael et al, 2023: 2).

My chapter unfolds as follows: Firstly, I begin by discussing the methodology and broader project from which the material in this chapter is drawn. Second, I introduce framing theory as part of social-movement studies and unpack why an intersectional lens is important. Third, I describe the Rise Up Movement and Friday For Future Uganda, as well as the context in which they operate. Lastly, I present the framing of youth activism by particularly investigating the diagnostic framing of youth activists, namely

the way climate crisis is defined from an intersectional lens. Activists perceive youth, gender and their situated experience in Uganda as overlapping dimensions of inequality which shape their understanding of climate crisis and therewith their activism. Of particular importance is how youth acknowledge that climate crisis is embedded in global dynamics of climate inequality, which are partly framed as 'climate colonialism'.

Researching climate activism: a methodological approach

This chapter results from a research project on youth activism in Austria, Bangladesh and Uganda.[2] Its main aim is to investigate motivation and activism from an intersectional and global perspective. The latter is addressed by exploring the similarities and differences by considering how the specific context shapes motives and activism. For this chapter I focus on Uganda and predominantly on the self-reproduced narratives of the most visible female activists: Hilda Nakabuye of Fridays For Future and Vanessa Nakate of the Rise Up Movement. In the frame of the global climate youth movement many other youth groups emerged in Uganda, such as Extinction Rebellion, Climate Justice Africa or End Fossil Occupy Uganda. However, Fridays For Future Uganda and Rise Up Movement are among the best-known. I collected and evaluated material in which the activists presented themselves since 2019. These documents are 'natural data' because they were created independent of the research purpose and without the participation of the researcher (Salheiser, 2019). They include the websites of the social movements, ten videos of speeches by and interviews of Nakate and Nakabuye, which predominantly emerged at conferences of the United Nations, personal statements of the activists shared on social media between 2019 and 2020 (Twitter/X and YouTube), and self-produced text such as Nakabuye's coauthored paper *The Fridays For Future Movement in Uganda and Nigeria*, published in 2020, and Vanessa Nakata's book *A Bigger Picture*, published in 2021. The self-produced narratives are particularly important because they show self-perception and self-image. All these resources can be described as (digital) documents that seek to initiate and control a communicative process; they have a specific addressee and create a certain image. Often, they have an appellative function, which warns, comments or mobilizes (Schünzel and Traue, 2019).

The following narratives of Nakate and Nakabuye represent those youth climate activists who emerged in the frame of the global wave of Fridays For Future and who have been an inspiration for many others. However, they cannot represent the broad diversity of engagement on climate in Uganda, consisting of numerous and even long-lasting engagements as community-based or nongovernmental organizations in rural and urban areas. The

documentation and analysis of these two activists offers a starting point for understanding youth voices in the climate crisis in Uganda, which are still rare but important for overcoming the underrepresentation of climate activism in global discoursed and academic research.

Framing climate justice from an intersectional lens

Framing theory is one of the most popular approaches in social-movement studies because it draws attention to an essential dimension of protest. Following a constructivist lens, framing theory addresses the interpretation and discursive strategies of social movements (Snow and Benford, 1988; Benford and Snow, 2000). Following the understanding of Benford and Snow (2000), 'frames' can be defined as collective patterns of interpretation in which certain problem definitions, causal descriptions, claims, justifications and value orientations are developed by activists in order to raise awareness of a certain problem and to legitimize demands. Framing theory usually works with three frames. The 'diagnostic frame' describes the discontentment felt as part of a social problem, which also explains why a social movement emerges. To define a problem as such and to raise awareness is an important step for a social movement to legitimize the problem and even the social movement. Through the 'prognostic frame', social movements develop strategies, tactics or goals in order to initiate change, with the aim of solving the defined problems. The 'identity frame' creates a sense of community among the participants by emphasizing motives for participation. Benford and Snow (2000: 205–7) argue that not all diagnosed problems become heard: rather, they must have a certain centrality, or should be linked to existing systems of values and beliefs and thus be interrelated with the broader society.

In order to understand youth climate activism, the diagnostic frame is of particular importance because this unpacks which problems climate activists perceive as relevant. For exploring the diagnostic frame, an intersectional lens will be used. Although the notion of intersectionality emerged from women's movements (cf. Crenshaw, 1989), it recently entered mainstream social-movement research (cf. Heaney, 2019; Daniel, 2021; Roth, 2021). An intersectional framing is still a new form of analytical lens but highly important and innovative.

Different understandings of intersectionality exist, focusing on social movements (Fisher et al, 2018; Daniel, 2021; Fisher and Rouse, 2022). For the frame analysis, intersectionality is understood to unpack which social categories shape the collective action frame. Intersectional framing highlights that no coherent perception of the climate crisis exists: rather, the meaning and the experience of the climate crisis are shaped by social categories, such as gender, sex, age, region or 'race'. This lens provides knowledge on the meaning and role of social categories for social movements' motivation and

activism (Crenshaw, 1989; Carbado et al, 2013). An intersectional lens will be applied in order to investigate how social categories produce different perceptions of the climate crisis by youth.

Analyzing the climate crisis and its varying framings is a precondition for understanding what climate justice means. Climate justice, which defines climate change as a question of human rights and justice, can mean different things for different people. This makes it all the more important to explore those voices which have not been sufficiently presented in the debate on climate activism (Daniel and Dannecker, 2024). Michael et al (2023: 4) argue that climate justice emerged in the 1990s within activist and academic debates. It was integrated into the Paris Agreement of the United Nations on climate change signed by the representatives of 196 nations and organizations in 2015. As argued in the beginning, climate justice is more and more discussed in relation to inequality. For instance, at the Conference of the Parties (COP) Conferences on Climate Change, Minority World perspectives of climate justice dominate and therefore an understanding of green capitalism; 'alternative' understandings and voices of the Majority World are hardly recognized (Michael et al, 2023: 9; Sultana, 2022). This is the reason why Mikulewicz et al (2023) call for intersectionality in the debate on climate justice. Likewise, youth voices and their specific situation have not been considered, so that Cooper et al (2019: 35) claim that it is important to take 'seriously what young people say about their own lives and the socio-political contexts in which they live.' In thinking about the need to understand the variety of meanings of climate justice, it becomes clear that an intersectional lens on the diagnostic frame offers a critical engagement with the crisis. Which and how overlapping forms of injustices or oppressions intersect in East Africa can be unpacked by using the case studies of the Ugandan Fridays For Future and Rise Up Movement.

Youth climate activism in Uganda

Uganda is greatly affected by climate change and experiences pronounced issues, including flooding, deforestation, landslides and extreme temperatures. These have an impact on livelihood, poverty, famine and a loss of biodiversity (cf. Barford et al, 2021; IPCC, 2021; Birkmann et al, 2022; BTI, 2022). On the Notre Dame Global Adaptation Initiative Index (2024), Uganda is ranked 163th of 187 and therefore belongs to the most vulnerable countries in the world to climate change; it is also the 28th least-prepared country to combat its effects. The Ugandan government ratified the Paris Agreement of the United Nations and was also one of the first countries on the African continent to adopt its National Determined Contribution Partnership Plan, in which the government committed itself to reduce carbon emissions by 2030. It also developed a national Climate Change Policy Plan in the year 2015 (BTI, 2022: 29–30). The Ugandan government can be seen to have

engaged in climate politics and responses, but critical voices contend that there is a lack of consistency and the prioritization of economic needs, which, from the perspective of climate activists, slows down action to address climate change (Nakabuye et al, 2020: 216).

A broad spectrum of civil society actors addresses climate change: welfare-oriented community-based organizations and nongovernmental organizations as well as more politically oriented lobbyist groups. Among these are newly emerging youth groups such as the Rise Up Movement and Fridays For Future Uganda, which were inspired by Greta Thunberg. Youth groups are perceived as important in Uganda because at 22.7 per cent of the nation's population, it is the third-youngest nation worldwide (Mugeere et al, 2021: 344; UNDP, 2024). Young people are perceived as change makers and responsible for ensuring a sustainable society for future generations (Honwana and de Boeck, 2005; Riemer et al, 2016).

Fridays for Future Uganda was founded in 2019 by Hilda Flavia Nakabuye, who was studying for a bachelor's degree in Procurement and Supply Chain Management at the time. In an interview, she noted that 'climate change is a personal issue' (FFF Uganda, 2024b). Nakabuye, the eldest of 11 siblings, spent part of her childhood in rural areas in the south of Uganda. She experienced what it meant when drought destroys livelihoods and land and animals have to be sold. During her studies in 2017, she took part in the Green Climate Campaign Africa and realized that her experiences as a young person were linked to the climate crisis. Fridays for Future Uganda emerged from the university group that she created in response. They organized their first protests in the frame of the Global Climate Strike in March 2019, when 150 young people participated at the demonstration in Kampala (Nakabuye et al, 2020: 212). In August 2024, Fridays for Future Uganda's website reported that the group had organized 22 protests overall, mobilized 500,000 people, and reached 72 communities. While the Kampala-based group is urban centred, they are integrating rural areas with their community-based work in 73 districts (FFF Uganda, 2024a). Fridays for Future Uganda also organizes talks, exchanges projects with other groups and creates campaigns for causes, such as the conservation of wetlands, crowdfunding for victims of floods and protests against the East African Crude Oil Pipeline (EACOP). In addition, it arranges activities, such as tree planting, cleanups of the lake and workshops and trainings on climate awareness. An important part of their work is also participation at the United Nations conferences, representing the voices of African youth. In so doing, they are interlinking local and global climate activism. Fridays for Future Uganda receives support from the French Embassy, Oxfam and 350ORG.

The Rise Up Movement was similarly inspired by Greta Thunberg, especially the speech she gave at the Climate Action Summit in New York in 2019 (Locke, 2023: 123). Founder Vanessa Nakate, who holds a Master of Arts degree in marketing, grew up in a middle-class family with parents

who were concerned about environmental issues and she learned about global warming in school (Barnes, 2021: 4). In her book, she writes that her awareness was triggered by the 2018 floods in East Africa. When she started mobilizing for climate justice in 2019 she gathered relatives around her: similar to Thunberg, her first strike was in front of the parliament together with her siblings and cousins. Nakate began to combine these strikes with a social media presence (Nakate, 2021: 17–8). She is also engaged on the global level with the United Nations and was appointed to be a UNICEF Goodwill Ambassador, a role she uses to campaign for youth and children in climate crisis (UNICEF, 2022). Thanks to her global attention, she received support from abroad. She started the Vash Green School Project in 2019 in collaboration with a Swiss climate financier. The aim of this project is to install solar panels on schools, both to reduce greenhouse gases and pollution and to teach children about climate change. It is incorporated in an organized structure of the Tard Foundation, an officially registered Christian climate foundation created in 2022 to use faith to achieve climate justice (Tard Foundation, 2024).

Both of these youth activist groups emerged in the wake of the global wave of youth climate activism, although their founders recall that they were already sensitized by extreme weather events. Both Nakate and Nakabuye are engaged on the international stage of the United Nations and are appreciated as significant representatives of the Majority World by the Minority World as well as in the space of the COP. These international spaces are important to give a voice in global debates on climate justice to those who are most affected by climate change but least represented. This is important to learn from East Africa and to find suitable solutions for the global climate crisis. Additionally, as the political space for protest in Uganda is limited, the international spaces as well as solidarity from the Minority World are used to exert pressure on the national government. Locke (2023: 121) argues that the context for protest is shrinking in Uganda (see also BTI, 2022: 3). Although freedom of expression is fixed in the constitution and a broad variety of newspapers exist, expression is limited by the regulation of oppositional voices. From time to time social media has been restricted and critical accounts closed (BTI, 2022). In general, there is not much media coverage of climate activism (Rafaely and Barnes, 2020: 79–80). The constitutional right to assemble 'is often severely curtailed through a mixture of laws and administrative procedures' (BTI, 2022: 10). Permits to protest are hard to get and police have broad authority over public gatherings, which is intimidating for protesters (Locke, 2023: 123). In her book, Nakate (2021: 30ff; 131–2) reports that when she protested with signs in front of parliament, she was met with a great deal of scepticism by the security forces. She also mentions the fear of being arrested, a common concern for activists. Protests are also made more difficult for women in what until recently was perceived as a

male sphere (which was also the case in Europe, see Baumgarten and Rucht, 2013). Fridays For Future protests have a high representation of women. Accordingly, women engaged in protesting experience sexual hostility, are defamed as sex workers, and are morally devalued (Barnes, 2021, 8). Nakate has related how she is infantilized, portrayed as childlike and immature, in order to deny her legitimacy as a protester (Barnes, 2021: 10). There are also numerous barriers for women beyond the political sphere. Nakate (2021: 136–7) emphasizes that many young women do not have the self-confidence to protest. Uganda's climate activists operate in a shrinking civil society, which women such as Nakate and Nakabuye are using even though they face challenges.

Youth climate activists' framing of the climate crisis

How do these young women frame climate crisis? This section investigates the framing of the climate crisis and explores overlapping forms of oppression along social categories. Beyond the context-specific understanding, three social categories become evident in the women's framing: the intersection between climate crisis and youth and gender, as well as the overlap between climate crisis and structures of global inequality through a postcolonial framing.

Ugandan youth utilize the globally circulated understanding of 'climate crisis' resulting in increasing global warming due to CO_2 emissions and causing ecological, social and political problems. The cause of the climate crisis is seen to be manmade. Nakabuye explains that in the year 2019 she went to COP 25 to represent millions of people affected by climate change who are underrepresented in global climate regimes. She relates that she perceives herself as a victim of the climate crisis (FFF, 2024b). The climate crisis is not presented as an abstract climatological change or argued on the basis of scientific evidence, nor perceived as a future threat as most of the Fridays for Future movements in the Minority World do; rather, it is framed as everyday experiences of suffering (Locke, 2023: 121; Daniel and Dannecker, 2024). Nakate connects her framing of the climate crisis with the suffering she observed during the flooding in 2018 in the Eastern Region of Uganda and Nakabuye to her experience of drought in childhood.

In this respect, it is important for the activists to present the climate crisis as a context-specific problem. For example, the destruction of land, forests and wetlands due to floods or drought, other forms of extreme weather, plastic waste or the extraction of resources (Nakabuye et al, 2020: 216). In so doing, the two youth activists interlink the experience of extreme weather or destruction of nature with an increase of vulnerability and a lack of resilience. Thus, the climate crisis is not only understood through the occurrence of 'natural disasters', where it is felt most strongly (IPCC, 2021),

but is also linked to food shortages, the spread of diseases, health problems, increasing inequalities, migration and social conflicts. Increasing temperatures destroy East African livelihoods in agriculture and animal husbandry and endangers food sovereignty. It forces people to migrate to other areas, and causes increasing health problems, such as malaria and cholera, and even mental health issues, such as climate anxiety. These youth climate activists frame the climate crisis to show that it disrupts livelihoods, creates loss and displacement, and has an impact on health and well-being (cf. Birkmann et al, 2022).

The two activists also perceive climate politics as part of the problem. They accuse the Ugandan government of insufficient action and noncompliance with the Paris Agreement. Furthermore, they describe a lack of climate education limiting the understanding of the climate crisis in communities. Many people have experienced the climate crisis in East Africa through drought, but do not name it as such and do not perceive it as resulting from climate change. Therefore, there is often a lack of sensitivity and understanding of the climate crisis. Last but not least, securing one's own livelihood is often given priority over the environment, so that, for example, citizens cut down the trees that could help to ease the problem (Nakabuye et al, 2020: 216). Even though these arguments state that communities contribute to the climate crisis due to financial need or a lack of education, the overall responsibility can be attributed to the Minority World, while Uganda and East Africa in general pay the costs.

East African young activists in these areas center global inequality and develop a form of postcolonial framing. This includes differentiating Uganda from the Minority World and portraying the nation as a victim of the climate crisis. This goes hand in hand with a clear attribution of guilt. Nakate, for example, accuses the Minority World of Eurocentrism, and thus self-centeredness in the global climate debate. Against the backdrop of her experience of being cut out of the photo at the Davos conference, she also speaks of 'racism', deliberate marginalization and silencing (Rafaely and Barnes, 2020: 75, 77). At COP 25, Nakabuye calls on the Minority World to frame youth in the Majority World as vulnerable but deserving: 'Stop being self-centered and treat all lives equal' (FFF, 2024b). These narratives can be interpreted as blame and contestation of the dominance of the Minority World and its climate colonialism (cf. Nelson, 2003; Sultana, 2022).

Such framing is used to legitimize these groups' claim to represent the Minority World at international UN conferences. In so doing, the activists not only refer to Uganda but to 'Africa' to unpack the perpetuation of structural inequality between the Minority and Majority World, even in postcolonial times. In this way, they show from an intersectional perspective that Africa is part of a global system of injustice (Barnes, 2021: 7). Against this background, it also becomes clear why activists do not speak of indigeneity or

ethnicity, but repeatedly refer to 'Africa'. Although the continent is diverse, a fact acknowledged by the activists, its name is used to frame inequality in crisis along the intersection of climate and regional belonging to (East) Africa. This form of global inequality in the perception of climate crisis is characterized by highlighting the aftermath of colonialism as climate colonialism (cf. Nelson, 2003; Sultana, 2022).

In the discursive framing of youth activists, the climate crisis is also narrated at its intersection between the vulnerability of youth and gender inequality. Uganda's youth are in a challenging situation: they form the largest age cohort of Uganda's population and are perceived as the group that will shape society and the politics of tomorrow. Yet opportunities for young people are diminishing against the backdrop of high population growth. Livelihood possibilities are also constrained through growing competition for jobs that were reinforced in recent years by economic shocks and the COVID-19 pandemic (Mugeere et al, 2021: 345). In addition, youth is the age group, which is – and will be – most affected by climate change, and the continuous decline in opportunities in the present and future due to the climate crisis.

Young people suffer from fear of the future and climate anxiety. Accordingly, Nakabuye refers to them as a 'generation of the scared' in her talk at the C40 Mayors Summit in Copenhagen in 2019 (FFF, 2024b). She also argues that her commitment to climate justice arises from this vulnerability. To emphasize the needs of youth, she was risking her education to participate in international conferences. As a young person, she was a victim of the climate crisis and was sacrificing herself with the intention of not letting the climate crisis get any worse. She said in a talk at the COP 25: 'Climate injustice forced me to risk my education and to fight for everyone. I [would] rather fail my exams than fail my generation […] what shall I tell the next generation when they ask me where I was and what I did when nature was being destroyed?' (FFF, 2024a). In this statement, youth as a vulnerable age group, the willingness to sacrifice, and the need for leadership to secure the future for the next generation go hand in hand. The passivity of vulnerability and the negative feelings of fear do not hamper action, but instead become translated into leadership and activism for the next generation. Nakabuye argues 'We are facing a climate emergency; we need unprecedented global action because we are running out of time. The only way to protect our generation's future is by standing up and speaking out. We are the first generation to know what we are doing and the last one to be able to save it' (cited in Mugeere et al, 2021: 356).

The vulnerability of youth overlaps in part with gender. While Greta Thunberg's framing is more or less gender blind, she does not focus on her experiences as a woman or on gender barriers. Nakate draws awareness for intersecting dimensions of climate crises and gender inequality. From a feminist lens, she refers to the interplay among capitalism, white supremacy

and sexism and describes the double form of disadvantage she faces as a woman and a victim of climate crisis. Nakate portrays herself as a woman and vulnerable, especially when it comes to the limited space for action women have to protest. At the same time, she draws legitimacy from this vulnerability in her demands to consider gender as a dimension in solving the climate crisis. One of her role models is the East African woman activist Wangari Maathai who became popular for her environmental engagement. Nakate particularly emphasizes the need to focus on the education of girls, and she connects family planning with the preservation of the planet and of nature (Barnes, 2021: 9).

Conclusion

Climate justice fails unless we do not consider intersecting forms of marginalization. An intersectional lens unpacks the different framings of climate crisis along youth and gender, along with the roles of the context and location. What is perceived as crisis depends on the local conditions. While the global climate crisis becomes localized in the framing of Ugandan activists, Nakate and Nakabuye also refer to global structures of inequality, which are partly framed as climate colonialism. Thus, climate activism configures itself between global and local conditions as well as structures of inequalities between the Majority and Minority World. The members of Fridays For Future and the Rise Up Movement, like many activists in Uganda or East Africa, shape this framing and contribute to linking globalizing orientations of climate crisis with context-specific problems. It is important to consider this framing of climate crisis of the Majority World in order not to perpetuate inequality in the climate crisis and at the same time to work out where the climate crisis may reproduce or create new forms of inequality. The framing of climate crisis also offers important starting points for local problem solutions and the problem-solving potential of communities and politics. Acknowledging the perception of climate crisis can thus be also an important orientation for policy – locally, nationally but also internationally.

At the same time, Nakate and Nakabuye argue for a need to distance themselves from globally dominating discourses, such as those framed by the United Nations, which are still shaped by the Minority World, and to consider the vulnerability and the suffering of the Majority World. Accordingly, Nakate and Nakabuye call for the self-presentation of (East) African activists in global discourses and to learn from their views and from their claims for solving global climate crisis. The need for self-representation goes hand in hand with blaming the Majority World for causing the climate crisis. Beyond the strategic framing of belonging to the Minority World to impact global climate regimes, East African activists also use global arenas and also create networks of solidarity in the Minority World in order to

exert pressure on national governments, to gain solidarity and support. This is particularly important given the shrinking civil society space. Framing is therefore not only intersectional, but must also be interpreted depending on the space in which statements are made by activists. Thus, only an intersectional and context-sensitive framing ensures to adequately understand youth climate activism in Uganda.

Notes

[1] In August 2018, 16-year-old Greta Thunberg began demonstrating for climate justice in front of the Swedish parliament. From this protest arose a global social movement under the slogan Fridays For Future, which, according to organizers, covered 163 countries and over four million people in September 2019.

[2] This chapter results from a research project titled 'Youth Activism and Fridays For Future. A global and intersectional perspective funded by the Austrian Science Fund P 37202, and in which we (Petra Dannecker, Nancy Otyang, Fahima Al Farabi and Michaela Hochmuth together with our research partners Robert Esuruku and Ainoon Naher) are using a mixed-methods approach to analyze youth activism in the respective countries.

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12

Youth Engagement for Climate Action: the Case of the SAUTI-Youth Project in Tanzania

Evench Gomes, Kathy Reilly, Una Murray, Aidan Sinnott and Maurice Sadlier

Introduction: Climate change, SAUTI-Youth and citizen voice and action

The relationship between young people and climate change is complex and multifaceted. Representing one of the world's largest minorities (Ansell, 2005), contemporary young people live at a time of entangled global crises trying to make sense of the messiness, responsibility and burden to solve, often placed on their shoulders. As early as Agenda 21 (1992), children and young people were recognized as central actors within society, an extensive global population with the potential to act as catalysts in addressing the world's most serious problems. Article 6 of the United Nations Framework Convention on Climate Change (UNFCCC, 1992) emphasizes the importance of education, training and public awareness (among other actions) to provide scope for young people (among other social groups) to engage climate knowledge and associated actions. The programme(s) of work that followed specifically make targeted provision for engaging young people as a vital group in shaping and actioning policies related to climate change. These (and subsequent decisions) identify young people as a vital resource for climate action across a multitude of scales (global, regional, local); advocating for an understanding of young lives that embodies diverse life experiences and is sensitive to contextual nuance.

Further to this, we recognize that not all young lives are homogenous but represent a myriad of life experiences often dependent on where one lives and grows up in the world. In the context of climate change and

climate action, the diverse nature of young lives and their situatedness (Rose, 1997) requires climate policies and subsequent actions that are sensitively developed to ensure contextual relevance and the capacity for local engagement. This stresses the need for comprehensive approaches to climate action that consider youth participation not only as environmental protection but also as a means of shaping economies and societies more broadly. This transformative ethos demands a rights-based approach, stressing the need for comprehensive approaches to climate action that consider youth participation as a fundamental human right[1]. This approach not only supports environmental protection but also recognizes youth participation in this arena as a means of shaping economies and societies more broadly. Tailoring youth engagement strategies to the socioeconomic intricacies of each country is crucial, acknowledging influencing factors like educational systems, employment landscapes and cultural norms. Ultimately, the connection between youth participation and climate action forms a nuanced landscape that transcends borders, offering a range of opportunities and challenges that have the potential to influence the course of global climate politics. Drawing from the case of Tanga in Tanzania, this chapter explores young people's engagement in climate action through the lens of World Vision's SAUTI-Youth project.

The SAUTI-Youth project aims to empower young people to become influential voices on climate issues within their communities, facilitating active monitoring of, and engagement with, government and their commitments to climate action, to drive climate initiatives (World Vision Ireland, 2019). As part of the SAUTI-Youth project young people monitor local government's efforts in addressing climate-related concerns, including the allocation of budgets for sustainable climate actions (World Vision Ireland, 2019). Furthermore, the project provides a platform to initiate conversations between young people and local authorities, advocating for, and creating an atmosphere that, fosters creative solutions within local communities. Although SAUTI is an acronym for the project ('Sustainable Accountability Uniting Tanzanian and Irish Youth') the word also carries a deeper meaning, signifying 'voice' in Swahili. While the programme was delivered in Galway in the west of Ireland and Tanga in Tanzania from 2020 to 2023, this chapter focuses on the Tanzanian context.

The Tanga Region is located in the northeast of Tanzania; it has a young population and is a largely rural and coastal area. Tanga City is its administrative and economic hub, with fishing and agriculture central to the livelihoods of the region's inhabitants. Like many regions across the continent of Africa, climate change has had a significant impact on the Tanga Region, compounding existing environmental challenges and creating new threats to lives and livelihoods. Impacts include changing rainfall patterns, rising temperatures, sea level rise and increased vulnerability to extreme

weather events. Useful also at this juncture, is an acknowledgement that what constitutes a young person is contextually dependent. In Tanzania, young people are considered any person between the ages of 15–35 years old (National Youth Policy Tanzania, 2007), and as a result young people involved in the SAUTI-Youth programme in Tanga were aged between 15–35 years.

Using the citizen voice and action (CVA) approach, the SAUTI-Youth project was committed to repositioning the voice of young people as central in climate conversations within communities and local government. According to World Vision CVA 'is a local advocacy approach that helps communities engage directly with government service providers to improve the quality of the services they provide at the community level' (for further details see www.wvi.org/sites/default/files/CVA_within_DPA.pdf). In exploring the multilayered dimensions of programme implementation, the chapter explores the impact of effectively harnessing youth agency in addressing climate challenges. Through an exploration of the Tanga context, the chapter considers how skills development, education and gender dynamics contribute to young people's active participation and advocacy in and across themes relating to climate change. Based on the findings, we advocate for the inclusion of the CVA approach to create, enhance and support young people's engagement in climate action.

Young people, activism and climate change

Literature addressing the theme of young people and climate change is growing both in geography and beyond, though much of it remains situated in Minority World contexts. Work in this area engages a broad series of places and spaces, conceptualizing the position of young people in relation to discourse on the current climate crisis and the role young people might play in helping address the enormity of the crisis. Young people's involvement in climate action is crucial, highlighting the significance of young voices and the importance of citizen-led actions in advocating for climate-sensitive policy initiatives and holding those responsible for delivering on climate promises accountable. The sight of young people converging in public spaces speaks volumes about their resolute commitment to climate action (Christou et al, 2023). Their presence is not merely symbolic; it signifies a demand for inclusion and active participation in shaping their future. Through public protests and other forms of activism, young people assert their visibility and stake their claim in various spheres of public life (Christou et al, 2023).

Central to the concept of youth engagement in climate action is the recognition of children and young people as active participants in environmental education and research. This approach underscores the necessity of understanding and valuing the unique experiences, viewpoints

and ways young people interact with their environment (Cutter-Mackenzie and Rousell, 2019). Education then emerges as a cornerstone of youth empowerment in climate conversations, equipping them with the knowledge and skills necessary to make informed decisions and contribute to debate in the field. However, the role of education extends beyond the dissemination of information, to encompass issues that straddle multiple scales across multiple themes (Dunlop et al, 2020). This holistic approach equips young people to navigate the complexities posed by climate change, empowering them to become active drivers of positive change within their own lives and networks. By interweaving educational programmes with innovative methods such as CVA, young individuals are endowed with the tools needed to initiate and sustain effective climate action. CVA then, in the context of this chapter is central to addressing a number of core challenges facing young people in Tanga (World Vision Ireland, 2021; IIED and World Vision Ireland 2020; World Vision Ireland, no date). A lack of educational opportunities (both academic and vocational focused), compounded by poverty, poor access to adequate healthcare and a history of entrenched gender inequalities, have long marginalized the voice and capacities of young people. Further to this, there is little to no tradition of young people being consulted and involved in decision making around local or national issues. SAUTI, using the CVA approach sought to develop a platform to connect young people with decision and policy makers through a programme of climate action.

While much of the literature supports the idea that young people are knowledgeable about climate change and the climate crisis, some clear knowledge gaps remain (Portus et al, 2024; Reilly et al, 2024). These include (but are not limited to) a lack of know how around mitigation and adaptation measures (Baldwin et al, 2022), and the cobenefits of addressing both a lack of knowledge on the political process and the importance of engaging in their national self-defined climate pledges under the Paris Agreement (Nationally Determined Contributions, or NDCs) (among other commitments). Furthermore, young people can feel a sense of hopelessness due to the enormity of the challenge posed by the climate crisis (Jones and Davison, 2021). Such gaps point towards the critical importance of targeted knowledge and skills training in and around climate action and the need for critical analysis to be able to evaluate and see through national claims with regard to climate-change promises. Therefore, it is important to provide young people with the necessary support to develop the skills essential for meaningful engagement, creating opportunities for climate action (Narksompong and Limjirakan, 2015) whilst being mindful not to unnecessarily overburden young people with the responsibility of 'solving' the crisis. The potential of such youth-driven actions and activism provides an alternative to adult-driven climate action (Trott, 2021). Youth activism's essence lies in its potential to challenge these norms, revealing their

inadequacies and advocating for a societal paradigm shift. By embracing CVA methods, this chapter aims to unpack the potential of youth activism to introduce innovative perspectives to climate action (Sustainable Development Goal 13). By extension, when young people lend their voices to social movements advocating for climate action, they embody a sense of responsibility for and towards future generations. This responsibility drives them to demand accountability from decision makers, urging governments and institutions to answer for their actions.

Research around young people's activism has also explored the impact of digital media and social networks, pointing towards the impact of effectively harnessing technology as a conduit for raising awareness, inspiring action and motivating young individuals to spearhead positive change (Rousell and Cutter-Mackenzie-Knowles, 2020; Senbel et al, 2014). Viewing climate change as a 'slow pandemic' offers a fresh perspective on the crisis (Christou et al, 2023), bridging essentializing climate-change discourse outlining the urgency inherent to climate conditions that have tragically become mundane. The gradual nature of climate change compels youth activists to advocate for action that may not be prompted by a sudden emergency. This approach demands proactive and assertive action, demanding accountability and change even in the absence of crisis. In championing social accountability through citizen voice and action, young activists underscore the essence of urgency, compelling governments, and associated institutions, to respond promptly to a relentless climate crisis. What remains largely absent from much of this work are perspectives from the Majority World and the need to challenge the temptation positioning all young people and all young lives as homogenous – when this is certainly not the case. Some initiatives are beginning to emerge such as the International Youth Climate Delegate Programme to embed youth from underrepresented groups in climate-change policy making at COP28, with a priority for youth delegations from Least Developed Countries (LDCs), Small Island Developing States (SIDS), Indigenous Peoples and other minority groups. YOUNGO has been the Official Children and Youth Constituency of the UNFCCC for many years, although some argue that the system itself moulds and constructs how representatives act (Marquardt et al, 2024; Thew et al, 2020). While there are multiple initiatives connecting young voices and climate action at an international scale, it is important to recognize that there is an emerging scale to some of these initiatives, with difficulties associated with capturing and recording the impact of more localized, small-scale climate action led by and for young people. Taken cumulatively, young people's engagement represents a strong force for change, holding governments, institutions, and societies accountable for their actions – or lack thereof – in shaping a sustainable future for generations to come.

Methodology

Data for this chapter were collected during seven semi-structured group interviews[2]. Participants were selected through a purposive sampling strategy to include insights from key personnel and project participants from World Vision Tanzania and Ireland who were involved in the implementation and management of the World Vision SAUTI-Youth project in Tanga. The seven group interviews included 18 interviewees, representing nine youth participants from the SAUTI-Youth programme in Tanzania and five representatives from World Vision Ireland and Tanzania. Semi-structured group interviews were included as part of the research design to better understand the implementation and impact of the CVA method in the broader SAUTI-Youth project in Tanzania. The interviews were conducted in the second half of the SAUTI-Youth final year (2023). These interviews addressed themes on how the CVA approach effectively engages young people in climate action. The interviews explored participants' roles, experiences and personal growth within SAUTI-Youth. Moreover, the interviewees discussed the obstacles they encountered and reflected on the learning journeys of participating young people, influencing their commitment to climate action. Finally, discussions also engaged themes around programme sustainability and the enduring impact of the CVA method in fostering long-term youth involvement in climate action.

Interview data was qualitatively analyzed using thematic analysis. Interview transcripts were coded to identify recurring themes, patterns and discrepancies. The emergent themes then underwent a process of review to ensure relevance and stringency (to avoid bias in the data). The themes emerged in an organic manner, reflecting participants' voices and capacity to shape the narrative. This approach ensured that the themes genuinely echoed through the interviewees' perspectives, providing a rich understanding of elements associated with the SAUTI-Youth project's implementation and impact. In allowing the data to speak for itself, the resulting themes captured the complexities, successes, challenges and impacts of the SAUTI-Youth programme.

Research for this chapter also faced a number of challenges. These included a limited timeframe for data collection, and potential limitations produced by using a purposive sampling technique. Furthermore, the findings may not be generalized beyond the specific context of Tanzania. Nevertheless, the case study approach provides valuable insights into the CVA method's application in different environments and can inform future research and programme implementations. This methodology enabled a comprehensive examination of how the CVS method was adopted for engaging young Tanzanians in climate action. The findings will contribute to the body of knowledge on participatory approaches to climate action and may guide

policy makers and organizations in designing effective programmes for youth engagement in addressing climate challenges.

Results and discussion

The politics of funding

SAUTI-Youth was regarded as hugely successful in its delivery and implementation with young people in Tanga, Tanzania. SAUTI-Youth recognizes the critical relationship between the impact of climate change and the challenges faced by young people, particularly in regions like Tanga. The project aims to empower young people with the knowledge, skills and tools needed to *adapt to climate change* and advocate for sustainable environmental practices. Through educational initiatives, training and advocacy workshops, SAUTI also promotes gender-sensitive approaches to climate issues, creating active networks between young people and decision and policy makers across a variety of local and national scales, ensuring that young voices are included in building more resilient communities. Project workers commented positively on the degree of sophistication operationalized across the project, emphasizing that existing expertise and active networks between communities and local governments led to a series of more successful climate actions and associated outcomes.

In Tanzania, local government departments are often under resourced, both in terms of funding and personnel. World Vision's approach to community development relies on close cooperation with local government bodies and technical officials when delivering programme activities, recognizing local stakeholders as the ultimate owners of development within their communities. The SAUTI-Youth project was implemented within two pre-existing long-term (10+ years) World Vision Area Programmes through which World Vision regularly cooperate with local government officials on development activities: 'It's really common for the local government in Tanzania to cooperate with World Vision and for World Vision to provide funding for those types of activities like tree planting or beekeeping' (WV Representative, Ireland). The strong pre-existing relationships between World Vision and district authorities in Handeni and Korogwe (Tanzania) facilitated an easy introduction to the CVA project model for government authorities and enabled a strong foundation of trust between government officials and the SAUTI-Youth groups engaged in monitoring their activities. This practice aligns with the principles of development aid, where nongovernmental organizations (NGOs) collaborate with local governments to address challenges and achieve common goals. NGOs can sometimes become reliant on aid agencies for their funding, which can shape their priorities and strategies (Edwards and Hulme, 1996). In Tanzania, the strong collaboration between

local governments and international NGOs like World Vision demonstrates how development assistance can influence funding patterns and drive joint efforts for environmental protection.

Nurturing youth climate action: the challenge of diverse and dynamic needs

> I think that there are certainly different demands on the young people in Tanzania and the vast majority of the young people involved in the project are normally engaged in subsistence agriculture… so the SAUTI-Youth project, particularly in terms of the income generating activities which is very attractive for them to participate in the project. So, you see a high amount of engagement from the Youth in Tanzania. (WV Representative, Ireland)

This emphasizes the importance of contextual factors in shaping youth participation. In Tanzania, SAUTI-Youth's climate-sensitive income-generating activities attracted high engagement due to economic incentives supported by local government. This series of initiatives (for example, funding the planting of trees in the Tanga region) aligns with the local economic realities (and needs) of young people's lives. For example, James (SAUTI-Youth participant) indicates that his participation in the programme has given him the capacity 'to not only know climate change, but also … to know how to do something about it.' This analysis upholds the complexities of youth participation, aligning with theoretical discussions of real-world examples on how different contexts impact engagement approaches.

Acknowledging gender as a cultural challenge

> Gender is a huge focus of the project … it tends to be that men become involved in politics at a greater rate and then at community meetings it tends to be it's not always the case, but it tends to be the men who speak, the men tend to be more influential in the community. (WV Representative, Ireland)

A significant element of the SAUTI-Youth project in Tanzania was ensuring the inclusion of diverse voices and encouraging young women to become involved in the project, enabling this group to have a more active role in their community. Young women essentially experienced a dual challenge both in relation to gender and age. Therefore, facilitating such sustained participation was challenging in Tanga due to cultural expectations that did not include a positioning of young women as actors in local community decision-making processes. This is reflected in the experience of the project coordinator in Tanzania: 'The responsibility of women is with household chores, taking

care of the families, cooking and everything, so at first it was difficult to engage much of the female youth, but they're now taking on the project'.

The challenges faced in Tanzania regarding gender dynamics and young women's participation resonate with much of the literature in the field of children and young people's geographies (for example, Badstue et al, 2021). In the context of Tanzania, young women faced multiple challenges, the need to find a voice as a young person – a group often overlooked in decision making at a variety of scales, but also as young women – a group traditionally associated with the home and domestic work. Using the theme of climate action, the SAUTI-Youth project created a space in Tanga that provided opportunities to challenge cultural expectations around the role and place of young women reflecting calls within the literature to acknowledge the complexities around such participation.

'It was challenging as a woman because it was very difficult for them to accept that we can do it (take climate action) as women in our community. So, after SAUTI project coming, villagers started to talk with them, and they have seen that climate change also affects us' (Shania, SAUTI-Youth participant). The sentiment expressed by Shania is reflected in comments by other participating young people (for example, James) who flag the difficulties women faced in participating as a result of their domestic and care-giving responsibilities:

> The main challenge in involving the women in our society is their social status. Because the women are responsible for their family for caring for their child and for fetching water, for cooking. They have many responsibilities to cover, so involving them in the meeting like Sauti meetings or any other dialogue it's very difficult because of the responsibility they have during the day. Every responsible woman will not leave her child to come at the meeting…so all these activities made it hard for the women even if they want to come. (James, SAUTI-Youth participant)

There was a sense that due to the responsibility bore by young women in their domestic and care-giving lives that they could not be trusted to engage in climate actions within the community. Peter (SAUTI-Youth participant) indicates:

> In African traditions women are supposed to stay at home during domestic chores, while the men have the final say of the family or in the community. Now, because our President is female, women are given various opportunities to participate and they have been empowered. So, this influences women to involve themselves in various activities. So those traditions that created barriers between men and women,

> now they have been removed in our community. (Peter, SAUTI-Youth participant)

The experiences shared by Shania, James and Peter illustrate the challenges faced by women in climate action due to societal norms around gender roles. The importance of a female President is significant in that it is used as a strategy by the SAUTI-Youth project to mobilize and legitimize the voice of young women within the project's activities. Within the SAUTI-Youth group in Tanga, the inclusion of young women's voices is valued. This sentiment is not necessarily experienced more broadly across Tanzanian society. There is a sense, though more work is needed in this area, that there was a conscious effort to include women, and this participation was welcomed by men who recognized that women's voices were absent from many local and national decision-making bodies. There remains a sense of hope that a female Tanzanian President would go some way towards changing this attitude.

The local SAUTI-Youth project officer in Tanzania identified a number of risk-mitigation strategies employed throughout the project's 3-year delivery to address gender imbalances among participating young people. These included the following: ensuring half the group are young women (including young women living with disability – however broadly defined); ensuring community leaders are committed to the inclusion and active participation of young women in local climate actions and decision making; to develop a strategic plan to support women's participation in local small businesses providing alternative opportunities to support livelihoods impacted by environmental and climate crisis. These measures aim to reposition the place and role of young women within the communities where they live while also creating a sense of ownership among participating young women towards the climate actions they are involved in developing and implementing. In the context of SAUTI-Youth this showcases on-the-ground solutions that promote inclusivity, empowerment and ownership, bridging the gap between theory and effective implementation. Lucy (SAUTI-Youth participant) states:

> SAUTI helps women not be dependent. Because it helps us to have our own gardens. I have a farm where I grow vegetables, so it helped me financially and now I am independent financially. I can't depend only on my husband, but also I could get some money to support myself through the vegetables that I sell.

Developing skills to champion climate action across challenging contexts

'We were developing skills in things like public speaking, understanding local government processes, how to represent a group of people' (WV

Representative, Ireland). The approach advocated by the SAUTI-Youth project aims to empower young people with the necessary tools (for example, education and information through workshop events focused on types of climate action and why this might be important for their community) to engage effectively with a variety of local actors, representing formal institutions (such as schools) and more informal structures and networks (such as those operational within community contexts). Young people faced a significant challenge in gaining acceptance and legitimacy from schools where they attempted to raise awareness of climate issues and promote climate action with peers. In the context of climate change, Shania comments We had to get support from our headmistress to help us to continue give knowledge to our fellow students and also help them to know how many challenges (are) facing us as girls at the school and also boys … So I thank our headmistress for helping us to give knowledge about those students because in first time they didn't accept in what we are saying to them. (Shania, SAUTI-Youth participant)

This highlights the SAUTI project's emphasis on skill development and education as essential tools for empowering young people in climate action. The emphasis on skills for engaging youth effectively also showcases practical strategies for enhancing youth capabilities in addressing the challenge of climate change. The importance of developing skills and communication capacity was also commented on by Christian and Lucy:

> Through [the] SAUTI project it helped me to have courage and believe in myself. Before, I didn't have courage to stand in village meeting and raise my voice or speak about anything. But through SAUTI project, gave me courage and belief in myself. Now I could stand in the meeting and advocate anything that can benefit the community. Along with conserving the environment also, the project helped me to know about agriculture and domestication of animals and bee keeping. (Christian, WV, Tanzania)

Another young participant commented that the SAUTI-Youth project developed their knowledge about planting trees in their villages. For example Christian (SAUTI-Youth participant) states 'we didn't have knowledge about planting trees. But now we have knowledge about planting trees because they have expert who came to educate us about or how to plant trees in their villages'. These statements reflect the multiple transformations facilitated by and through the SAUTI-Youth project. There is clear value and thirst among young people for skills development both in relation to knowledge and practicable skills (for example, farming and agribusiness). Christian's newfound courage to speak up and Lucy's financial independence through gardening resonates with an ethos of youth empowerment. The focus on agriculture and tree planting signifies a practical contribution and

such insights from interviewees adds depth to the understanding of how projects like SAUTI-Youth can support the empowerment of young people, becoming a catalyst for inspiring participation and positive gender-related outcomes, whilst also addressing multilayered climate challenges. More importantly, these insights point towards the necessity for supporting small-scale, local projects that grow from grassroots interest in improving lives and livelihoods through engagement with young people.

At the project's opening, young people faced many challenges. Shukrani (WV, Tanzania) indicates '… at first it was difficult because you know when go to someone and say that you know this is your responsibility but you are not doing that the right way, then it is difficult for someone to accept. But slowly they understand that "oh this is how I supposed to be".' Christian (SAUTI-Youth participant) pointed towards a positive experience of working with local government in her community noting:

> the CVA model has been a saviour. It's brought together various leaders and especially in local government and also spiritual leaders. Through to the participation of leaders and religious leaders helped them to solve various challenges through CVA. So, then what is very good and it continuous to bring positive changes in the community.

The struggle to gain acceptance and legitimize the voice and views of young people became a prominent theme across the SAUTI-Youth project. Shukrani's account reflects the process of overcoming resistance through understanding and positive engagement. Christian's positive experience demonstrates how the CVA model facilitates collaboration among diverse leaders, showcasing practical success in promoting local government and religious leader cooperation. This provides a practical example of what academic literature describes as partnership-driven approaches for effective youth engagement in climate action.

Conclusion

To effectively engage young people in climate action, communication strategies should be tailored to resonate with their interests, values and concerns (Corner et al, 2015). To encourage voluntary participation messages should focus on areas that young people are passionate about and that may be affected by climate change. Moreover, messages should be delivered by diverse and trusted messengers, such as parents, teachers, peers and scientists, those who have the potential to connect with young people through building a sense of credibility. Furthermore, there is a need to disseminate messages that resonate and are digestible by and for young people to support understanding and capacity for practical climate actions.

Given the complexity of the challenge presented by the climate crisis (Narksompong and Limjirakan, 2015), engaging young people in climate action should involve comprehensive educational initiatives that emphasize the multifaceted nature of climate change and its connections with various societal issues. In the Majority World, where the impacts of climate change are often particularly severe, community-based educational programmes play an important role in helping communities adapt to local climate challenges. These programmes should be tailored to local contexts and incorporate indigenous knowledge, promoting a deep understanding of how climate change affects livelihoods and ecosystems. In the Minority World, educational curricula can integrate climate change topics across subjects, fostering interdisciplinary awareness and encouraging innovative solutions. This approach enables participation in climate solutions that address the broader context, fostering a generation of change makers capable of driving impactful and sustainable transformations across interconnected domains.

Youth needs are diverse. Many require jobs, economic stability and a future beyond what they see as the overwhelming and inevitable effects of climate change. Targeted skill development and training in green sectors identified by youth themselves is one way forward. Forming partnerships with governments and businesses, advocating for green job policies, facilitating job placements and entrepreneurship support, offering mentorship, and continuously monitoring and evaluating their programmes (Barford et al, 2021) is another way that encourages the sustainable use of natural resources. SAUTI-Youth in Tanzania recommended the creation of alternative work sources that encourage people not to cut trees, but instead to preserve natural forests in Tanga. By actively engaging with young people, a sense of economic empowerment and environmental conservation was created as one way to address the multifaceted challenges of climate change and youth unemployment.

Government-led initiatives are often perceived to be accompanied by political agendas (Sarzynski, 2015). Typically government-led policies do not engage with young people while developing climate-change adaptation plans, or whilst putting in place policies that address greenhouse gas emissions (Archer et al, 2014; Baker et al, 2012). Shukrani talked about how the laws are top down, with local government expected to implement, indicating gaps in effective collaboration with stakeholders at regional and district levels. World Vision (Ireland) representatives recommended that there should be collaboration with central government to promote youth decision-making capacities. In establishing joint platforms for dialogue and decision making, where young people actively contribute to shaping climate policies at governmental levels where they have an entry point, inclusivity and ownership on climate action can be fostered. Adaptation and mitigation policies are consequently informed by the unique needs and perspectives of young people, and better commitment to implement climate initiatives is achieved.

The SAUTI-Youth project stands as a testament to the essential role of young people engaging in climate action. By examining its implementation in Tanzania, our work increases the comprehension of the many factors, which contributes to effective youth involvement. In focusing on a combination of academic literature, policies across a variety of scales, and the contextual lived realities of young people in Tanga, the study identifies the need for personalized strategies, cooperation with government and nongovernment stakeholders, and education in supporting youth to tackle the multifaceted problems of climate change. In the final analysis, the SAUTI-Youth project serves not only as a demonstration of successful youth engagement but also as an example of an innovative approach that bridges theory and impactful action in the realm of climate action and the future lives of young people.

Notes

1 For more on how World Vision International view this approach see here www.wvi.org/sites/default/files/2021-11/PX4356%20Sauti-Youth%20Policy%20Brief%20V2.pdf

2 Research completed as part of this project was guided by the ethical research principles (in particular, informed consent, assurances around confidentiality and adherence to rules regarding the handling and storing of data) as outlined by the Research Ethics Committee at the University of Galway, Ireland.

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13

Environmental Justice, Climate Change and Food Security: Interventions with Refugee Children in Western Uganda

Margaret Wagana

Introduction

Focusing on the Young African Leaders Initiative – Green Refugees Community Project, this chapter explores the interconnected issues of climate change, food insecurity and environmental injustice affecting refugee children in Uganda. I investigate how these factors impact the well-being of refugee children and examine the role of nongovernmental organizations (NGOs) and external partners, as well as constitutional and judiciary responses to addressing these challenges through climate interventions. Taking an interdisciplinary approach of law, social sciences and anthropology, this chapter centers climate and environmental justice in order to address the needs of refugee children.

The global ecological crisis is one of the most detrimental dangers to global humanity (Cathi, 2023), while Sardo (2023) argues that climate change is a structural injustice demanding a theory of political responsibility. A climate-justice approach entails making equity and human rights the crux of decision making on issues pertaining to climate change. Environmental justice, which seeks significant participation from all people – including minorities – in the execution and implementation of environmental legislation and policy, is a complement to this. Environmental protection has become an important topic globally (Cathi et al, 2023; Agyeman and Evans, 2014; Bullard, 2014;

Mol, 2016). The interaction between people and the environment raises complex societal issues, and Latour (2017) takes an interdisciplinary approach comprising future collaboration with scientists, theologians, activists and artists as the world modifies itself to the novel climate regime.

Uganda is a country rich in natural resources but also faces numerous environmental challenges, including deforestation, pollution and climate change. Food security is an important component of the overall welfare of refugees and should be a key factor addressed in climate action. Of the refuges worldwide, 1.36 million of the 25.4 million, including some children who suffer from poor nutrition, live in Uganda (Mandre et al, 2022). As global challenges increase, food insecurity, climate justice, environmental justice and vulnerable child populations intersect at a critical point. These intersections impact the entirety of displaced populations, thus requiring urgent and sustainable solutions. It becomes critical to adopt interventions that not only mitigate short-term concerns but also foster long-term resilience equitably among the various refugee settlements in the country, particularly in Western Uganda. In this chapter, I aim to examine fair and long-lasting interventions while highlighting the particular difficulties that child refugees who experience food insecurity due to climate change face, while scoping the legal and policy grounds for seeking environmental justice.

First, the chapter sketches the local climate context and discusses the environmental stressors and social conditions constraining the capacities of refugee communities to adapt to the changing climate and build resilient futures. I then explore potential grounds for responding to these structural challenges through the frames of environmental justice, considering conceptual, constitutional, statutory and judicial positions. I then introduce the Young African Leaders Initiative – Green Refugees Community Project, which was research I led in order to examine the role of NGOs and external partners in supporting refugee children. Intervention efforts have focused on improving access to education, providing livelihood training, and enhancing agricultural productivity through the introduction of climate-smart farming techniques. However, the scale and scope of these initiatives have been limited, and more comprehensive and coordinated efforts are needed to address the complex and interrelated challenges facing refugee children in Uganda (Ahimbisibwe, 2019; Awidi and Quan-Baffour, 2020; Bjørkhaug, 2020).

Refugee settlements in Western Uganda: background and context

Western Uganda has been a refuge for 1.6 million displaced individuals who have fled conflict and persecution in neighboring countries, including the Democratic Republic of Congo, South Sudan, Rwanda and Burundi

(UNHCR, 2023). For the purposes of this research, Kyaka II, Oruchinga and Rwamanja refugee settlements were visited. These settlements are often situated in rural areas with limited resources and infrastructure and limited access to essential services and economic opportunities, making it difficult for both refugees and host communities to sustain their livelihoods (Hovil, 2007). They are characterized by a fragile ecosystem, strained resources and limited opportunities for development, negatively impacting the welfare of host populations residing around the settlement (Zhu et al, 2023). The influx of refugees can strain local services, including education, healthcare and food security, further exacerbating the already precarious situation (Jacobsen, 2006). The competition for scarce resources can also lead to potential conflicts between refugees and host communities, further destabilizing the already fragile social and economic fabric of the region.

Refugee settlements in Uganda often face pollution, deforestation, scarce water and drought. In recent years, the region has been grappling with the adverse effects of climate change, including erratic weather patterns, prolonged droughts and increased temperatures, which have exacerbated food insecurity and heightened vulnerabilities among both refugee and host populations (Serwaja et al, 2024). The impacts of environmental degradation can be particularly severe for refugees, who may have limited access to resources and limited ability to adapt to changing conditions (Cláudio, 2007). A recent study found that erratic weather patterns threaten food security due to the rising temperature and heatwaves (United Nations, 2023), resulting in an increase in the sale of charcoal to combat crop failure. The erratic weather patterns comprise extensive dry spells combined with droughts and flash floods. There is now a heavy dependence on agriculture, affecting migration patterns whereby people are seeking employment, thus leaving permanently (Reliefworld, 2023). This has led to increased competition for scarce resources and potential conflicts. These environmental stressors can have a devastating impact on the region's already limited resources, leading to deforestation, soil erosion and water scarcity, which in turn negatively affect the livelihoods of both refugees and host communities (Jamshed et al, 2020).

Nearly 820 million children worldwide are exposed to harsh environmental risks, including heatwaves, which significantly affect their well-being (UNICEF, 2023. In Uganda, refugee children face unique challenges due to their displacement and the often precarious conditions of refugee settlements. Refugee children in settlements like Kyaka II, Kiryandongo and Oruchinga experience limited access to clean water, sanitation facilities and healthcare. They may also be exposed to environmental hazards, such as contaminated soil, air pollution and extreme weather events.

Refugee households in Uganda often rely on subsistence agriculture to support themselves, making it crucial to consider the relationship between environmental benefits and food security (Huang et al, 2023). For example,

extreme heatwaves in Uganda can lead to crop failures, impacting the food security of refugee families who depend on agriculture for sustenance. Additionally, the lack of access to clean water and sanitation facilities in refugee settlements during heatwaves can increase the risk of waterborne diseases, further endangering the well-being of children. Sustainable food security is vital for the well-being of refugee children, but it can only be attained in a safe and legally protected environment; several issues ranging from rising refugee numbers, protracted refugee situations and the burden of hosting refugees to dwindling resources and scarce external aid weaken Uganda's generosity (Ahimbisibwe, 2019).

Understanding these complexities is essential for developing effective strategies to address the needs of refugee children in Uganda. Sustainable agricultural practices, such as agroforestry and permaculture, can help protect the environment while ensuring a steady food supply. However, limited access to land, seeds and agricultural inputs might make these practices more difficult. It is important to include adult learning and education in helping refugees adapt their way of life and become self-sufficient. For example, giving refugees access to agriculture extension education and financial literacy can help them learn the skills they need to adapt (Awidi and Quan-Baffour, 2020).

Responding to environmental and climate injustice

To address these complex and multifaceted challenges that refugee populations face, a comprehensive approach is needed that considers the complex interdependencies between rural and urban areas, as well as the impacts of climate change on the region (Jamshed et al, 2020). Sustainable rural development strategies that prioritize the needs of both refugees and host communities while also mitigating the effects of environmental degradation are crucial (Mihai and Iațu, 2020; Jamshed et al, 2020). By addressing the unique challenges faced by rural refugee settlements through a collaborative and holistic approach, we can work towards a more equitable and resilient future for all those affected by forced displacement and environmental stressors in rural regions.

While the feminist movement has empowered women to advocate for their environmental rights, their voices are frequently marginalized in policy-making processes (Eastin, 2018). At the grassroots level, women are often at the forefront of climate-change adaptation efforts, but national laws and policies may not adequately address their specific needs and challenges. Incorporating the unique experiences and solutions of women into climate adaptation plans can lead to more effective and equitable responses to the challenges posed by a changing climate in the region. By working closely with women farmers to implement sustainable irrigation systems or drought-resistant crop varieties, communities can better withstand the effects of climate

change. Additionally, involving women in decision-making processes ensures that adaptation strategies are culturally appropriate and address the specific challenges they face (Lawson et al, 2019; Addaney et al, 2021). Addressing these gaps and empowering women as leaders in climate adaptation is crucial for building resilient communities in the face of a changing climate. It is clear that the intersection of gender, climate change and vulnerability requires urgent attention. Adaptation and mitigation policies must address the specific needs and challenges faced by women and other marginalized groups to ensure climate justice and promote more equitable and resilient communities.

Key to this is environmental justice, which highlights the disparate impact of environmental degradation on marginalized communities. This emphasizes equal protection and meaningful participation in decision making, is essential for all individuals, including refugee children (Pellow and Vazin, 2019; London et al, 2011). The equitable distribution of environmental benefits, particularly in relation to sustainable food sources, is a fundamental right that requires consideration and intervention (London et al, 2011; Cláudio, 2007). Environmental justice ensures that all individuals, including refugees, have equal access to environmental benefits and are involved in decision-making processes related to environmental policies (Bjørkhaug, 2020; Ahimbisibwe, 2019; Huang et al, 2023; Opono and Frank, 2023).

Refugee policy and climate policy must work together. Refugee policies should prioritize environmental sustainability and ensure that refugees have access to the resources and support they need to adapt to climate change. Uganda has one of the most favourable refugee policies in Africa, with an 'open border and settlement approach' that allows refugees to move freely, work and access government services (Huang et al, 2023). However, the country still faces significant challenges as refugees and host communities grapple with 'lack of information, transparency, and accountability of EU programs' and struggles with limited resources and environmental stressors (Opono and Frank, 2023). Climate policies should also take into account the specific needs and vulnerabilities of refugees and ensure that they are not marginalized or excluded from decision-making processes. By promoting environmental justice and ensuring that refugee children have access to a safe and healthy environment, we can help to build a more equitable and sustainable future for all (Huang et al, 2023; Ahimbisibwe, 2019). I now turn to explore how environmental justice is currently framed in constitutional, statutory and judicial terms in Uganda.

Constitutional, statutory and judicial positions on environmental justice

Article 39 of the 1995 Constitution of the Republic of Uganda emphasizes that Ugandan citizens have a right to a clean and healthy environment,

ensuring protections of the atmosphere, land and water alike. Article 34(4) protects children from all activity harmful to their well-being. Additionally, Article 254 requires Parliament to enact legislation promoting environmental protection. The National Environmental Act No. 5 of 2019 (NEA), which mandates environmental protection and addresses environmental issues like climate change, supports this. Section 2(2)(j) of the NEA necessitates environmental awareness to be part of the school curriculum at all educational levels. These constitutional provisions and legal frameworks demonstrate Uganda's commitment to environmental protection and the well-being of its citizens, including children. However, their effective implementation remains crucial to address the ongoing environmental challenges and ensure a sustainable future.

While Uganda's legal framework provides a foundation for environmental protection and the well-being of children, the case of Tsama William and 47 others vs. Attorney General and two other Miscellaneous Cause No. 024 of 2020 highlights the challenges in ensuring effective implementation and enforcement of these laws, particularly in the context of climate-related disasters like landslides. The applicants had brought an action against the government of Uganda for failure to take appropriate action to mitigate the risks of landslides in Bududa District, Uganda. The applicants were displaced; 20 of their relatives were deceased; their property and the environment were destroyed. They prayed for compensation and for the government to put in place procedures to effectively deal with landslides in accordance with the National Objectives and Policy. To date, the matter has not been concluded.

Additionally, children have a right to a healthy environment, such as in Greenwatch vs. Attorney General and NEMA [2002] UGHC 205 (Misc. Cause No. 140 of 2002—Civil Division). The matter was brought before court for an order to ban the manufacturing and sale of plastic goods, which were poorly disposed of and ended up heavily polluting the environment. The Court declared the manufacture and use of such disposable plastic bags and containers violated an individual's right to a healthy environment. Refugee children, just like host children, have a right to a healthy environment.

Further, the Ugandan courts recognized the preservation of environmental rights of the Butamira community in Lugazi Village, Buikwe District, in Central Uganda in the case of Advocates Coalition for Development and Environment vs. Attorney General (Miscellaneous Cause No. 0100 of 2004)**.** This case involved the change of land use from forest to plantation. The High Court held that the law should be used as a tool for national development and should avoid the prevention of economic progress. Further, there was a breach of public trust, and the forest reserve was held in trust for the citizens. There was a need for the consent of the community before any licenses were issued to carry out works on the reserve. The relevance this case has to the welfare of refugee children is that no individual or entity

can unanimously enter a forest reserve in a refugee settlement and cut their trees to plant commercial crops for export, which has been happening in different areas like Lugazi District in Central Uganda. Such practices have resulted in soil erosion in some parts of the country.

The polluter pays principle was highlighted in the case of Nyakaana vs. NEMA, Attorney General & Others [2015] UGSC (Constitutional Appeal No. 05 of 2011). In this ruling, the court considered the balance between the right to a clean environment and the right to private property. However, the Supreme Court emphasized the 'Polluter Pays Principle' and the 'Precautionary Principle' were part of Ugandan law. This takes into consideration that legal interventions are necessary. Both refugees and host communities have a right to a clean, safe environment. Furthermore, as much as there is a need for national development, communities need to be consulted with before any drastic change in land use. While policy implementation remains a challenge, I now turn to consider a grassroots climate intervention in which fruit trees form the basis of food security action among refugee children in settlements in Western Uganda.

Young African Leaders Initiative – Green Refugees Community Project

I was appointed as Coordinator of the Young African Leaders Initiative – Green Refugees Community Project (YALI-GCRP), which was implemented under the Tunaweza Foundation. A group of Ugandan delegates chosen as the 2019 cohort of Young African Leaders proposed the project, which the Foundation was able to fund with a USD 20,000 grant from the American Embassy. The YALI-GCRP aimed to address the pressing issue of deforestation due to cutting trees for charcoal and decided to focus on fruit trees as an intervention strategy due to the need to not only tackle deforestation but shift the focus to food insecurity in refugee settlements in Uganda. Fruit trees were least likely to be cut down for charcoal as they were a food source.

At the time of the project, I was a judicial officer working for the government of Uganda and pursuing a doctorate, with a central focus on refugee welfare. This academic background provided a valuable theoretical framework for understanding the challenges faced by refugees and developing effective intervention strategies. Additionally, my experience as a judicial officer, which included working on cases of illegal deforestation in Central and Western Uganda, underscored the severity of the environmental crisis and the urgent need for sustainable solutions using the most suitable research methodology.

I identified and mapped out 11 refugee settlements and two internally displaced person's settlements across Uganda. Resources comprising of

grafted fruit trees, fertilizers and digging implements were procured locally within the respective districts. A team of 12 volunteers was divided into four groups, each responsible for three settlements and the IDP settlement. I coordinated the team that focused on Western Uganda, in particular Kyaka II (Kyegegwa District), Oruchinga (Isingiro District) and Kiryandongo (Kiryadongo District) refugee settlements. The Western region is notorious for its loss of trees to charcoal burning, as when one enters the region, large bags of charcoal are visibly sold on the roadside for kilometers on end. Further, the three refugee settlements had been selected because of food shortages in the settlements, heavy loss of trees, drying of trees and vegetation, the precarious nature of humanitarian aid and the loss of agency of refugees in food production. Currently, in the settlements, different families grow their own food. The refugees are allocated plots of land to farm food by the Office of the Prime Minister (OPM), which caters for all refugee needs. Food donations from the UNHCR and other local and international organizations serve as a substitute for this. The different schools in the settlements also have gardens with maize and various vegetables. They also have few trees within the settlements, which serve as a source for making charcoal to boil water and cook food. Most of the trees had been felled for wood, while other trees that had been planted by other NGOs had died before reaching maturity. There were barely any fruit trees in the settlements.

This study employed a qualitative approach. From August to September 2022 I engaged students, teachers and officials in fruit tree-planting activities within the settlements. The research intervention aimed to apprise policy development and decision-making processes by identifying effective strategies for mitigating climate-change impacts on minority vulnerable groups. Qualitative insights on food security and intervention strategies were gathered through in-depth interviews with 12 key informants, including refugee children, headteachers and agriculture teachers, UNHCR officials for the region, NGO directors and representatives, government representatives from the Office of the Prime Minister, and community leaders. Approximately 90–100 students in total participated in focus group discussions and tree-planting activities. In each school, 30–40 students participated in a focus group discussion on the themes of climate change, food security and deforestation. Each student participated in planting a tree, which they named after themselves, and were excited to individually care for it until it grew to fruition. Students were awarded prizes like t-shirts and informed of the importance of sustainable solutions to food security, the relevance of grafted trees and relevant information on keeping growing fruit trees.

The fruit trees were an intervention strategy for sustainable food production, with heavy emphasis on refugee agency and self-reliance. This reveals a dynamic relationship between ecological interventions, local livelihoods and climate resilience. School officials were picky about particular

grafted fruit trees that would be advantageous to the entire settlement. The chosen fruit trees were carefully selected to ensure maximum yield and nutritional value for the community. The school officials believed that by providing the refugees with the knowledge and resources to cultivate these trees, they could empower them to take control of their own food sources and become more self-sufficient. This holistic approach to sustainable agriculture not only sought to address immediate food needs but also contribute to the long-term resilience of the community in the face of climate change. The findings indicated that limited mobility and the multigenerational nature of refugee communities have created a precarious situation. Vulnerable children face the risk of becoming a new generation of refugees, facing the same or even greater challenges, such as food insecurity, without the assurance of international donor support (Awidi and Quan-Baffour, 2020). Currently, some donors have already started pulling out of Uganda to focus their resources on the Ukrainian refugees.

The interest by the majority of the children in planting fruit trees revealed their awareness of the importance of refugee agency with regard to food production, and they understood the need to monitor the trees to fruition as it gave them individual agency. Teachers were able to show the progress of fruit trees they had planted years ago, and students were encouraged to name each tree they planted to ensure it grew to maturity. In the Kyaka II settlement, one of the teachers stated We would like grafted tree seedlings of mangoes, oranges, and avocadoes. We need fertilizer, water, and pesticides to enable the trees to grow as many dry up. Others are cut down to make charcoal. We prefer fruit trees and need more training on caring for them for food security. One of our biggest challenges is that NGOs provide us with seeds but never follow up on the welfare of the trees. They don't leave money for the upkeep of the tree planting project, and some trees die before maturity.

The secondary school children demonstrated a strong understanding of climate change and food insecurity but had limited knowledge about how to plant fruit trees and the different varieties of seedlings available. In contrast, the primary school children had a basic understanding of climate change but were extremely excited to learn about planting fruit trees. They were introduced to grafted trees and learned new skills, such as proper spacing, appropriate fertilizers and pesticides, and how to take responsibility for caring for the trees as they grew. A supportive agricultural teacher who emphasized the significance of sustainable food sources facilitated this hands-on learning approach. One of the refugee children in the Kyaka II settlement stated

> At home, my parents grow maize, but we don't have fruit trees. I prefer to plant fruit trees because our teachers have taught us about the benefits of fruit trees. They can feed the entire school continuously for years

to come. After planting my tree, I will name it after myself and keep checking on it and watering it to help it grow.

One of the biggest issues NGO representatives and teachers spoke about was the challenge of limited access to land in the settlements. There was a food security challenge and competition between hosts and refugees over land, which is a finite resource. In Kiryandongo and Oruchinga settlements, there seemed to be fewer trees by the schools than at Kyaka II settlements. The teachers in these settlements were happy to provide the little school land to plant the trees, as it was during the rainy season. They were concerned about procuring more land to plant trees, as land is a finite resource. They were optimistic about securing more land to continue such a positive interventionist strategy in securing sustainable food sources, as they too were dealing with an increase in the number of refugees within the settlement. The agriculture teachers were positive about introducing nutritious, sustainable food sources to the settlements, especially for the schoolchildren. Similarly, the teachers were hoping for NGOs and OPM to follow up and provide funds towards fertilizers and maintenance of the trees. They had challenges where some trees would die off due to failure to be maintained, and they could only procure fertilizer from animal waste and more advanced forms of fertilizer from agriculture shops supplying farms regionally.

Opono and Frank (2023) address the socioeconomic factors around refugee settlements in refugees' motivation and attitudes towards integration in Uganda. Uganda has been widely praised for its progressive refugee management policies, which allow refugees to live alongside Ugandan citizens and have access to land, work and social services (Huang et al, 2023). However, the challenges of refugee integration, particularly in the education sector, persist (Willmott, 2016). Consistent engagement with schools through interventions such as this have the potential to reduce the challenge of drying up the trees and the failure of NGOs and governmental agencies to follow up and provide resources to maintain reforestation projects from the time of planting to maturity.

Interventions as climate justice in action for refugee agency and self-reliance

Uganda's welcoming refugee policies, which allow for unrestricted entry and settlement, have garnered international recognition as a positive example for other nations. However, the study suggests that there are still limitations and contradictions within the system that need to be addressed. Consequently, the study highlights the need for a more comprehensive and nuanced approach to refugee integration in Uganda, with a focus on addressing the challenges faced by refugee children in accessing education and ensuring

their long-term integration and self-reliance (Awidi and Quan-Baffour, 2020; Betts et al, 2019).

The refugees themselves encouraged and welcomed such practical interventions. The efforts of UNHCR, Windel International YALI-GRCP, NGOs and external partners have complemented government efforts in reforestation, as well as planting fruit trees to combat food scarcity in line with the Strategic Development Goal 2.1 – Uganda Refugee Response Plan 2022–2023. This will combat the food insecurity challenge of a lack of sustainable food resources due to limited land use. This won't solve food insecurity or poor/inadequate nutrition, but it should be part of a broader set of initiatives/interventions. Such interventions are necessary for integration to avoid competition for resources between refugees and hosts in the settlements.

There are different ways these interventions could be considered climate justice in action, through promoting sustainable agriculture and climate-change education**.** The common sentiment between the interviewees was that they wanted to promote refugee agency and self-reliance, as they were aware that aid was a finite resource and that speedy integration with the host community was now more necessary than ever. From the research, it was revealed that NGOs play a vital role in supporting refugee communities to adopt sustainable agricultural practices that are resilient to climate change. The teachers were very grateful for the work the Office of the Prime Minister, the UNHCR, and small projects like YALI-GRCP were doing in providing aid, planting trees and sensitizing on ways of trying to create sustainable food security, but were concerned about international donors withdrawing aid as the number of refugees was consistently increasing, disproportionally to the amount of external assistance being received.

By promoting agroforestry, permaculture and other climate-smart techniques, NGOs can help refugees ensure food security while reducing their environmental footprint. These practices can also contribute to soil conservation and biodiversity conservation. Climate-change education is essential for empowering refugees to adapt to changing conditions and make informed decisions. It was suggested that the teachers can develop and implement climate-change education programmes that raise awareness of the causes and consequences of climate change and provide refugees with the knowledge and skills needed to build resilience. These programmes can also promote climate-friendly behaviours and encourage refugees to participate in climate-action initiatives, such as reforestation, in spite of limited land use.

This research suggests that education and sustainable food sources play a significant role in facilitating refugee integration. Access to agricultural extension education and financial literacy has been found to help refugees acquire the necessary skillsets for adaptation and self-reliance (Awidi and Quan-Baffour, 2020). One of the common sentiments across the interviewees

was refugee self-reliance and agency, as donor aid is a finite resource and many of them cannot return to their countries. Seeing that some parts of Uganda, like Bududa District, and the Karamoja region are already wholly devastated by climate-change floods and excessive heat, it was imperative to secure sustainable food sources to mitigate losses and adapt to the current situation of unpredictable weather.

It is vital to enforce implementation of international law, national law and policies protecting children, tackling climate change, and promoting food security. There should be a focus on policy around sustenance and completion of projects to encourage donners to see projects through to completion. The Government of Uganda, NGOs, and external partners need to strengthen the capacity to forecast climate change and shocks, prioritizing the most vulnerable refugees as per the Uganda Refugee Response Plan 2022–2023. Emphasis should be placed on more research that utilizes participatory and decolonizing methodologies that encourage exercising critical reflexivity by all researchers, appreciation of self-determination and sustainability by the refugee children, and embracing other ways of obtaining knowledge. It is imperative to focus on research that prioritizes the perspectives and agency of refugees themselves.

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14

'Burdens and Threats': Displaced Populations in Eastern Africa's Climate Agenda

Jana Kaufmann and Sonja Fransen

Introduction

Displaced populations are often disproportionately exposed to extreme and deteriorating weather conditions, particularly in Eastern Africa. Most refugees and IDPs in Eastern Africa reside in climate 'hot spots', defined as areas 'where a strong climate change signal is combined with a large concentration of vulnerable, poor, or marginalized people' (De Souza et al, 2015: 748). Hot spots generally experience high levels of environmental degradation, while their populations are highly dependent on natural resources (Tucker et al, 2015). Fransen et al (2023) for example, found that the world's 20 largest refugee camps, of which the majority are located in Eastern Africa, are in suboptimal locations. Refugee settlements in Ethiopia, Rwanda, Kenya, Sudan and Uganda are more exposed to high temperatures and low levels of rainfall compared to other areas, while in Tanzania, refugee camps are exposed to excessive levels of rainfall. Similarly, Owen et al (2023) used satellite remote sensing to show that seven of the seventeen refugee camps in Eastern Africa, and particularly those in South Sudan and Kenya, score highly on a climate-exposure index. The authors also found high levels of exposure in border regions; areas in which refugees typically reside, either temporarily or more long term.

These findings are consistent with studies in various contexts that highlight the climate exposure and vulnerabilities of refugee camps, which are often located in remote areas prone to extreme weather events. For example, Rohingya camps in Bangladesh face floods, cyclones and landslides (Ahmed et al, 2018; Alam et al, 2020; Emberson et al, 2021), while camps in Rwanda

experience landslides and extreme weather (Dampha et al, 2022). Displaced populations are also often less able to cope with climate hazards, due to legal and economic constraints (IPCC, 2022; Fransen et al, 2023). A recently published literature review on the climate risks for displaced populations (Fransen et al, 2023) showed how displaced populations are at risk at being negatively impacted by climate hazards due to their high sensitivity, limited adaptive capacities and, in some cases, heightened exposure. Yet, the literature is heavily focused on Southern Asia (particularly Bangladesh).

Given their high levels of (climate) vulnerability, it is imperative that displaced populations are included in targeted climate-adaptation and risk-reduction strategies and national climate-adaptation strategies. Yet, environmental concerns or assessments are often not a priority for humanitarian organizations (Tafere, 2018), and there is limited evidence on the policy strategies that host countries use to protect displaced populations and to enhance resilience in displacement settings. A recent study of the Red Cross Red Crescent Climate Centre on anticipatory action interventions in IDP camps in Northwest Syria and refugee camps in Bangladesh has shown how national interventions tend to neglect camp locations (RCRCCC, 2022). More comparative research is needed to understand how, and to what extent, displaced populations are included in national climate-adaptation and risk-reduction efforts.

In this chapter, we study the inclusion of displaced populations in climate change-related laws and policies in Eastern Africa. While previous studies have highlighted the vulnerability of these populations to climate risks, there is limited research on the specific policy responses aimed at addressing these challenges, particularly in Eastern Africa. This chapter fills this gap by offering a comparative assessment of national climate-related laws and strategies, shedding light on the extent to which these policies account for displaced populations. By focusing on a region that has been under represented in the climate adaptation–displacement discourse, this chapter offers new empirical insights and enhances our understanding of the policy landscape governing the resilience of displaced communities in climate-sensitive areas. Based on our findings, we argue that there is a significant gap in the integration of these populations into formal climate-related policies in the region. This oversight is crucial for building the resilience of displaced populations, and calls for more targeted and inclusive climate strategies that consider the unique vulnerabilities of these communities in Eastern Africa.

In the following, we first detail current displacement trends in Eastern Africa, and give a comparative overview of the climate risks in Eastern African countries. We then analyze how often displaced populations are mentioned in the legal and policy documents, and consequently use a frame analysis to study the narratives that are used to refer to displaced populations. The frame analysis reveals that many legal and policy documents 'threat' or

'burden' narratives when referring to displaced populations, and adopt a homogenizing perspective, often neglecting the intersecting identities that shape individuals' experiences of displacement and vulnerability. We end this chapter with a discussion and the findings.

Displacement and climate risks in Eastern Africa

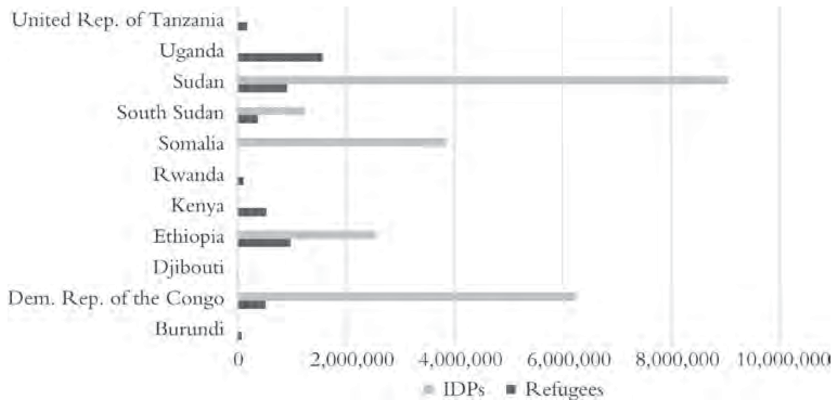
For decades, the Eastern Africa region has been among the most important refugee and IDP-hosting regions in the world. Ongoing and newly emerging conflicts, as well as increasing levels of environmental degradation, have led to large numbers of displaced populations, of which the majority seek refuge in neighbouring countries or within their own countries (UNHCR, 2022a). At the end of 2022, the East and Horn of Africa hosted 4.9 million refugees and asylum seekers and 10.7 million IDPs (UNCHR, 2023a).

Figure 14.1 gives an overview of the most recent displacement statistics in Eastern Africa (including the Democratic Republic of Congo (DRC)), based on the UNHCR Population Statistics Database 2023[1]. The figure shows that the countries in our sample are host to significant displaced populations. Uganda, Sudan and Ethiopia are the top-three refugee-hosting countries in the region: Uganda hosts approximately 1.6 million refugees and asylum seekers, while Sudan hosts 960,000, and Ethiopia hosts 930,000. The vast majority of refugees that reside in African countries originate from their own region (Fransen and De Haas, 2022), and many refugees are in a protracted situation (although exact numbers are lacking). Countries hosting the largest IDP populations include the DRC (with almost 6 million IDPs), Somalia (3.8 million), Sudan (3 million) and Ethiopia (2.1 million).

The most recent IPCC report identified Eastern Africa as one of the 'global hotspots of high human vulnerability' due to its environmental challenges and the vulnerability of its populations (IPCC, 2022: 12). Livelihoods based on livestock and agriculture are affected by increasing levels of water scarcity, drought, population increases and land degradation. Moreover, people residing in climate hot spots are often constrained in their capacities to adapt to changing environments, due to economic marginalization, geographic isolation and lack of institutional support for managing climate risks (IPCC, 2022).

To give insights into the climate risks that the countries in our sample face, Table 14.1 gives an overview of the level of climate risk in each country, based on the World Risk Report 2023 (Bündnis Entwicklung Hilft and IFHV, 2023). The World Risk Index (WRI) illustrates the disaster risks for 193 countries worldwide, covering more than 99 per cent of the global population. The WRI is based on the premise that climate risk is a function of exposure and vulnerability to natural hazards, with vulnerability

Figure 14.1: Displacement statistics in Eastern Africa in 2023



Note: Refugee statistics are based on UNHCR data, while the IDP data is based on data from the Internal Displacement Monitoring Centre (IDMC). The data for the latest year (2023) is available up until the mid-year, except IDMC data on Internally Displaced People which is available until end-2022.

Table 14.1: Climate risks in Eastern Africa

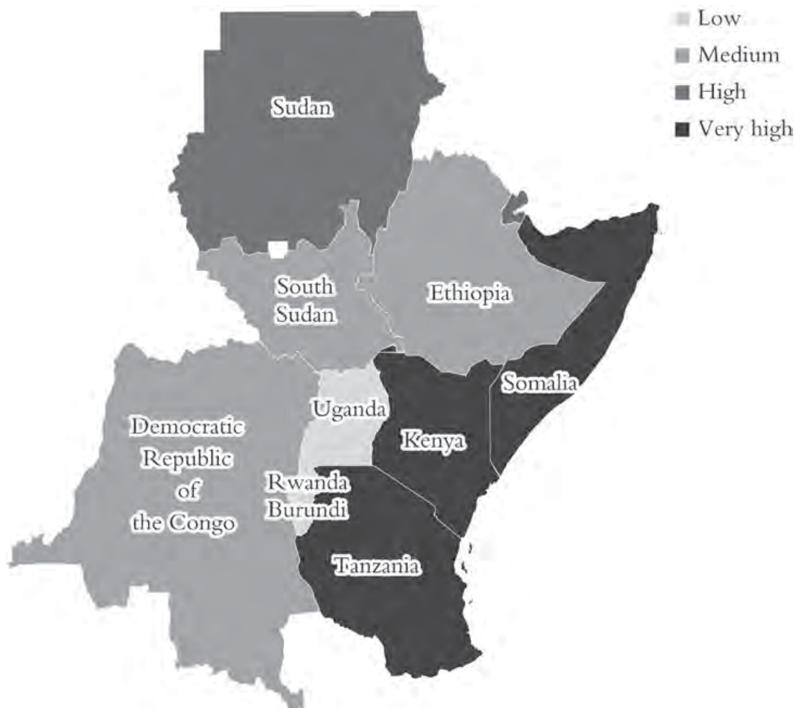
Country	World Risk Index	Rank	Exposure	Vulnerability	Susceptibility	Lack of coping capacities	Lack of adaptive capacities
Burundi	3.03	115	0.16	57.38	47.46	59.56	66.84
Kenya	13.71	39	3.27	57.52	58.22	57.81	56.55
Rwanda	2.69	133	0.50	14.47	12.33	5.44	45.2
South Sudan	4.25	95	0.25	72.19	73.20	68.79	74.71
Uganda	2.80	126	0.23	34.19	50.05	13.77	57.99
Djibouti	10.68	50	4.25	26.85	23.79	14.42	56.42
DRC	5.24	54	0.57	48.18	34.66	58.41	55.24
Ethiopia	4.85	86	0.36	65.44	64.71	62.02	69.83
Somalia	25.09	14	8.55	73.63	67.49	82.11	72.02
Sudan	10.27	51	1.65	63.91	60.01	63.64	68.36
Tanzania	16.08	31	5.49	47.09	33.66	55.22	56.18
Africa	**4.39**	–	**0.70**	**30.53**	**30.40**	**14.68**	**59.83**
World	**4.13**	–	**1.05**	**20.23**	**14.97**	**11.88**	**45.94**

Source: World Risk Report [WeltRisikoBericht] 2023: Bündnis Entwicklung Hilft & IFHV

being composed of susceptibility, coping capacities and adaptive capacities. Susceptibility is defined as the 'structural characteristics and general conditions of societies that increase the overall likelihood of populations suffering damage from extreme natural events and entering a state of disaster' (Bündnis Entwicklung Hilft and IFHV, 2023: 40), whereas coping capacities relate to the direct actions and resources that are available in the event of a disaster, and adaptive capacities refer to the more long-term processes of adaptation and anticipatory action that can be taken. As such, the risk that a climate hazard turns into a disaster is not just a result of exposure, as well as its intensity and duration, but results from the interactions between exposure and socioeconomic and political conditions. The WRI is based on 100 different indicators and yields a score between 0 and 100, with higher scores indicating higher climate risk.

Countries in Eastern Africa score relatively high on the WRI, which is in most cases a result of their high levels of vulnerability, as shown in Figure 14.2. Somalia and South Sudan are the most vulnerable countries worldwide, with high levels of susceptibility and low levels of coping and adaptive capacities. Overall, all of our selected countries have either high or very high levels of vulnerability, with the exception of Rwanda, which

Figure 14.2: Classification of climate risks in Eastern Africa.



scores 'low' on the vulnerability dimension. Looking at the WRI as a whole, only Rwanda, Uganda and Burundi have low climate risks, while all other countries in Eastern Africa have either medium climate-risk scores (South Sudan, Ethiopia and the DRC), high climate-risk scores (Sudan and Djibouti) or very high climate-risk scores (Kenya, Tanzania and Somalia).

Although these numbers refer to the countries as a whole, within these countries, displaced populations often reside in particularly climate-vulnerable areas, as described in the introduction (Fransen et al, 2023; Owen et al, 2023). Moreover, displaced populations are often located in remote locations, with limited access to employment opportunities, other livelihood options, and social networks (UNHCR, 2023a). In 2023, UNHCR launched a 2023–2028 Climate Action Plan for the East and Horn of Africa and the Great Lakes region (UNHCR, 2023b), which detailed the organization's plan to help improve the capacities of national states to provide protection for displaced populations within their borders, with a particular focus on the contexts of disasters and climate change. An important element of this plan is to encourage nation states to include displaced populations in their national climate adaptation and sustainable development plans, as well as to improve early warning systems and disaster risk-reduction strategies.

Methodology

The corpus for our analysis was sourced from the Climate Change Laws of the World (CCLW) Database, which was constructed by the Grantham Research Institute at the London School of Economics (LSE) and the Sabin Center at Columbia Law School (CCLW, 2023). The CCLW Database contains 'climate change-related laws and policy', which are broadly defined as 'legal documents that address policy areas directly relevant to climate change mitigation, adaptation, loss and damage or disaster risk management'. The inclusion criteria are that 'one or more aspects of a law or policy must be demonstrably motivated by climate change concerns'[2]. We included documents published in the past 5 years for countries with the highest numbers of refugees or IDPs in Eastern Africa: Burundi, DRC, Ethiopia, Kenya, Djibouti, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda. Data on displacement were derived from the UNHCR Population Statistics Database[3], while the IDP data was based on data from the Internal Displacement Monitoring Centre (IDMC). The data for the latest year (2023) is available up until the mid-year, except IDMC data on Internally Displaced People, which is available until end-2022. The documents we selected for this research cover the time period from 2018 to 2023, with the exception of one document from Burundi published in 2015, one document each from Rwanda and Sudan published in 2006, and documents sharing future endeavours such

as one from Somalia covering the efforts until 2025, Ethiopia until 2030, and Uganda until 2025.

As described, we analyzed 55 policy and legal documents from the 11 countries in our sample. An overview of the names and publication dates of all documents can be found in Appendix 1. To give an indication of the inclusion of displaced populations in legal and policy documents in Eastern Africa, we first ran a frequency search using the following keywords: (1) camp(s), settlement(s), shelter(s); (2) internally displaced person(s), IDP(s), displacement, displaced; (3) ecological migration, eco-migrant(s), migration and migrants (when related to climate), and (4) refugee(s), displaced refugee(s). We included the keywords related to ecological migration and migrants more generally so that we could also capture migration referred to in the context of environmental or ecological change or terms like climate-induced migration. Additionally, the selected documents included terms, such as displaced children, displaced households, or displaced refugees, which were clustered within the displacement (2) keywords.

To gain further insights into *how* displaced populations are referred to in our sample, and in which contexts, we conducted a frame analysis, using an inductive approach. Frame analysis, as conceptualized by Erving Goffman, offers a systematic approach to the examination of how individuals, groups and policy makers construct frameworks or 'frames' to comprehend intricate and multifaceted issues (Creed et al, 2002). This theoretical framework delves into the process through which actors in the policy arena delineate the parameters of problems, ascertain causal factors and establish potential solutions, all of which exert substantial influence on policy outcomes (Pan and Kosicki, 1993). Therefore, frame analysis emerges as a valuable tool for the dissection of how policy issues are shaped when it comes to issues of migration.

The empirical data, generated through coding the selected documents, primarily reflects the frequency of specific terms without delving into distinct patters, and perceptions. Here, the frames were crafted through an inductive process, embracing a bottom-up methodology. This approach empowers the data to articulate its own narrative, steering clear of predetermined outcomes, and facilitating the natural emergence of insights from the observed patters. After carefully reading, highlighting and preliminary analyzing all documents, a list of recurring frames was developed. We identify the following eight frames in our data:

1. *Alarming*: showcasing the high numbers of climate related migration and refugees and IDPs, taking an alarmist stance.
2. *Burden*: portraying the groups as a burden for the country, illustrating issues they might bring.
3. *Danger and threat*: framing refugees and IDPs as a threat to the host country, showcasing negative effects.

4. *Advantageous*: viewing refugees and IDPs as advantageous for the host government, economy, and so on, positioning the groups for the benefit of the host country.
5. *Humanitarian*: recognizing that refugees and IDPs need protection, offering help and solutions.
6. *Incorporation and inclusion*: trying to incorporate refugees and IDPs into the host country/society, suggesting avenues for (re)integration and (re) incorporation.
7. *Monitoring and data collection*: establishing ways to monitor effectiveness of measures, refugees and IDPs, and other related factors, seeking more data.
8. *Neutral*: just stating neutral facts and numbers, no emotive language, or biases.

Inclusion of displaced populations: findings

Frequency analysis

Table 14.2 gives an overview of our findings. Within all 55 documents, camps or shelters were mentioned ten times, with nine of the ten cases found in Somalia documents and one in Uganda. IDPs or displacement were mentioned 74 times, mostly in documents from Somalia (30 times), the second-largest IPD hosting country in our sample and South Sudan (32 times). Five and three incidences were found in Uganda and Burundian documents, respectively. Interestingly, in the largest IDP-hosting country in our sample, the DRC, IDPs or displacement were only mentioned once. The same is true for Sudan, the third-largest IDP-hosting country in our sample, where internal displacement was mentioned once. Migration and migrants were mentioned 28 times, mostly in Somalia, South Sudan and Uganda. Finally, refugees were mentioned 19 times in Ugandan documents, twice in documents from South Sudan and once in an Ethiopian document.

This frequency analysis based on key search terms shows that displaced populations are largely unrepresented in the climate-adaptation plans, and policies and legislations published in Eastern African countries during 2018–2023. Exceptions include the Somali documents, and those published by South Sudan and Uganda. In important refugee-hosting countries, which have often hosted refugees for decades, including Sudan, Kenya, Rwanda and Tanzania, refugees, and displacement in general, are either not mentioned at all, or only a few times. The same holds for important IDP-hosting countries, such as the DRC, Sudan and Ethiopia.

Frame analysis

Table 14.3 gives an overview of the frames that were used in the documents. We conducted the frame analysis on paragraphs, which is why the numbers in

Table 14.2: Frequency analysis of key search terms

Country	No. of documents	Camp(s), settlement(s), shelter(s)	Internally Displaced Person(s), IDP(s), displacement, displaced	Ecological migration, eco-migrant(s), migration and migrants	Refugee(s), displaced refugee(s)	Total
Burundi	7	0	3	1	0	**4**
DRC	2	0	1	1	0	**2**
Ethiopia	4	0	1	1	1	**3**
Kenya	7	0	0	0	0	**0**
Djibouti	1	0	0	0	0	**0**
Rwanda	7	0	1	0	0	**1**
Somalia	7	9	30	10	0	**49**
South Sudan	3	0	32	10	2	**44**
Sudan	5	0	1	0	0	**1**
Tanzania	3	0	0	0	0	**0**
Uganda	9	1	5	5	19	**30**
Total	**55**	**10**	**74**	**28**	**22**	**134**

Tables 14.2 and 14.3 on occasion do not match. In other words, when search terms were mentioned multiple times in one sentence or paragraph, we only recorded the frame once. We furthermore classify the 'alarming', 'burden' and 'danger and threat' frames as relatively negative, whereas the 'advantageous', 'humanitarian', 'incorporation and inclusion', and 'monitoring and data collection' were classified as relatively positive. As the frequency analysis illustrated that displaced populations are mostly mentioned in documents from South Sudan, Somalia and Uganda, the frame analysis is consequently mostly based on these documents. Where relevant, we added information from the other documents.

Countries most often used negative frames when referring to displaced populations in their countries. Particularly the 'burden' frame was common, with documents illustrating the (potential) challenges that these populations might bring in the host country. This burden frame is most prominent in documents from Somalia and South Sudan, followed by those from Uganda. In Somalia, for example, a country that hosted almost 3.8 million IDPs at the end of 2022 (see Table 14.1), internal displacement is described as being driven by climate-induced disasters, such as droughts and floods, but also as an important factor contributing to further instability and a lack of development. In the National Drought Plan for Somalia (D32), the government of Somalia writes how, among other challenges such as

Table 14.3: Framing analysis

Country	Negative frames			Positive frames				Neutral	Total
	Alarming	**Burden**	**Danger and threat**	**Advantageous**	**Humanitarian**	**Incorporation and inclusion**	**Monitoring**		
Burundi	0	0	0	0	0	0	0	3	**3**
DRC	0	0	0	0	0	1	0	1	**2**
Ethiopia	0	1	0	0	1	0	0	0	**2**
Kenya	0	0	0	0	0	0	0	0	**0**
Djibouti	0	0	0	0	0	0	0	0	**0**
Rwanda	0	0	1	0	0	0	0	0	**1**
Somalia	4	13	5	2	3	3	0	10	**40**
South Sudan	6	13	3	2	2	1	0	10	**37**
Sudan	0	0	0	0	0	0	0	1	**1**
Tanzania	0	0	0	0	0	0	0	0	**0**
Uganda	3	7	0	0	3	5	2	1	**21**
Total	**13**	**34**	**9**	**4**	**9**	**10**	**2**	**26**	**107**
Classified total		**56**			**25**			**26**	

institutional weakness and continuing conflicts '[…] migration and droughts have always impeded the gradual development of various sectors relating to development, humanitarian, environment management, and disaster management' (D32).

Likewise, in South Sudan, displacement is described as having contributed to food insecurity: 'Despite having one of Africa's richest agricultural areas with fertile soils and abundant water, frequent flooding, conflict, and the displacement of millions of people have drastically reduced the country's food production, which has left an estimated 7.5 million people facing food insecurity' (D38). Moreover, displacement caused by conflict is described as having negatively impacted the education of students and teachers, while rural–urban migration of youth is mentioned as causing labour shortages in rural areas, and lower agricultural productivity. In Uganda, increasing regional displacement figures are seen as one of the future risks that the country faces, and refugee presence is mentioned in relation to increasing levels of natural resource depletion.

Other common, more negative frames include the 'alarming' frame, in which (potential) increases in forced displacement are described in a concerning way, and the 'danger and threat' frame, in which refugees and IDPs are considered a threat to, for example, national security levels. These frames are also mostly present in the same countries: South Sudan, Somalia, and, to a lesser extent, Uganda. Somali documents, for example, describe 'huge displacement levels', while the documents from South Sudan describe future return flows as a potential risk for development and reconstruction processes in the country.

These examples of the more negative framing of displaced populations show how countries that are facing multiple risks, including climate-related hazards and disasters as well as conflict, insecurity and poverty, struggle to address the causes of displacement, while also mitigating the challenges that accompany it. Moreover, 'regular' migration to cities is often seen as a burden as well. Continuing and newly emerging flows of displaced people is said to increase poverty levels as displaced people struggle to create new livelihoods during displacement. Moreover, refugee populations are associated with environmental burdens and competition over scarce resources.

Neutral and more positive frames were used 26 and 25 times, respectively, across the documents in our sample. As described, neutral frames mostly mention facts, such as numbers of refugees and IDPs, the areas in which they reside, and their demographics. Among the more positive frames, the 'incorporation and inclusion' frame was common, just like the 'humanitarian frame', which recognizes that refugees and/or IPDs need protection. The incorporation frame was particularly dominant in Ugandan documents,

which, next to the challenges that accompany the refugee population there (see, for example, Betts, 2021), often mentioned Uganda's exemplary refugee integration policy. Ugandan documents also describe how refugee populations should be protected as a starting point for local integration. Moreover, Uganda specifically mentions how it is important to 'integrate environmental management in all disaster and refugee response interventions' and to 'integrate migration and refugee planning and all other cross cutting issues in national, sectoral and local government plans' (D51). The Ugandan documents also called for better monitoring of displaced populations through the collection of more and better data.

In Somalia, displaced populations are also described in the context of humanitarian protection. IDPs are specifically mentioned as a vulnerable group that needs particular attention in policies and programmes. The documents also discuss setting up disaster-response systems and increasing access to water, including in IDP settlements such as (D25): 'Improve water access by supporting piped water to urban areas and IDP camps'. In South Sudan, the policy documents also mention specific programmes to help IDPs and their host communities deal with the impacts of hazards such as floods, as well as food insecurity like in (D38): 'Food aid and agricultural inputs are provided during drought periods, especially when people are migrating from affected areas.' As such, IDPs are specifically recognized as vulnerable populations in need of support. In some areas, seasonal migration is mentioned as a potential solution to sustain livelihoods in times of drought. Other countries that often used neutral or more positive frames include Burundi and the DRC. Although displacement populations are not mentioned often in the sampled documents, when they are mentioned, this was mostly done in neutral terms, for example, referring to the drivers of displacement, and in relation to incorporation and inclusion.

Conclusion

As climate change is expected to exacerbate in Eastern Africa, and new and continuing displacement is occurring across the region, displaced populations will increasingly be at risk to be affected by climate hazards (such as floods and droughts), and more gradually occurring changes in the climate, such as increasing temperatures and lower levels of precipitation (Fransen et al, 2023). The intersection of displacement and climate vulnerability in Eastern Africa, recognized as a global hotspot of high human vulnerability by the IPCC (2022), underscores the pressing need to integrate environmental considerations into displacement and development planning. Recent studies shed light on the suboptimal locations of major refugee camps in Eastern

Africa concerning climate exposure, emphasizing the necessity for tailored risk reduction and adaptation plans for displaced populations and their inclusion in national climate policies (Fransen et al, 2023).

Our analysis reveals a concerning oversight of displaced populations in recent climate-adaptation plans of host countries. Some countries, such as Kenya and Tanzania, face severe climate risks, while hosting significant refugee populations, yet do not mention these populations as in need of particular attention in their climate-adaptation plans and policies. A closer look through the frame analysis reveals predominantly negative representations, with the prevalent 'burden' frame, in countries that do mention displaced populations such as Somalia, South Sudan and Uganda. While some countries, notably Uganda, adopt positive frames emphasizing humanitarian concerns and the need for integration, others, such as Somalia and South Sudan, tend to lean towards alarming and threatening perspectives. The frame analysis also reveals that many legal and policy documents adopt a homogenizing perspective on displaced populations, often neglecting the intersecting identities that shape individuals' experiences of displacement and (clime) vulnerability (Mikulewicz et al, 2023).

The increasing convergence of climate change and displacement in Eastern Africa necessitates urgent and focused attention from policy makers, researchers and international organizations. Displaced populations bear a disproportionate burden of extreme weather conditions, and simultaneously grapple with challenges arising from conflict, poverty and insecurity. As Eastern Africa confronts a myriad of challenges, including the impacts of climate change and displacement, there is a crucial need for more comprehensive and empathetic approaches in climate-adaptation policies. The findings stress the urgency of recognizing displaced populations as both vulnerable and potentially beneficial. A call for more data and monitoring signals the importance of understanding the human dimensions of displacement and climate vulnerability. It is imperative to address the underlying drivers of displacement, consider the environmental impact of migration, and implement inclusive strategies that prioritize the well-being of displaced communities within the broader context of climate-change adaptation.

In this effort, academic and policy communities must work together to ensure that displaced populations are seen not just as passive recipients of aid, but as key stakeholders in climate resilience efforts. This requires a shift in narrative – from viewing displaced populations as burdens to recognizing their potential contribution to long-term adaptation and resilience. Failure to address these gaps will perpetuate existing vulnerabilities, while inclusive and adaptive policies will help protect and empower these populations amid growing climate challenges.

Appendix

Document nr.	Country	Document name	Publication date	Type of document	Source
D1	Burundi	Burundi. Biennial update report (BUR). BUR1.	June 2022	Biennial Update Report	UNFCC
D2	Burundi	Burundi First NDC (Updated submission)	July 2021	Nationally Determined Contribution, Adaptation Communication	UNFCCC
D3	Burundi	Burundi. National communication (NC). NC 3.	October 2019	National Communication	UNFCCC
D4	Burundi	Burundi's REDD+ National Strategy and Action Plan	October 2019	Strategy	CCLW
D5	Burundi	National Agriculture Strategy 2018–27	2018	Strategy	CCLW
D6	Burundi	National Plan for the Development of Burundi 2018–27 (PND BURUNDI 2018–27)	June 2018	Plan	CCLW
D7	Burundi	Burundi First NDC (Archived)	September 2015	Nationally Determined Contribution	UNFCCC
D8	Djibouti	Djibouti's National communication (NC). NC 3	2021	National Communication	UNFCCC
D9	DRC	Democratic Republic of the Congo First NDC (Updated submission)	October 2021	Nationally Determined Contribution	UNFCCC
D10	DRC	National Strategic Development Plan PNSD 2019–23	n.d.	Plan	CCLW
D11	Ethiopia	Ethiopia's long-term low emission and climate-resilient development strategy (2020–50)	2023	Strategy	UNFCC

(continued)

Document nr.	Country	Document name	Publication date	Type of document	Source
D12	Ethiopia	Ethiopia's First NDC (Updated Submission)	2021	Nationally Determined Contribution	UNFCC
D13	Ethiopia	10-Year Development Plan (2020/2021–2029/2030)	2020	Plan	CCLW
D14	Ethiopia	National Adaptation Plan Implementation Roadmap	2020	Roadmap	CCLW
D15	Kenya	Kenya. National Communication (NC). NC 2 - Executive Summary	2015	National Communication	UNFCCC
D16	Kenya	Central Bank of Kenya - Guidance on Climate-Related Risk Management	October 2021	Policy	CCLW
D17	Kenya	Kenya First NDC (Updated submission)	December 2020	Nationally Determined Contribution, Adaptation Communication	UNFCCC
D18	Kenya	National Wildlife Strategy 2030	June 2018	Strategy	CCLW
D19	Kenya	National Climate Change Action Plan (NCAPP) 2018–22: Volume I	2018	Policy	CCLW
D20	Kenya	National Climate Change Action Plan (NCAPP) 2018–22: Volume III - Mitigation Technical Analysis Report	2018	Action Plan	CCLW
D21	Kenya	National Climate Change Action Plan (NCCAP) 2018–22: Volume I – Towards a Low carbon Climate Resilient Developemnt	2018	Action Plan	CCLW

Document nr.	Country	Document name	Publication date	Type of document	Source
D22	Rwanda	Technical analysis of the first biennial update report of Rwanda submitted on 29 December 2021. Summary report by the team of technical experts	March 2023	Technical Analysis Summary Report	UNFCCC
D23	Rwanda	Rwanda. Biennial update report (BUR). BUR 1. National inventory report.	2021	National Inventory Report	UNFCCC
D24	Rwanda	Rwanda. Biennial update report (BUR). BUR 1.	December 2021	Biennial Update Report	UNFCCC
D25	Rwanda	Rwanda's Adaptation communication	October 2021	Adaptation Communication	UNFCCC
D26	Rwanda	Submission letter of Updated NDC for Rwanda	May 2020	Nationally Determined Contribution	UNFCCC
D27	Rwanda	Rwanda. National Communication (NC). NC 3.	September 2018	National Communication	UNFCCC
D28	Rwanda	Law N°48/2018 on the environment	September 2018	Law	CCLW
D29	Somalia	Somalia's Updated NDC	2022	Nationally Determined Contribution	UNFCCC
D30	Somalia	National Water Resource Strategy 2021–2025	2021	Policy	CCLW
D31	Somalia	Somalia First NDC (Updated submission)	2021	Nationally Determined Contribution	UNFCCC
D32	Somalia	National Drought Plan and resilience framework for Somalia	2021	Framework	CCLW
D33	Somalia	National Climate Change Policy	2020	Policy	CCLW

(continued)

Document nr.	Country	Document name	Publication date	Type of document	Source
D34	Somalia	Ninth National Development Plan	2020	Policy	CCLW
D35	Somalia	National Communication (NC). NC1	2018	National Communication	UNFCCC
D36	South Sudan	South Sudan Second NDC	2021	Nationally Determined Contribution	UNFCCC
D37	South Sudan	South Sudan First NDC	n.d.	Nationally Determined Contribution	UNFCCC
D38	South Sudan	South Sudan. National communication (NC). NC1.	2018	National Communication	UNFCCC
D39	Sudan	Sudan's first NDC	2022	Nationally Determined Contribution	UNFCCC
D40	Sudan	Electricity Strategy 2019–2035	2022	Strategy	CCLW
D41	Sudan	Sudan's first NDC (Interim updated submission)	2021	Nationally Determined Contribution	UNFCCC
D42	Sudan	Solar Transformation Program	2020	Policy	CCLW
D43	Sudan	Sudan's National Forestry Policy Statement	2019	Policy	CCLW
D44	Tanzania	United Republic of Tanzania First NDC (Updated submission)	July 2021	Nationally Determined Contribution	UNFCCC
D45	Tanzania	Tanzania Health National Adaptation Plan 2018–23	n.d.	Plan	CCLW
D46	Tanzania	United Republic of Tanzania First NDC (Archived)	n.d.	Nationally Determined Contribution	UNFCCC
D47	Uganda	Uganda's Updated NDC	September 2022	Nationally Determined Contribution	UNFCC

Document nr.	Country	Document name	Publication date	Type of document	Source
D48	Uganda	Uganda. National Communication (NC). NC 3.	July 2022	National Communication	UNFCCC
D49	Uganda	Submission letter (Interim updated submission)	October 2021	Nationally Determined Contribution	UNFCCC
D50	Uganda	National Climate Change Act 2021	2021	Act	CCLW
D51	Uganda	Third national development plan (NDPIII) 2020/21–2024/25	July 2020	Plan	CCLW
D52	Uganda	Budget Speech Financial Year 2020/21	June 2020	Press Release	CCLW
D53	Uganda	Uganda. Biennial update report (BUR). BUR 1 – Technical Annex	April 2020	Biennial Update Report	UNFCCC
D54	Uganda	The National Environment Act	March 2019	Act	CCLW
D55	Uganda	Climate Change Communication Strategy	September 2018	Strategy	CCLW

Notes

[1] The UNHCR Population Statistics Dabase is available from: www.unhcr.org/refugee-statistics/.

[2] See https://climate-laws.org/methodology

[3] See www.unhcr.org/refugee-statistics/download/

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15

African Legal Tools for Facilitating Climate Justice in Cross-Border Displacement in Eastern Africa: Surpassing the Bleak Legal Ideal in International Refugee Law

Dalia Malek

Introduction

'… I'm the same as people who are fleeing war. Those who are afraid of dying, it's the same as me. The sea level is coming up, and I will die, like them', Ioane Teitiota (McDonald, 2015).

International refugee law has aptly received criticism for its inability to protect those displaced by climate change. Terminologies such as 'environmental migrants' or 'climate refugees' are contested across scholarship, while there is no universal term or definition in international law. A few scholars have suggested that international legal instruments can be amended or interpreted more flexibly, but many others have argued that international refugee law cannot appropriately offer protection to those displaced by climate change (Marcs, 2008; Borges, 2019; McAdam, 2022). The international human rights legal regime has similarly illustrated narrowness when considering the prohibition of *refoulement* as it pertains to climate-change displacement. In *Teitiota v New Zealand* (2020), the Human Rights Committee (HRC) found that New Zealand did not violate the right to life of Ioane Teitiota, quoted at the start of the chapter, when it refused his asylum claim and deported him back to Kiribati from which he had escaped the harmful effects of rising sea levels.

With these scholarly and jurisprudential commentaries in the backdrop, receiving States have had to overcome the limitations of the legal tools available and react rapidly to displacements, particularly in situations of sudden-onset disasters and mass influx. The United Nations High Commissioner for Refugees (UNHCR) refers to the 'cross-border movement in the context of conflict and/or violence *and* disaster and/or the adverse effects of climate change' (Weerasinghe, 2018, emphasis in original) as 'nexus dynamics'. When international refugee law is analyzed in light of nexus dynamics, the provision of international protection for persons displaced by climate change is contingent on a link to the legal criterion of persecution. This results in a bleak legal ideal where the observed dynamic of climate change acting as a 'threat multiplier' (UNSC, 2019) of existing marginalization becomes an eligibility requirement.

International refugee law situates the circumstances of forced migrants within the criteria of having 'a well-founded fear of being persecuted' as elaborated in Article 1(A)(2) in the 1951 Convention Relating to the Status of Refugees (1951 Convention). Persecution must be linked to at least one of the 1951 Convention's five grounds of race, religion, nationality, membership of a particular social group or political opinion. If harm caused by climate change can be integrated into a claim of persecution for reasons related to one or more of these grounds, the claim is more likely to be successful according to these standards. In Eastern Africa, the circumstances of climate change in conjunction with persecution can theoretically qualify some displaced persons to meet the rigid legal criteria.

Multiple overlapping factors can drive migration in Eastern Africa, a characterization of migration that contrasts with the standards of international refugee law where persecution is ordinarily considered the sole motivator. Migrants in Eastern Africa can fulfil the 'legal ideal' where their displacement is attributed to government authorities and non-State actors who perpetuate wars, prevent access to humanitarian aid, and oppress minoritized populations as climate change simultaneously inflicts drought, flooding, heatwaves and anomalous rainfall. Subsequent food insecurity or famine can be caused or exacerbated by climate change, or it can be directly human-induced, while also compounding existing vulnerabilities and amplifying discrimination to an extent that it rises to the level of persecution. While this 'legal ideal' is framed as bolstering refugee claims, it also reinforces the narrow standard that must be reached in order to acquire international protection. Achieving this standard should be considered beneficial for some, but its exclusionary rigidity contradicts the calls for flexibility and resourcefulness that are necessary and practical for addressing climate-change displacement. Although the African regional system does not necessarily offer a straightforward or comprehensive answer to these calls, its hallmark flexibility can facilitate innovation. The legal tools it provides, alongside other regional efforts, can

help circumvent the restrictiveness of international refugee law when applied in the climate-change context.

In this chapter I use 'climate-change displacement' to generally refer to movement that occurs both within and across borders while assuming a human-induced element causing climate change and resulting in environmental events and disasters. I use 'regional' as it is used in international law when referring to the respective international human rights laws, courts, procedures and other mechanisms that are only applicable to regions such as Africa, the Americas and Europe, in contrast with the 'universal' or United Nations (UN) system and its treaty-monitoring bodies and mechanisms. While any country can adopt global instruments, such as the UN treaties, regional and subregional instruments also form a part of international law, but their acceptance is restricted to countries in those regions. To avoid confusion with this use of 'regional', for the purposes of this chapter the Regional Economic Communities (REC), as well as their groupings of States such as the Inter-Governmental Authority on Development (IGAD), are referred to in this chapter as 'subregional'.

This chapter begins with a reflection on migrants from Somalia to Ethiopia, a microcosm of nexus dynamics. After signposting recent developments, I examine the unique acknowledgements of climate-change displacement in the subregional IGAD Transhumance and Free Movement Agreements. On the regional level, I consider tools available to those in all contracting States in Africa: the African Charter on Human and Peoples' Rights (African Charter) and their potential for strategic litigation before the African Commission and African Court, as well as the regional 1969 Organisation of African Unity Convention Governing the Specific Aspects of Refugee Problems in Africa (1969 OAU Convention) and its expanded refugee definition. I return to the context of Ethiopia as a receiving State of forced migrants from Somalia, putting forward that its domestic application of the 1969 OAU Convention should be encouraged and that climate-change events should be interpreted as 'events seriously disturbing public order'. In turn, I conclude that, through its characteristic flexibility, the African regional framework is equipped to bring about justice and provide international protection for those displaced by climate change.

Somali forced migrants meeting the standards of the 'bleak legal ideal'

The peoples of Eastern Africa have engaged in travel and trade for millennia and, in spite of colonial boundaries and border disputes, movements across the borders of what are now the modern States of Ethiopia, Kenya and Somalia have continued for a variety of reasons that are separate from but sometimes intermingled with repression, conflict and climate change.

These include healthcare, education, seeking favourable markets for trade, as well as continued traditions of pastoralism and transhumance. Pastoralist and agropastoralist livelihoods have integrated adaptability with mobility and for generations have passed down traditions of land management, communications between elders and communities, and localized migration governance. In the border area, pastoralists were the main group to cross international borders as a result of climate change according to research by UNHCR (2023a). For some, crossing international borders had been a form of seasonal migration. Over time, they have increasingly integrated strategies of adaptability to weather variability and now, their traditional livelihoods have become disrupted or altogether lost as they come to face drought, flooding and other harmful impacts of climate change.

Those who *flee* Somalia may be escaping targeted harm, for example due to belonging to a minority ethnicity or clan, or they may be seeking safety from the ongoing armed conflict where the violence may be indiscriminate. They may also be fleeing the continually deteriorating human rights situation in areas that are under the effective control of State agents and government-affiliated forces, or of non-State actors such as Al-Shabaab or clan militias (UNHCR, 2022). In previous decades, Somalia has also been subject to environmental degradation and climate change. More recently, the severe ongoing drought that began in 2021 led to an increased scarcity of water resources, food insecurity, livestock deaths, outbreaks of disease and lack of access to livelihoods, also causing many to flee. According to Frantz Celestin, the International Organisation for Migration (IOM) Somalia Chief of Mission: 'It's becoming clear that climate change is exacerbating conflict and displacement in Somalia as farmers compete over natural resources to survive. The short-term consequences are violent clashes, but the long-term outlook is a threat to peace in a country which has already suffered three decades of protracted conflict' (IOM, 2022). The crossing of an international border is a requirement of fulfilling the refugee criteria, but the majority of climate-change displacement occurs internally. By the end of 2023, there were 3.5 million internally displaced persons (IDPs) in Somalia, and 64 per cent of them cited 'natural disaster' as the primary reason for their displacement (IOM, 2024). From late 2023 onward, heavy rains leading to severe flooding have led to outbreaks of disease and death, leading to more displacement.

These multiple drivers of migration in Eastern Africa can operate simultaneously, and decisions to migrate are often considered, strategic and characterized by a significant level of agency subject to variables that may be unique to an individual or household, and thus difficult to generalize and link directly. Although refugees and their reasons for leaving their countries of origin do not necessarily lack these characteristics, international refugee law narrows their displacement to a usually singular motive of

having a 'well-founded fear of being persecuted' as elaborated in the 1951 Convention. UNHCR has interpreted this to mean that it 'automatically makes all other reasons for escape irrelevant to the definition', and that it also 'rules out such persons as victims of famine or natural disaster, unless they have a well-founded fear of the reasons stated' (UNHCR, 2019a). The legal perspective that narrowly focuses on a well-founded fear of being persecuted for reasons related to one of the five grounds in the 1951 Convention definition does not fully capture these dynamics without further contextualization. Similarly, while climate change may also affect or motivate some of these movements, a slow or rapid onset disaster does not tell the whole story behind the drivers that may compel individuals and families to move across borders, alter their movements across borders, or leave their countries of origin permanently. Although aspects of these movements may be irrelevant to the consideration of a refugee claim, the factors and motivations contributing to cross-border mobility in Eastern Africa are multifaceted, as is exemplified by the migrations of Somalis to Ethiopia.

Those of the myriad identities fleeing persecution in Somalia may also suffer harm as a result of climate-change-induced disasters and, correspondingly, those who flee the effects of climate-change disasters on their livelihoods, health or safety, may also be exposed to conflict and violence due to resource scarcity. These disasters may also cause an augmentation of existing vulnerabilities and discrimination, further contributing to their reasons for migrating. As a matter of law, many of those fleeing such circumstances in Somalia would likely fit the 1951 Convention definition of 'refugee'. As mentioned above, while this is positive for the claims of refugees seeking international protection, it is because the circumstances in Somalia are uniquely protracted and because Eastern Africa is especially vulnerable to climate change that individuals may be likely to fulfil the 1951 Convention criteria on the basis of nexus dynamics. Still, those who have left Somalia solely because of harm induced by climate change would find difficulty in fulfilling the 1951 Convention refugee definition. A slow onset disaster like drought may raise legal questions about the extent to which cross-border movement of this kind would be considered involuntary, whether the loss of livelihood and other harms caused by climate change constitute persecution, and if so, who the agent of persecution might be. These questions should not lead to a presumption that such claims are ineligible for international protection. Rather, they should be explored further in legal research; beyond the law, social, economic and political inequities should also be analyzed together with an eye toward achieving justice for those affected. As reflected by Ethiopia's approach to receiving these populations, analyzed later, this difficulty can be circumvented by creatively utilizing regional tools at the domestic level.

Appetite for change: the development of subregional and regional tools

Since the AU Assembly established the Committee of African Heads of State and Government on Climate Change (CAHOSCC) in 2009 (AU Assembly, 2009), African subregional and regional institutions have increasingly made efforts to address climate-change displacement. In 2022, Ministers of the subregional IGAD and East African Community (EAC) Member States gathered key messages and commitments in the Kampala Ministerial Declaration on Migration, Environment and Climate Change; it recognizes that '[T]he East and Horn of Africa Region is severely affected by environmental degradation, floods, landslides, sand storms, tropical cyclones, drought, water level rise, and rainfall variability. Notably, in 2016 alone, 2.6 million new disaster displacements occurred in sub-Saharan Africa creating climate mobility crisis' (Kampala Ministerial Declaration, 2022).[1] It includes the commitment to 'apply and integrate gender and human rights-based approaches in the design and implementation of policies relating to the climate change-migration nexus' (Kampala Ministerial Declaration, Article 10).

At the regional level, Article 5(4) of the AU Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention), a binding instrument, obligates contracting States to 'take measures to protect and assist persons who have been internally displaced due to natural or human made disasters, including climate change'. The African Commission, in its Resolution on Climate Change and Forced Displacement in Africa, among other things, reminds African States of their 1969 OAU Convention obligations and calls on them to 'add climate change and its impact on populations on their agenda and to take the necessary measures to prevent forced displacement as a result of climate change' (AfComm, 2021: 2). The AU Migration Policy Framework for Africa (2018–2030) (MPFA) provides migration policy guidelines to AU Member States on issues that include climate change and environmental degradation. The AU Agenda 2063's flagship project Free Movement of All Persons and African Passport, through its progress, has already begun to impact those displaced by climate change (AU Agenda 2063). The African Youth Declaration for Climate Mobility (2022) introduced urgent demands and recommendations to establish initiatives and actions, including those that address the human mobility nexus and integrate the participation of migrants. The AU and IOM signed an agreement in 2022 that articulates an alignment with the UN's 2030 Agenda for Sustainable Development, the AU's Agenda 2063, and the MPFA; the AU Commission and IOM also met in 2024 to renew their commitment to solidarity, reinforce partnership with Regional Economic Communities (REC)s, and address governance

areas including climate-induced migration. These growing subregional and regional efforts, along with existing regional international tools, can be better suited to address displacement caused by climate change in Eastern Africa than ordinary approaches to international refugee law.

Subregional recognition of climate change displacement in unlikely places: the IGAD transhumance and free-movement protocols

In the Eastern African subregion, the eight Member States of the Intergovernmental Authority on Development (IGAD) are Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda. The primary purpose of subregional transhumance and free-movement agreements is not to provide international protection or asylum, but rather to improve labour mobility in favour of economic growth and development. As mentioned above, pastoralists were among the populations observed to be crossing borders between Ethiopia, Kenya and Somalia, among other reasons, as a result of climate change. The ability of pastoralists to cross borders in Eastern Africa for purposes such as transhumance has decreased as climate change has impacted many of their activities including finding water for their herds and altering grazing patterns (IOM, 2022). Ahmed Mohamud, a Somali herder who lost 50 of his 70 camels, has said 'There's no food. The ground is dry. This country is known for its refugees. If you lose your animals, you sign up as a refugee, that's what we say. So, there are many people who lost their animals and signed up as refugees' (ICRC, 2021). In a study conducted in Somaliland, an informant said that the impact of drought was more severe than 'any other tragedy I've experienced, even conflicts and the war' (Ahmed et al, 2022).

The 2020 IGAD Protocol on Transhumance (IGAD Transhumance Protocol) addresses the livelihoods of pastoralists and agropastoralists in the IGAD subregion, in part as a response to climate change as is mentioned in its Preamble. According to Article 2(a), its aims include 'allowing free, safe, and orderly cross-border mobility of transhumant livestock and herders in search of pasture and water as an adaptation mechanism to climate change and weather variability within the IGAD region' (2020 IGAD Transhumance Protocol). Although this acknowledgement of cross-border movement due to climate change is positive, given the nature of the cross-border mobility of transhumant livestock and herds, for it to be 'orderly' in the sense of the text would seem antithetical to the instrument's need for flexibility toward varying movements. For example, the IGAD Transhumance Protocol calls for an identification document called the IGAD Transhumance Certificate (ITC). However, in Ethiopia some pastoralists have seen the ITC as undermining traditional governance; others, including those in Somalia,

have chosen not to obtain an ITC because they see themselves as owners of the land and distrust the central government, while still others are not aware of the ITC (ICPALD, 2020). Member States should thus consider collaborative border governance methods that realistically refrain from inhibiting pastoralist movements across borders and respect the traditional local methods of governance that have been in place.

The AU's endeavours to establish integration through the free movement of persons, one of the flagship projects of the AU Agenda 2063, can complement the IGAD Transhumance Protocol. The 2020 Protocol on Free Movement of Persons in the IGAD Region (IGAD Free Movement Protocol) is a tool for implementing IGAD's aims of sustainable development and harmonization of economic policies through an integrated subregion. It is not overtly a legal instrument for conferring international protection, but it promotes an abolition of visa requirements and rights of entry, stay, exit, free movement, establishment and residence in the territories of IGAD Member States. Despite its economic focus, its Preamble recognizes 'the positive contribution that free movement of persons can have in mitigating the impact of conflict, poverty, unemployment, and underemployment, drought and disasters, as well as the adverse effects of climate change and environmental degradation as important drivers of displacement and migration in the IGAD region' (2020 IGAD Free Movement Protocol). This crucially identifies the economic and social loss of livelihood caused by climate change as a driver of cross-border displacement. Unlike international refugee law instruments, the IGAD Free Movement Protocol also specifically addresses climate-change displacement. Article 16(1) provides that Member States should allow individuals from other Member States entry into their territories when they are 'moving in anticipation of, during, or in the aftermath of disaster'.[2]

For individuals who are affected by disaster, Article 16(2) indicates that Member States should 'take measures to facilitate the extension of stay or the exercise of other rights'. Article 19 prohibits the mass expulsion of noncitizens with reference to the same obligation in Article 12(5) of the African Charter. Within its principles for governing expulsion, Article 21(5) elaborates that 'No Member State shall expel or return ('*refouler*') a citizen of another Member State where there are substantial grounds for believing that he or she may be in danger of death, torture, inhuman or degrading treatment or punishment, or other irreparable harm' (2020 IGAD Free Movement Protocol). The inclusion of a provision on *nonrefoulement*, the cornerstone of international refugee law, implies that individuals from Member States who are protected from return may be in need of asylum, even if it does not obligate Member States to confer it. An obligation of *nonrefoulement* necessarily entails a right to seek asylum, which debatably may be interpreted into this provision, but is also found explicitly in other binding instruments, such as the African Charter. Article 16 of the IGAD

Free Movement Protocol could on its own protect those who have been displaced by climate change, or it could be considered in conjunction with Article 21(5) if the 'danger' is of a threshold that can result in death or irreparable harm, both of which could be inflicted by a climate-change-induced disaster. A broader interpretation could also include 'torture' and 'inhuman or degrading treatment or punishment' as consequences of return; it can also be considered in situations where there has also been harm, conflict or persecution along with a climate-change-induced disaster.

It is promising that the Preamble of the IGAD Free Movement Protocol suggests a progressive interpretation of climate-change displacement and of *nonrefoulement* and that it, along with the IGAD Transhumance Protocol, incorporates human rights and expressly recognizes climate-change displacement. Significantly, these instruments consider that economic and social matters do not exist in a vacuum. Challenges may exist in this context, such as the logistical problems of identification and documentation that arise when displacement occurs. If those displaced by climate change will also be considered 'refugees' with consideration to Article 16, the 1969 OAU Convention, or a separate national asylum procedure, then it would be apt to recall the obligations on States not to penalize the 'illegal entry or presence' of refugees. This obligation is found in Article 31 of the 1951 Convention, which is binding on all IGAD Member States except for Eritrea and Somalia, which are not Parties to the Convention. The IGAD mechanisms lay the first stone for addressing the livelihoods and needs of increasingly displaced pastoralists, presenting Member States with the opportunity to play a supportive role, particularly in their approaches to documentation and legal status in the context of climate change displacement.

Flexibility in African regional law: working towards justice through climate-change displacement litigation

Beyond regional refugee law, Africa's regional international human rights framework is also equipped to protect the rights of those displaced by climate change. Its implementation of human rights standards differs from conferring legal status, such as asylum or international protection; beyond decisions on whether States have violated human rights, no implementing body can compel States to accept individuals into their territories or to grant asylum or international protection. Treaty-monitoring bodies hold a separate role from the State, which has discretion to grant refugee status or international protection based on its own laws and policies. Bearing this distinction in mind, the African Commission and the African Court can be empowered to make decisions on cases concerning the rights of those displaced by climate change.

The African Commission can make influential recommendations to States Parties to the African Charter to States and the African Court can issue

binding decisions to Member States which have accepted its jurisdiction. As examples in the climate-change context, the African Commission and Court can implement the right to life in Article 4, the prohibition of torture in Article 5, the right to seek and obtain asylum when persecuted in Article 12(3) of the African Charter, and the prohibition of mass expulsion of non-nationals in Article 12(5). According to the so-called flexibility clause in Article 60 of the African Charter, the African Commission and Court can utilize the 1969 OAU Convention,[3] its expanded refugee definition and other provisions and international instruments relevant to climate-change displacement.

Activists' recent efforts to advance strategic climate-change litigation should extend to displacement and the African regional system, including the African Commission and African Court. Strategic litigation should also occur at the domestic level, but so far only a small number of cases have emerged across a few jurisdictions in Africa, and only a few in Eastern Africa. In Kenya, *Legal Advice Centre T/A Kituo cha Sheria & Anor v Attorney General and 7 Others* includes, among others, the allegation of displacement due to climate-change-induced flooding. At the time of writing the petition is pending, and the Environment and Land Court of Iten must consider the question of whether the Kenyan government failed to mitigate the impacts of climate change. This is one of the first cases of its kind in Africa, and despite some potential challenges, strategic litigation will continue to play an important role in addressing climate-change displacement through the African regional human rights framework.

There is an impossibility of drawing causal links between specific migration events and climate-change-related events that result from State conduct that is prohibited by international law. Since it is not typically African States that are responsible for emissions contributing to climate change, this may raise questions about considering an African State as a Respondent in a case. Despite not being directly responsible for climate change, African States may still fail to protect individuals or groups from harms caused by climate change within their jurisdictions. African States may violate the human rights of those entering their borders as a result of climate change or, through inaction, fail to implement the planned relocation of a population that is susceptible to climate-change displacement. However, at the international level, the African regional system's complaints mechanism is flexible when it comes to victimhood (Suedi and Fall, 2023), and the admissibility criteria in Article 56 of the African Charter does not require that the author of a communication be the victim of the alleged human rights violation. The African Charter also allows NGOs with observer status to author communications.

Flexibility around victimhood and authorship can lend itself to strategic litigation and climate-change displacement cases, but there may be additional challenges for Complainants themselves. Individuals displaced by climate change – or climate change *and* conflict or persecution – may face unique

hurdles when fulfilling the admissibility requirements laid out in Article 56 of the African Charter. I have written elsewhere that when accessing individual complaints and fulfilling the admissibility requirements,

> refugees may be particularly disadvantaged due to a lack of familiarity with how to approach the legal system in a foreign country when attempting to exhaust local remedies, lack of freedom of movement when being held in detention or refugee camps, challenges with uncertain or pending legal status, unavailability or unaffordability of legal aid, serious and massive violations of human rights, and deportations. (Malek, 2023: 3–4)

Displaced persons may face difficulty with access to the African system's individual complaints mechanism and admissibility before a communication can even be submitted. Because of this, the African Commission and Court should strengthen their approaches to cases where the Complainants have been displaced, and they should provide commentary on the interpretation of the application of the African Charter and the 1969 OAU Convention to climate-change displacement.

Of the few cases that the African Commission and African Court have considered where the Complainant was forcibly displaced, even fewer have included decisions on *nonrefoulement*. While the African Commission has occasionally exempted refugees from the African Charter's Article 56(5) requirement to exhaust local remedies, its approach has been inconsistent. So far, the African Commission and Court have not provided significant commentary on *nonrefoulement*, the 1969 OAU Convention, or how or the extent to which exemptions from exhausting local remedies should consider the vulnerabilities of those who have been forcibly displaced. In addition to human rights that are related to a determination of legal status or international protection, such as the right to seek and enjoy asylum and the prohibition of *refoulement*, the African Commission and Court can consider other substantive rights found in the African Charter that pertain to climate-change displacement. For example, those displaced by climate change, such as Somalis who flee to Ethiopia, may be inhibited from the right to enjoy one's culture, the right to a healthy environment, the right to life, or the prohibition of torture or cruel, inhuman or degrading punishment and treatment.

Application of the regional standards of the 1969 OAU Convention at the domestic level: Ethiopia's reception of Somali forced migrants

At the regional level, the 1969 OAU Convention definition of 'refugee' in part contains language similar to that in the 1951 Convention definition. Additionally, it indicates that a refugee is also

> every person who, owing to external aggression, occupation, foreign domination, or event seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality. (1951 Convention, Article 1(2))

UNHCR and legal scholars agree that this expanded 1969 OAU Convention definition of 'refugee' may be suited for offering protection to some of those fleeing climate-change-related events and disasters, but there have been diverging understandings of which circumstances should qualify for the granting of international protection according to this definition.

UNHCR (2023c: 3) has advised that 'Refugees within wider regional definitions encompass persons who are compelled to leave their country in the context of events or circumstances related to climate change events or disasters "seriously disturbing public order"'. Despite this commentary focusing on climate change and disasters, all of the examples that UNHCR provides to illustrate this additionally refer to elements of violence and persecution, including 'Somalis fleeing violence and conflict exacerbated by drought and famine in 2011–2012 who were granted refugee status in Kenya and Ethiopia' (UNHCR, 2023c: 3). Through these examples, UNHCR seems to maintain that refugee protection in the climate-change context entails nexus dynamics even when a more flexible refugee definition may not demand this. Elsewhere, in UNHCR's Climate Action Plan for East and Horn of Africa and Great Lakes Region 2023–2028, its first Regional Objective entails that States: 'provid[e] protection to people fleeing from and living in climate crises', in part by granting refugee status according to the 1969 OAU Convention. It observes that the expanded definition may offer international protection 'including notably those compelled to leave their countries in the contexts of events or circumstances seriously disturbing public order related to climate change or disaster' (UNHCR, 2023b: 8).

Scholarly debates over whether 'events seriously disturbing public order' include environmental events have been divided, particularly over the question of whether or not the events must be human induced in order to produce refugees (Sharpe, 2018: 50). These debates, however, should consider migration due to 'natural disasters' and other environmental and climate-related events separately from the climate *change* context. Climate *change* is undoubtedly human induced, even if it is difficult to attribute to a particular State. State failure to mitigate climate change or to undertake actions that result in damages in other States or violations of the human rights of their citizens contravenes the 1997 Kyoto Protocol to the UN Framework Convention on Climate Change (Kyoto Protocol) and the 2015 Paris Agreement. Although it is impossible to attribute a singular

climate-change-induced event to an individual State, human activities – predominantly through the burning of fossil fuels, greenhouse gas emissions and other forms of pollution – have 'unequivocally' caused the warming of global surface temperature and led to climate extremes globally (IPCC, 2023: 6). The international community has what Sciaccaluga (2020: 86) calls a 'collective responsibility' to mitigate emissions that particularly falls on the heavy polluting countries, and their obligation to the no-harm principle in international law should be included in the analysis of displacement.

Although the circumstances of nexus dynamics in Eastern Africa can give relevance to the 1951 Convention refugee definition, the practices of Ethiopia as a receiving State of forced migrants from Somalia reflect that attempting to apply stringent legal criteria – even when it is possible to do so – may not be necessary or practical. UNHCR (2019b) has lauded Ethiopia's domestic asylum law, Refugee Proclamation No. 1110/2019 (Refugee Proclamation), which incorporates both the 1951 Convention and 1969 refugee definitions, as 'one of the most progressive in Africa'. An Ethiopian representative at the Nansen Initiative Global Consultation declared in his plenary statement that Ethiopia takes regional and international conventions to include 'those who are forced to leave their countries due to natural disasters, mainly climate related calamities such as droughts'. He further stated that Ethiopia is of the view that for the 1969 OAU Convention refugee definition 'to include persons who are compelled, due to natural disasters, to leave their place of habitual residence in order to seek refuge in another place outside their country of origin or nationality, has enabled African countries, including Ethiopia to open their borders' (The Nansen Initiative, 2015: 107). At the IOM Council's 100th Session in 2011, the Ethiopian delegation announced that Ethiopia 'maintains an open door policy towards people seeking assistance and refuge from violence and natural disasters' (IOM Council, 2011).

Ethiopia's stated position on its interpretation of the 1969 OAU Convention is a reflection of its practice; this has been documented in UNHCR's 2018 (Weerasinghe, 2018) research, which UNHCR also alluded to in its abovementioned 2023 note on climate-change impacts and cross-border displacement. This study captured a snapshot of the responses of some receiving States, including Ethiopia, to populations including Somalis who fled across international borders to escape environmental disasters and degradation, along with conflict, violence, and persecution, in 2011–12. Informants in the study indicated that multiple drivers led them to flee from Somalia to Ethiopia, which was comprised of the interconnected circumstances of drought and the violence and conflict predominantly caused by Al-Shabaab, as well as other social, political and economic dynamics. An illuminating aspect of this study is its exposition of the fact that those who indicated in their refugee status determination (RSD) interviews that they

only fled Somalia due to drought and the resulting famine also indicated that when they sought humanitarian assistance within Somalia, Al-Shabaab blocked or restricted the access of the population to humanitarian assistance, or it prevented those attempting to provide humanitarian assistance from affected populations. This interweaving of environmental factors and harm inflicted by non-State actors contributing to the conflict and violence, and potentially persecution, exemplifies the ways in which the 1951 Convention criteria could have been applied.

In practice, however, during the time period studied, Ethiopia recognized cases like this by applying the expanded 1969 OAU Convention refugee definition.[4] According to UNHCR's data, in the Dollo Ado Camps in 2011, only 17 Somalis were recognized according to the 1951 Convention, while in contrast, 98,650 were recognized according to the broader refugee criteria. In 2012, none received 1951 Convention recognition, and 34,816 were recognized under the broader refugee criteria (Weerasinghe, 2018). This received further comment from an informant in the study who represented the Administration for Refugee and Returnee Affairs (ARRA), the government department that at the time received asylum seekers and refugees in cooperation with UNHCR; the informant observed that the expanded definition moves away from placing 'too much emphasis on the human-made causes, noting that "natural" events can also result in disturbances of public order' (Weerasinghe, 2018: 56). While the data collected does not reflect whether this was necessarily the prevalent view held by the ARRA at the time, nor is there data about the interpretation of the current administrative body – the Refugees and Returnees Service (RRS) – it coheres with Ethiopia's public statements about its interpretation of the 1969 OAU Convention and its open-door policy. It also aligns with its practice, at least with reference to the time period of 2011–12 upon which the UNHCR study focused.

The African Commission has stated that 'the notion of public order in a State implies conditions that ensure the normal and harmonious functioning of institutions on the basis of an agreed system of values and principles' (*Scanlen and Holderness v Zimbabwe*, 2009, para. 109). The ARRA informant's understanding of 'events seriously disturbing public order' also has support from those in academic scholarship who do not believe that a human-induced element is required for the clause to apply to environmental events. However, as mentioned above, this debate about 'natural events' should be considered separately from human-induced climate-change disasters. Ethiopia's interpretation of 'events seriously disturbing public order' referenced in the UNHCR study could make a case for applying African regional refugee law when offering international protection to those displaced by climate change.

From an international law perspective, as Wood (2019) has observed, the isolated practices of States should only be considered as a supplemental means

of interpreting the 1969 OAU Convention. Interpretations also should not undermine the treaty's object and purpose which in part is humanitarian in approach, per the Preamble. Scholars have interpreted the object and purpose of the 1969 OAU Convention differently in that, in addition to its stated humanitarian approach, it also focuses on security. In light of the drafters' preoccupation with subversive activities, the 1969 OAU Convention distinguishes between 'a refugee who seeks a peaceful and normal life' and 'a person fleeing his country for the sole purpose of fomenting subversion from the outside' (Preamble, para 4). Since it is an instrument that confers rights and status to refugees, it would be apt to apply an humanitarian interpretation that follows the Preamble's stated aims which repeat the notion of seeking a better future, outlining its desire for 'finding ways and means of alleviating … misery and suffering as well as providing … a better life and future' (1969 OAU Convention, Preamble, para 1). Beyond the limits of this chapter's scope, further research should be conducted in Eastern African States and throughout the continent to observe their approaches to 'events seriously disturbing public order', while encouraging acceptance of its inclusion of those displaced by climate-change disasters.

Conclusion

The AU has demonstrated a continued receptiveness toward initiatives that concern climate-change displacement. Through the AU Agenda 2063's flagship project on the free movement of persons, further protections of those displaced by climate change can be extended on the subregional level. Regional Economic Communities (RECs) can tailor their approaches to implementing the AU Agenda 2063's aspirations in their respective subregions with consideration to cultural and geographic requirements, such as IGAD's approach to delivering services to clusters. Although the primarily economy and trade-centred IGAD Transhumance and Free Movement Protocols were not intended to confer legal status or human rights protection to displaced persons, their inclusion of provisions that address climate-change displacement and *nonrefoulement* can bring about promising solutions. Alongside the potential for these instruments to help protect those such as pastoralists and agropastoralists who are affected by climate change in the IGAD subregion, Member States should continue to respect local governance structures and apply minimal approaches to documentation requirements when implementing the Transhumance and Free Movement Protocols.

The African Commission and African Court can bring about justice by protecting and implementing the human rights of those displaced by climate change. Despite challenges and limitations of the individual complaints mechanism, strategic climate-change litigation is possible. The

African Commission and Court should provide further commentary on exemptions from the exhaustion of local remedies rule when Complainants have been displaced and are seeking justice in another country; by doing so, their approaches to displaced Complainants can be made more consistent than in previous case law. The African Commission and Court are also empowered to provide more in-depth commentary on climate-change displacement and *nonrefoulement*, and they should use the flexibility clause to make further pronouncements on the 1969 OAU Convention and on climate-change displacement.

More research is needed to identify and evaluate the practices of African States and their interpretations of the 1969 OAU Convention when receiving those displaced across borders by climate change. Although approaches such as that of Ethiopia cannot be said to represent State practice in the African region, interpreting climate-change disasters as creating refugees in the sense of Article 1(2) is within the scope of 'events seriously disturbing public order'. Parties to the 1969 OAU Convention should be encouraged to adapt this interpretation, particularly in Eastern Africa where the harmful events of climate change are acute.

Overall, the African regional framework is uniquely equipped to address climate-change displacement, but in Eastern Africa, successfully protecting those most affected by the harms of climate change will require collaborative efforts by the AU, the African Commission and African Court, and individual Member States to promote justice for persons displaced by climate change.

Notes

1. Member States of the Intergovernmental Authority on Development (IGAD), the East African Community (EAC), and States of East and Horn of Africa. *Kampala Ministerial Declaration on Migration, Environment, and Climate Change*. Interministerial Conference on Migration, Environment, and Climate Change (29 July 2022).
2. The IGAD Free Movement Protocol defines 'disaster' as 'a calamitous event or series of events not governed by the rules of international humanitarian law and resulting in widespread loss of life, great suffering or distress, or large-scale material or environmental damage, thereby disrupting the functioning of society'.
3. Article 60 of the African Charter allows the African Commission and African Court to 'draw inspiration from international law on human and peoples rights'.
4. The time period covered by the UNHCR study 'In Harm's Way' predates the current version of Ethiopia's Refugee Proclamation, which continues to define refugees with language similar to the 1969 OAU Convention definition, but the revised 2019 Refugee Proclamation has removed the phase 'in case of refugees in Africa'.

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16

Dear Future Activists: How to Lead Intersectional Climate and Environmental Action

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Climate injustices and leadership in and from Eastern Africa

This final chapter reflects briefly on key lessons from Eastern Africa before directly hearing from climate leaders on the frontline of the movement for intersectional climate justice. *Climate Justice in Action* celebrates the innovations, activism and adaptations led by diverse communities, governments and organizations across Eastern Africa. Like much of the Majority World (Crawford et al, 2023), Eastern Africa is bearing the brunt of climate change, environmental degradation and deforestation. The interconnected nature of conflict, food insecurity and climate change are more evidence in Eastern Africa than anywhere else in the world (Bedasa and Deksisa, 2024). Yet, the region has been neglected from policy and knowledge production tables. This book therefore intentionally centres voices and experiences that are too often overlooked in global climate discourse.

Through practical, grounded examples, the chapters expose the deep social, economic and environmental injustices that climate change inflicts on vulnerable communities across the region. They underscore how climate change compounds existing inequalities – particularly for marginalized groups such as displaced people – and demonstrate the urgent need for intersectional, inclusive responses. Importantly, the book highlights that climate activism is alive and resilient in Eastern Africa, despite limited media

coverage and the challenges posed by repressive regimes. By amplifying the work of local researchers, activists and practitioners, we send a powerful message: that grassroots action and activism matter, and that collaborative efforts are key to meaningful change.

We collectively direct attention to the region's minimal historical contribution to the climate crisis (Wengraf et al, 2023), juxtaposed with recent efforts to expand fossil fuel extraction; an objective that endangers the future of both people and ecosystems. We call out the entrenched power structures in both government and the private sector, and showcase the diverse efforts to challenge them. This is despite the fact that oil and gas discoveries and increased industrialization – which tends to benefit multinational corporations from the Minority World – have contributed to ozone-layer depletion, pollution and environmental degradation. Here, Eastern African researchers and activists have foregrounded lived experiences, centred their epistemologies and highlighted their 'stories from the forests'. They contribute to growing work, which centres on, in particular, civil society efforts to 'frame oil deposits as a stranded asset and advocate that oil remain in the ground … in order to remain within the limits of a world carbon budget', in contrast to the 'economic imperative' argument employed by political actors to extract despite the ecological consequences (Wokuri, 2025: 1). These stories are diverse, ranging from adaptation, mitigation, activism and survival strategies in a context where environmental challenges have put people's livelihoods on the ropes. It is important to listen to these knowledge creators and activists because they constitute narratives of hunters who have survived the vagaries of the forest and watched in shock as the climate changed over time: from unpredictable rainfall patterns to hot temperatures becoming intense, from flash floods becoming normalized to increased food insecurity.

This book affirms, through both literature and practical evidence, that Eastern Africa is severely affected by the impacts of climate change. It faces increasing frequency and intensity of droughts, floods and landslides. Refugees, particularly those living in camps and settlements across the region, are especially vulnerable, experiencing higher temperatures and lower rainfall than other areas (Bose, 2024; Fransen et al, 2024). The need to centre this experience influenced our choice of book cover – which features Phillip Kairu's collage, 'Bidi Bidi', on the environmental challenges that exist in the refugee camps in northern Uganda. Chapter 15 in the book explores the intersection of climate change and displacement, reminding us that Eastern Africa is home to millions of refugees forced to leave their homes by conflict, but increasingly by climate-related disasters, with the two often intertwined. While cross-border displacement is significant, internal displacement is even more widespread. Both populations increasingly find their way into the region's growing cities (Crawford, 2021; Earle, 2024;

Crawford, 2025) – where new challenges are found as they find their way into unplanned and environmentally precarious informal settlements (Mattar and Crawford, 2023). These situations are often worse when individuals are part of multiple marginalized communities, such as LGBTQIA+ refugees (Crawford et al, 2025) or queer people with disabilities (McQuaid and Crawford, 2025). Yet, refugee and internally displaced communities are often left out of adaptation and resilience strategies, though their needs are just as urgent. The region's reliance on agriculture heightens its vulnerability, as climate change brings water stress, more incidence of pests and diseases; leading to reduced agricultural yields. Vulnerability is also reflected in limited employment opportunities, remote locations with inadequate infrastructure, and poor access to essential services.

This book highlights how climate change exacerbates pre-existing injustices and society's most vulnerable are structurally hit the hardest by climate change. By reading this book, we hope that activists and policy makers gain a wide-ranging understanding of the realities of climate change in the region.

The need for intersectional and decolonial climate justice

Collectively, the 39 authors/contributors – the majority of whom (over 60 per cent) are based in Africa – to *Climate Justice in Action* highlight the importance of intersectional climate actions that not only seek to curb environmental catastrophe triggered by erratic weather, heatwaves, floods and droughts in one of the most climate vulnerable regions in the world, but focus on transforming the inequalities that drive present and historical social and economic injustices. In doing so, our book shifts the gaze beyond vulnerabilities, to action and response, highlighting myriad creative pathways to activism and adaptation. They train our focus on the root causes of inequality and injustice, and the interconnections between multiple forms of marginalization and oppression. At the same time, they acknowledge climate adaptation involves significant yet often invisible labour that is undervalued and unequally distributed, and for climate justice and a just transition to be achieved, this labour must be recognized, redefined and transformed (Johnson et al, 2023).

In amplifying community voices, celebrating diversity and demonstrating the importance of intersectional approaches, *Climate Justice in Action* spotlights the lessons and leadership of Eastern Africa, offering key learnings for the global climate-justice movement. This includes the importance of rethinking the politics of climate knowledge and inclusion in order to decolonize and decentre hegemonic approaches that tend to replicate problematic binaries and exclusions. Too often, climate knowledge is dominated by certain people,

from certain places, with little done to address entrenched barriers. As a small survey of climate-justice scholars' highlights, Majority World scholars often face 'restricted access to knowledge and technology, publishing difficulties, systemic pressures, development challenges, and repression' (Mikulewicz et al, 2023: 256). The authors here offer alternative communal and holistic visions for climate justice that emphasize intersectionality, solidarity, creativity and plurality. They also remind us that every effort in response to the climate crisis matters. Chapters in the book spotlight the importance of Indigenous knowledge, echoing calls about the importance of such knowledge in climate-change adaptation across the continent and beyond (Schlingmann et al, 2021l; Leal Filho et al, 2022).

Eastern Africa requires a coordinated approach where activism, adaptation efforts and policy making work together simultaneously and inform each other. It is crucial that all stakeholders embrace this collaborative mindset rather than working in silos. Without this we risk exacerbating or creating new vulnerabilities even through seemingly well-intentioned initiatives. For example, the way in which some climate finance policies and initiatives have exacerbated climate injustices (Dafermos, 2025). Our book intentionally brings together the voices of activists, artists, researchers, journalists and practitioners from across this diverse region, highlighting the urgent need for multiple perspectives, epistemologies and methodologies. From the conceptual underpinnings of solidarity and collectivity that integrate social, environmental and climate-justice movements, to policy innovations that entwine national, regional and international instruments and embed human rights principles, innovations to strengthen food and energy security, and women-centred programmes that resist the normalization of patriarchal power.

Our authors compel attention to lived experiences and local visions for radical transformations and more-than-human perspectives for alternative sustainable futures. Their accounts offer direct pathways to bringing grassroots perspectives to the centre of climate action, rethinking the politics of climate knowledge, and seeking a de- and anticolonial approach that directly addresses inequities of power in our responses to the compounding climate crisis. As Ikal Angelei notes in our Foreword 'By amplifying local communities' voices, challenging unjust power structures, and proposing innovative, holistic approaches, African environmental advocacy is at the forefront, leading the push for global climate action.'

Climate action and activism: tools, challenges and futures

In this, the chapters of our book speak for themselves. They demonstrate how climate action is laden with politics. For sustainable climate action,

there is need to acknowledge that activism and policy making should be context specific, taking into account historical antecedents and situated in local and Indigenous knowledge systems to gain traction and collective ownership. There is a need for collaborative activism, rights and planetary consciousness, which embraces epistemologies and experiential Indigenous knowledges and systems of Majority World people and communities. The inclusion of marginalized groups is a non-negotiable issue if durable and lasting solutions to climate action are to be found. Drawing on the lessons of a transdisciplinary research project in urban South Africa, the importance of building marginalized communities 'capacity to adapt locally and to integrate their perspectives into higher-level adaptation measures' has been stressed, and that 'knowledge co-creation at the community level is central to the capacity building that is needed in order to inform transformative adaptation' (Ziervogel et al, 2022: 607). This echoes the importance of commitment to epistemic justice within climate-change programmes and scholarship.

Transformation does not happen overnight. Wangari Maathai's journey – the subject of Chapter 1 in this book – shows that it can take years of steady, nonconfrontational work to build a strong movement. For over a decade, her efforts focused on community engagement, education, and trust building, laying a solid foundation supported by local communities and even parts of the government. Only after this groundwork was in place did the movement grow into a powerful force, capable of challenging harmful government policies related to deforestation and human rights abuses.

The next generation of climate activists and policy makers understand that climate change is taking place within a context of multifaceted crises, or 'polycrisis', where multiple, and interconnected challenges are colliding in complex and unpredictable ways. For example, the aforementioned connection between food insecurity, conflict and climate change. There is a need to build a collective voice among activists pushing for different sociopolitical and environmental causes so that the resultant solutions can address the root causes of these complex, interrelated issues. An intersectional climate activism rooted and turbo charged by marginalized groups including women, youth, older people, displaced communities, diffabled individuals and queer communities holds promise to galvanize different constituencies.

Climate Justice in Action showcases initiatives such as water-harvesting technologies, training in climate-smart agriculture, and fruit tree planting. Expanding the reach and impact of such initiatives through increased climate financing is both urgent and essential. Our authors offer a rich collection of tools and strategies for activists to use in their work. These include public-awareness campaigns, digital activism, coalition building, protests, community organizing, reforestation efforts, petitions, media campaigns and litigation. It also emphasizes the importance of forming a wide range

of partnerships including with students, civil society groups, religious organizations, international media and global climate movements.

Young people are no longer waiting for a seat at the table – this book clearly shows that they are bringing their own chairs and tables when marginalized from climate-change discourse. By amplifying local communities' voices, challenging unjust power structures, and proposing innovative, holistic approaches, this book highlights how young African climate activists are at the forefront, leading the push for global climate action. Through community initiatives like Citizen Voice and Action (CVA), the SAUTI-Youth programme in Tanzani – detailed in Chapter 12 – enables young people to influence policy decisions and advocate for environmental sustainability. It is also essential to focus not only young citizens, but young people who have been displaced and offer a range of knowledge and insight from experiencing environmental challenges in their home, as well as in refugee camps and cities in neighbouring countries (McQuaid and Crawford, 2025b). Activism is often complex and burdensome, as clearly reflected in the stories shared in this book. Challenges should be expected. Activists should not be caught off guard by attempts to silence their voices. Even when governments adopt policies aligned with activist goals, those in power often act against these very policies due to conflicting interests and their ability to do so with impunity.

This book highlights instances where activists have been arrested or harassed by police – a form of systemic violence rooted in colonial legacies. According to nearly 3,000 cases analyzed from the global Environmental Justice Atlas, environmental defenders faced higher rates of assassinations (13 per cent), physical violence (18 per cent), and criminalization (20 per cent) – all of which are significantly higher for Indigenous communities (Schridrl, 2020). Women environmental defenders face notable instances of violence, notably in cases of resource extraction, though gendered violence in Africa is understudied (Tran and Hanaček, 2024). These cases are particularly prevalent among minority, poor, rural, and Indigenous women (Tran and Hanaček, 2023) – underscoring the need for an intersectional analysis and more focus on Eastern Africa. In the private sector, silencing may take more subtle forms, such as bribing activists through job offers. The media also plays a role, selectively amplifying certain voices while sidelining others, particularly in mainstream outlets that reinforce existing power imbalances through gatekeeping. The case of Associated Press erasure of Ugandan activist Vanessa Nakate in 2020 – discussed within this book – is the most well-known, but far from the only one (Hasan, 2024). Staying informed and critically aware of these dynamics is essential – while also resisting them whenever possible.

We need to also be vigilant of who is excluded from environmental action efforts. Uwimana Seifu, an activist for HUMURE, in Burundi and a

contributor to this chapter, highlights how difficult it is for members of the LGBTQIA+ communities to engage in environmental work and sustainable development due to the constant threat of insecurity. He explains that while many want to contribute, they often do so indirectly out of fear for their safety. As a community leader, Uwimana recalls an initiative to clean up the shores of Lake Tanganyika. The Lake borders the west of Burundi and provides access to water, food and livelihoods for the country, and faces challenges as a result of climate change (Phiri et al, 2023). Uwimana recalls that the Lake is severely polluted by debris from upstream rivers – but notes the challenges of participating openly. Although an LBQ organization was able to take part using simple, accessible materials, their efforts lacked sustainability due to limited funding and support. Seif emphasizes that for GTBQ individuals, especially transgender people, public involvement can be dangerous, as dressing visibly and working in public spaces often invites harassment. His experience underscores that environmental justice in Burundi and elsewhere cannot be separated from the struggle for LGBTQIA+ rights and safety, a point returned to in the following section by Eric Ndawula from Uganda.

Similarly, diffabled people often face significant barriers to participating in climate action, activism and adaptation efforts, including physical inaccessibility, lack of inclusive communication, and exclusion from decision-making processes. Emergency planning and adaptation strategies frequently overlook their specific needs, placing them at heightened risk during climate-related disasters. As articulated in other Majority World contexts, vulnerability to disasters and environmental hazards, 'is due not to their bodies and minds, but to multiple and reinforcing systemic (and normalised) socio-cultural, economic, and political barriers in daily life' (Pirmasari and McQuaid, 2023: 292). However, diffabled activists and community members bring critical knowledge, lived experience and leadership to climate-justice movements. Diffabled people must be actively included as stakeholders in climate and environmental research and decision making, using an intersectional, disability rights-based approach. International and national bodies, along with sustainability programmes, should ensure meaningful participation of disabled communities and specialists to inform equitable adaptation, conservation, and resilience strategies (Kosanic et al, 2022).

We need to ensure that climate action and adaptation is accessible to all – with particular attention to groups who are not only disproportionally impacted by climate change and its consequences, but are regularly excluded from policies and practices to help combat and tackle disasters and environmental injustices. Our understanding of climate change, and our responses to it, must be intersectional and inclusive. With this in mind, in the sections that follow, we hear directly from the voices of leaders in

Eastern Africa's climate-justice movements. In lieu of a 'conclusion' at the close of our book, we instead look towards the future and how to adapt, advocate and resist in the face of the climate crisis. Learning from the voices in this book is not just an act of solidarity, it is a necessary step toward global and intersectional climate justice that includes everyone, especially those on the frontlines.

Eric Ndawula (Lifeline Youth Empowerment Centre, Uganda)

Eastern Africa has never just been a region in crisis, it is a region of innovation, resilience and radical imagination. For too long, the global climate conversation has silenced or tokenized our voices. This book challenges that. It shifts the gaze from what is being done to us to what is being done by us. In this region, adaptation isn't a buzzword, it's a daily practice. We adapt when we grow food on concrete rooftops. We resist when we call out extractive industries. We transform when we build community in places designed to exclude us. And within this struggle, queer voices offer essential insights, not only because we are disproportionately affected, but because we bring with us a legacy of reimagining what justice, family, and survival can look like. This book will serve as a testament to that reimagining. And that's why I'm honoured to be part of it.

Climate justice must be intersectional

In Eastern Africa, those most impacted by climate change are already marginalized, queer people, women, youth, the urban poor. Yet too often, climate responses fail to address the structural exclusions these groups face. At Lifeline, we've witnessed how climate shocks like flooding and drought compound social inequalities. For queer youth already excluded from formal employment and public services, climate change simply deepens existing vulnerabilities. In our Equal Victims project[1], which focuses on intimate partner violence (IPV) among gay, bisexual and queer men, we've seen how economic instability, often climate-related, can lead to heightened domestic tensions and violence in same-sex relationships. A climate-justice movement that isn't inclusive of queer and other marginalized voices cannot truly be just.

Community knowledge is power

One of the most impactful lessons from our work is that community members are not passive victims – they are active knowledge holders and innovators. Through the Equal Victims project, rural outreach

sessions, and storytelling platforms, we've documented how queer people adapt in extraordinary ways: urban gardens in cramped informal settlements, shared housing cooperatives to withstand evictions, and mutual aid networks in moments of food insecurity. We've seen queer elders recall forgotten ecological wisdom and young leaders start urban farming collectives in deeply hostile environments. These aren't just coping mechanisms, they are radical acts of resilience that deserve to be honoured and supported.

Climate grief is real!! And so is joy

Working at the intersection of queerness, trauma and environmental collapse, I've seen grief take many forms. Grief for the land. Grief for homes lost. Grief for the freedom to simply exist. But I've also seen moments of incredible joy, joy that emerges from chosen families, from the small wins, from collective care. In our safe houses, in storytelling circles, in food-sharing projects, we've witnessed how queer communities, even in crisis, hold onto life with such fierce tenderness. That energy, grief held in one hand and joy in the other, is what sustains our movements. The next generation must learn to hold both if they're to carry this work forward.

Protect queer and other marginalized climate migrants

As climate-related displacement increases, queer people are uniquely at risk and often invisible within humanitarian responses. In places like Kakuma Refugee Camp in Kenya, LGBTQIA+ refugees have faced horrific violence (Amnesty International, 2023), from physical beatings to arson, at the hands of fellow refugees and local actors. These stories are not isolated; they're part of a broader pattern of exclusion and abandonment. Many queer migrants cannot access basic aid because of criminalization or stigma, and there are no safety nets in place. If climate justice does not explicitly include displaced queer people, through inclusive housing, legal recognition and trauma-informed services, then it is not justice at all.

Fund queer-led green innovation

Queer people are already building solutions. At Lifeline, I've seen queer youth transform waste into tools, plant sustainable food systems in small urban spaces, and design peer education platforms that combine climate awareness with sexual health. But these innovations rarely receive funding. They fall outside traditional development models that are still uncomfortable with queerness. The next decade must prioritize investing in queer-led environmental responses, not as charity, but as necessity. If we want to scale impact, we must

fund what's already working and trust those closest to the problem to lead the solutions.

Sostine Namanya (WoMin African Alliance, South Africa)

First, it's critical to recognize that the climate crisis is inherently unjust. It disproportionately affects those least responsible for causing it. This isn't just a carbon or a technical challenge but interlinked with histories and structures of systemic injustices. Climate 'solutions' that ignore this context risk deepening other crises by dispossessing communities of their lands and resources, which allow them to deal with other crises. Future climate actors must prioritize intersectional analysis. The systems that perpetuate climate injustice, colonialism, capitalism, patriarchy are deeply interconnected. These power structures produce and perpetuate the climate crisis, and we must recognize that these issues cannot be addressed in isolation. Movements must be built with this systematic awareness, rooted in solidarity across struggles from Indigenous land rights to gender justice and, most importantly, women's liberation. We must therefore shift from managing symptoms to transforming root causes. We must resist those that serve the current model of development and instead support approaches that challenge extractive development systems. Climate-justice movements must dismantle these interlocking systems and structures of power, and support movements that promote gender equality, environmental stewardship and climate resilience simultaneously. Without this systemic approach, we risk pouring solutions into a bottomless pit, feeding the capitalist beast with an insatiable appetite for exploitation and inequality. Our priority must not merely mitigate symptoms but transform the very foundations that perpetuate climate injustice.

Bridging siloed movements with intersectional and feminist approaches

In my work across Eastern Africa, I have seen how climate injustice is inseparable from economic inequality, militarization, gender-based violence and political repression. Yet too often our movements are siloed. We need to deepen collaboration between feminist, environmental, Indigenous and anticapitalist movements. Feminism, in this context, is not only about gender but a way of understanding power and for imagining alternatives rooted in care and collective power and that reject extractive capitalism. Feminist climate justice must centre those most impacted by extractivism, Indigenous communities, and the rural poor. It must challenge systems of 'power over' that rely on fear, violence and dispossession. It must

uplift traditional knowledge and community-led resistance as visionary paths forward.

Saying NO to harmful climate damaging solutions and reclaiming ecological sovereignty

The climate justice movement must take a firm stand against the corporate capture of climate responses, from carbon markets to green washing by multinationals companies. In the communities I work with, we see how these solutions replicate the same harm they claim to address, fuelling land grabs, evictions and resource theft. Instead, we must strengthen resistance to the extractive model of development and invest in approaches that restore community control over land, forests and water resources. This includes fighting for Indigenous sovereignty, collective land tenure, and different notions of democracy.

Ecofeminism

We must centre ecofeminist principles as a response to the ecological and climate crisis, such as values of solidarity – ubuntu ('I am because we are') – from Africa. Support the interdependence of all life at the core: the human and the other forms of life human/more than human; these linkages have been broken and separated and invisibilized. Community efforts to repair these, to take these back, to defend these, this is feminist climate justice. The ecofeminist approach's vision is for rural women to be involved in all decision making and to grow, sell and consume the products of their family farms, be in leadership, own land and be key decision makers in society. The values, beliefs and actions of ecofeminism is also to know that capitalism, colonialism, racism, patriarchy and the climate crisis are all closely interconnected and that collective action by women is essential in this fight.

Political justice

We also cannot ignore the realities of militarization, occupation and conflict from Palestine to Sudan to DRC to Western Sahara. Climate justice cannot exist under occupation or genocide. These struggles must not be made invisible in our movements. Climate justice is incomplete without political justice. Our solutions must not be based on arbitrary national boundaries, but rather bioregions and ecosystems (such as the Congo Basin or Amazon Rainforest). This reflects our understanding that environmental challenges and movements transcend political borders, and that cross-regional knowledge exchange is essential for building global solidarity.

It's time we are listened to not as victims but as alternative visionaries

Eastern Africa stands at a tipping point of escalating ecological and climate crisis impacts and growing structural inequalities. It's also rich in resistance, strengths and climate transformative visions, yet is often overlooked in global conversations. We must find ways to learn from one another. Like trees in a forest, we can create a thriving ecosystem, with each our shared knowledge and relationships contributing to our collective survival and well-being. Focusing on climate-justice activism in Eastern Africa is not just about representation, but it's about justice. Our communities are on the frontlines of climate breakdown and our stories reveal the depth of the change needed. We bring critical perspectives rooted in struggle, and resilience shaped by histories of colonialism, resource plunder and imposed development models. We carry anger and knowledge that challenges the dominant narrative that is connected to colonization, capitalism, patriarchy and racism and the harmful model of development. It's time we are listened to not as victims but as alternative visionaries.

Anabela Lemos (Justiça Ambiental! Mozambique)

Our work is rooted in connecting local grassroots struggles against dirty energy that are the main drivers of the polycrisis, with the climate-justice movement nationally, regionally and internationally, and to help build people's power towards real people-centred climate solutions. At Justiça Ambiental![2] we do research and we work with allied civil society in the Global North to strengthen our struggles. Mozambique is one of the countries most affected by ravages of the climate crisis. In 2019, Cyclone Idai and Cyclone Kenneth killed at least 1,400 people in Mozambique, Zimbabwe and Malawi. Hundreds of thousands were displaced, and many died of cholera and other illnesses in the aftermath. Those are the bigger, more visible impacts, but there are less visible impacts that communities in Mozambique are facing everyday: increase of droughts in one part of the county, floods in another, rain during dry season is a constant stress for lives that are made more and more precarious by maldevelopment. To make things worse, the Mozambique government has opened the doors of our country for foreign investment in coal, gas, transition minerals, timber, precious stones and more. Like other African governments, their narrative is that they have the right to exploit their fossil fuels and develop the country as the Global North did.

People are losing their basic right to say NO

The Global South did not cause the climate crisis; it is clear that the Global North is legally and morally culpable for the crisis and must act first and

strongest to address their historic and current carbon emissions. However, the actual situation we are in today means that the Global North has polluted so much that there is no space for more new fossil fuel exploration in our countries. Transnational corporations from the Global North such as Total, Eni, Exxon Mobil use this narrative of African governments to carry on exploring fossil fuels and as such to carry on business as usual. We are not sure why the Global South governments do not realize that what they are claiming is their right is actually the right to fall into an abyss. It is greed, complicity, ignorance of local and global elites, but for sure is not for the peoples of the Global South. On top of increasing emissions, environmental destruction, worsening climate impacts, the rural subsistence-based communities, the directly affected peoples are not gaining anything, they are losing their lands, their forests, their access to the sea and rivers and are losing their basic right to say NO.

Dangerous investments

The gas exploitation in Cabo Delgado is a clear example of these types of dangerous investments. After losing their lands and livelihoods, communities are living in poverty and the number of human rights violations has skyrocketed. Civil society and journalists who speak out are threatened or killed, and the communities that raise their voices either are disappeared or threatened to the point to stop raising their voices. At the national level, our *impune* (unpunished) government is now threatening to pass new laws to shrink civil society space even further. For sure these investments do benefit the political and corporate elite, so they carry on.

Community rights, system change and grassroots solidarity

Our work is at local, national, regional and international levels to raise awareness about the climate crisis and its key drivers. We integrate climate-justice considerations and an understanding of system change to shape our demands and priorities for climate action. We fight to stop the gas and coal exploitation in Mozambique and we highlight the urgency of ending fossil fuel dependence, while large-scale dams and monoculture plantations expose the flaws in false solutions and carbon markets. At the same time, we support communities affected by those projects, to demand their rights. In Cabo Delgado, the gas industry has already taken land from thousands of local people. Some have been removed by force and others were removed by mutual agreement but are still waiting for land and proper compensation. The so-called consultation process was a joke, with community members unable to dissent for fear of retaliation. Fishing communities, who once lived 10 metres from the sea were moved more than 10 km away from

their fishing grounds and farmers were moved far from their land. These subsistence communities are losing their entire livelihoods, and many previously self-sufficient communities have been turned dependent, now living off food aid. After Total claimed *force majeure* on their project back in April 2021 and put the project on pause, people are living in abject poverty, and many who had agreed to receive compensation from Total have not received these payments and don't know when they will again. Because of this displacement, and the violence, many people are now living in refugee centres.

JA's longest-running campaign is the fight against the proposed Mphanda Nkuwa dam. Since 2000, this campaign has worked alongside affected riverine communities, Mozambican and international civil society partners, academics and experts to expose the project's impacts and to defend the people's right to say NO. At the same time, we support the implementation of clean and renewable energy, owned and managed by the community, by installing solar power docks for charging electronic devices in Zambézia and Tete provinces. We hope this initiative contributes to showcasing the types of energy solutions that can be adopted in our country, providing communal clean energy to local communities, and stimulating their cooperation and solidarity.

What future activists should prioritize, remember or include in their action

1. Find a way to reach governments, decision makers and even some big influential civil society organizations to understand the drivers of the climate crisis, debunking myths around hydropower and gas as clean climate solutions, and promoting alternative narratives that present real, decentralized, clean energy solutions that benefit the people rather than large corporations and industries.
2. For better lives of dignity for Mozambican and other Global South peoples, our governments and industry must move financing from all fossil fuels to enable a just transition to renewable energy; providing the infrastructure and capital needed for renewable energy, the relevant education, and the technology without patents; and cancel national debt, which is trapping our countries.
3. Campaign to stop finance for those projects, raise your voices against the human rights violations, take Global North companies to court for their human rights abuses, even if they claim that it is the responsibility of the government not them. We need to expose the complicity between the companies and the government. We need more research on corruption and to expose the names in the media.

Decentralized people-centred energy systems based on justice

It is really important to work towards stopping fossil fuels, and at the same time, uplift financing and vision for a people-centred just energy system. We also need to debunk the narrative of false-solution schemes, such as REDD, megadams, gas as a transition fuel, carbon markets and geoengineering. There are no silver bullets to stop these multiple crises.

The exploration of fossil fuels not only increases emissions but comes with human rights violations, land grabbing, loss of livelihoods: that is our Global South reality and most of the energy is not even for our peoples, but for export. The solution is community-based decentralized energy systems, run by people and based on justice. It is possible and much easier in parts of the Global South, as the majority of our people in Mozambique, for example, do not have access to electricity and the grid doesn't reach them, so decentralized, off-grid solutions can work here. In Mozambique only 35–40 per cent of our people have energy. The work we have done with the solar docks project has given an immense benefit to communities by providing small-scale alternative energy sources – not just for charging mobile phones and listening to the radio but also as gathering places/commons where people can socialize while using the energy. Several families have greater access to energy and this is fostering social interaction in these now well-lit areas. Access to information and education has also expanded, with many children and young people using the solar-powered lighting to study and read at night. Although still limited in scale, these solar dock installations have demonstrated the feasibility of local, decentralized and community-managed solutions. This small solar dock project has shown that the alternatives it promotes are not only viable but also transformational.

We are living in a climate crisis and we do not expect that our governments and fossil fuel companies that caused the problem to begin with, will come with the solution, as they are all complicit within the capitalism system that puts profit above people, and they will try as much to push false solutions, which allows them to carry on business as usual and being complicit as usual.

Terry Otieno (Specialist on Civil Society Engagement in Sustainable Development, Kenya)

For every action or inaction, there is a consequence and the concept of climate justice clearly demonstrates this, holding every one of us responsible over the current climate-change situation. Eastern Africa is in the Global South, which bears the brunt of climate change, leading many of us into activism to call out those we know and see as the leading perpetrators of the climate crisis. We continue to converge in various settings including climate

conferences that result in written agreements that demonstrate the perspective of whistleblowing over and over again. Not to undermine the essential role that whistleblowers play, but I believe we have reached a saturation point. While a few of us can maintain this role, many should shift focus onto the next area. But what are the next key areas?

Summit of the future

As a policy advisor with a decade of working with civil society in the humanitarian context, I have grown from a youth to a professional expert engaging across the 17 Sustainable Development Goals' (SDGs) follow-up and review platforms, which have seen me facilitating projects at local levels, collaborating with various experts at regional levels, and drawing position papers that feed into global policy frameworks. Most recently, I facilitated the participation of 17 nonstate actor groups in the Summit of the Future as a Project Officer of the Stakeholder Engagement Mechanism, under a grant offered by the United Nations office for Disaster Risk Reduction. The summit was a high-level event that provided an opportunity to reimagine the multilateral system and steer humanity on a new course. We spent over a year in the policy-making process of the Pact of the Future – the outcome document of Summit of the Future.

As civil society actors, we wrote and submitted countless position papers and appeared in readings and negotiation meetings as well as lobbied through the UN member states to get our perspectives on how to chart a new course of humanity. I deep dived and evaluated the Pact of the Future after it was adopted in September 2024 to find noteworthy resilience building strategies that we had advocated for as a mechanism of nonstate actors in Disaster Risk Reduction, and the article of my findings was published on UNDRR's prevention web. Having been on both sides of projects and policies at various levels, it is with confidence that I know for sure that the next key area that activists and policy makers should focus on is Localization of Projects! Thus, the following are three important perspectives that activists and policy makers should remember in their works.

Adopt a multistakeholder and intergenerational perspective

Activism and the development of policy documents will always be needed, but advocating for how the latter is conducted is essential as policies are the foundation of the project designs that can transform our planet. The UN provides avenues for stakeholders to share knowledge on diverse global issues. What many see as conferences, are actually the final parts of long-term negotiation processes between various stakeholders including civil

society and the UN member states to select critical matters. A conference, therefore, is a key process for a select agenda; like Summit of the Future's agenda was to accelerate efforts to meet existing international commitments and taking concrete steps to address emerging challenges and opportunities. For a conference to be held, it takes months that can run over a year to table, discuss and debate the way forward and strategies to address a select issue. The agreed upon notions are combined into a written document referred to as the outcome document. These documents usually get named as I explained above, for example the outcome document for Summit of the Future is referred to as 'Pact of the Future'.

To date, the UN negotiates with member states on all the key issues of sustainability. Yes, the UN has made tremendous steps to include civil society, including the annual UN Civil Society Conferences as well as dialogues and consultations that form a part of the conferences and submission of position papers that are considered during the formulation of zero drafts of the outcome documents for these key processes-conferences, but ultimately, the member states scrutinize and approve the particulars in the outcome documents of the key processes. Activists and policy makers should advocate for multistakeholder approaches at all levels, including having civil society representatives, through the Major Groups and other Stakeholders (MGoS) that provides an organized structured way for civil society actors to engage with the UN, with voting powers just like the member states in the adoption processes that require voting for the outcome documents. Notably, having these voting powers would mean having the ability to negotiate the content directly and more strongly without necessarily having to lobby through member states. Likewise, we must advocate for intergenerational inclusion to not only ensure activists of different age groups and stakeholder groups are included in these key spaces, but for vulnerable populations including women and girls and those living with disabilities to have reserve spots that are not for show, but have true influence and power that comes with voting rights.

Build resilience across sectors and be aware of negative cascading effects

Resilience is the ability of systems to function in the face of disturbance. Activists and policy makers should embrace the concept of resilience and embed it into their works. This would mean acting more intentionally to anticipate occurrences that allow us to create systems that can absorb, recover, adapt and transform amidst uncertainties such as a shift of governance policies, a change of the ecosystem, or access to funding among others. With this renewed perspective, activists and policy makers can advocate for projects that provide long-term gains. Resilience allows us to shock proof the developmental gains we get from projects. The more projects we have,

the more realistic we make the call for climate justice. Advocate to design projects that allow you to not only frame it in a more context-specific way, but also use the design phase to scan the project to avoid any negative cascading effects, where one project causes a chain or bad reaction across other sectors.

Bridge global frameworks and localization

Climate justice calls for fairness which in an Eastern African context, is long overdue. Eastern Africa faces a rapidly growing population that is driving unplanned urban development that puts our livelihoods and the ecosystems at risk. As we continue to face the effects of climate change, the Eastern African population becomes vulnerable as the ecosystem deteriorates. While there are numerous global frameworks such as the Agenda 2063: The Africa We Want, Agenda 2030, Transforming our World: the 2030 agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction, and the Paris Agreement under the United Nations Framework Convention on Climate Change, localization of projects must be context specific. This is why this book is essential. It highlights the perspectives of Eastern Africans working across the climate-justice sector, bridging the gap between intellectual and practical knowledge of global frameworks and localization.

Luwedde JulietGrace (UNCCD Youth Caucus, Uganda)

If I were to speak directly to the next generation of climate activists and policy makers, there are three most important learnings I would pass on. Firstly, climate justice must be rooted in local lived experiences. Climate change doesn't just affect ecosystems, it disrupts everyday lives, livelihoods and entire cultures. My work with rural and periurban youth during my time at both the African Youth Initiative on Climate Change and the Media Challenge Initiative showed me that solutions must be designed with the communities they intend to serve. This means cocreation, not consultation, and valuing Indigenous knowledge alongside scientific expertise.

Climate justice is not abstract; it must be grounded in the real and often unequal consequences people face, and at the same time, it's important for each individual to define for themselves what environmental justice means to them. To me, environmental justice means ensuring that all communities regardless of socioeconomic status, geographic location, or identity have the right to live in healthy, sustainable environments and meaningfully participate in decisions that affect them. It is about recognizing the disproportionate burden of environmental harm placed on marginalized and under-resourced communities, while working intentionally to dismantle the systems that

allow these injustices to persist. Growing up in Uganda, in a single parent household, I have seen firsthand how climate change, deforestation, pollution and land degradation impact rural and urban communities differently. While some can adapt or escape, others are left behind, often without the tools, information or platforms to voice their needs. This has led me to have the understanding that ultimately, environmental justice is about power, who holds it, who shares it and how it is used.

Recognize youth tenacity

When I think about youth leadership, I think about tenacity. Personally, I've had to fight to be in certain spaces and prove that I belonged in certain rooms. I remember, just a few years ago, struggling to get policy makers to listen to me or even acknowledge that my contribution mattered. But I didn't let that discourage me. Deep down, I knew that as a young person determined to work in policy spaces, I didn't need anyone's permission to begin. I kept showing up. I kept knocking on doors. I kept reaching out until eventually, they gave me a seat at the table.

When I started working with the African Initiative on Climate Change, I knew I had to demonstrate the value of youth perspectives and why our engagement was not optional, it was essential. One of the first big steps I took was reviewing Uganda's Nationally Determined Contributions (NDC1). At the time, my goal was simple: to understand how youth were reflected in my country's climate action plan. Were we mentioned at all? Did the plan speak to the needs of our communities? After conducting my analysis, I shared it with Uganda's UNFCCC National Focal Point. Their response was encouraging: 'This is good, maybe you should start joining these conversations.' That moment opened a door for me, not because I waited for it, but because I showed that youth leadership is not a nice to have. It's essential and this brings me to my second reflection. Young people in Eastern Africa are not waiting to be invited; they are already organizing, innovating and leading change. Through my role in the UNCCD Youth Caucus and various grassroots initiatives, I've witnessed the power of youth networks to mobilize communities, hold institutions accountable, and reimagine our future. But their contributions are often under-resourced or tokenized. The next generation must insist on meaningful inclusion from design to decision making.

Justice is rooted in intersectionality

Justice must be intersectional because when I think about justice, I think about it from my perspective as a young woman from the Global South, specifically, from Uganda. I think about it through the lens of someone

who grew up in a society where girls' education was often frowned upon. In my own household (my dad should never read this) education was a priority for the boys. Even when he wanted to support my sisters and me, he didn't have the financial resources to do so. That meant I had to drop out of school. My third reflection, therefore, is that justice must be intersectional. Gender, age, economic status, land access and geography all shape how people experience the impacts of climate change and inequality. Not having the opportunity to gain formal academic qualifications could have closed many doors for me but it didn't. Instead, it pushed me toward activism, a space where I didn't need a degree to show up, speak out, and take action. All I needed was passion, drive, and a commitment to making a difference. Over time, I've carved out space for myself in this field and have had the privilege of doing meaningful, impactful work. Through my current work on gender and youth engagement, it's clear to me that young women and marginalized communities are on the frontlines of the climate crisis, but they are often excluded from the very decision-making spaces shaping their futures. For future activists and policy makers, justice must be more than a buzzword. It must be rooted in intersectionality. No-one should be left behind in the journey toward a just transition, regardless of their age, economic background, academic qualifications or where they come from.

Fund youth and prioritize land rights

Over the next 10 years, the climate-justice movement must prioritize two critical areas that I've seen repeatedly emerge through my work: land rights and tenure security for women and youth, and scaling of youth-led innovation through sustainable financing mechanisms.

Eastern Africa is full of youth-led climate solutions: brilliant, community-rooted and context specific. From regenerative agriculture practices to circular economy models that turn waste into energy, I've seen young people lead with creativity and courage. But the truth is, most of these initiatives remain stuck at the pilot stage because they lack sustainable financing and institutional support. The gap is never in ideas, it's in access. Therefore, we need to move beyond token youth inclusion and start funding youth as long-term partners and leaders. This means building financing pipelines that are accessible, flexible and tailored to the realities of young entrepreneurs and organizers. The future of climate resilience in our region depends on whether we invest in these solutions today.

Through my advocacy within the UNCCD Youth Caucus and our ongoing work to localize the Decision 26/COP.14 on land tenure, I've seen how policy can shift power. This is especially the case for the part spelling out that Parties must legally recognize equal use and ownership rights of land for women and the enhancement of women's equal access to land and land tenure security, as

well as the promotion of gender-sensitive measures to combat desertification/land degradation and drought and achieve land degradation neutrality, while taking into account the national context. But policy alone is not enough. Case in point, without secure access to land, it is nearly impossible for communities to build lasting climate resilience. This is something I've witnessed time and again in Uganda, where I work closely with youth networks and rural communities. For many young people and women, legal and cultural barriers continue to limit our ability to own or control land. Yet, when these barriers are removed even partially, I've seen how quickly communities begin to invest in land restoration and sustainable practices. What we need now is implementation that centres those most affected, particularly young women because when women and youth have control over land, they also gain a stronger voice in decision making, access to resources, and the ability to plan for the long term. These two focus areas – financing youth-led innovation and advancing land rights – are not just policy priorities. They are pathways to justice, agency and transformation for the communities I stand alongside every day.

Eastern Africa is a source of leadership

Climate justice cannot be fully understood or meaningfully achieved without centring those of us who live its consequences every day. As a young woman from Uganda, I've witnessed first hand both the harsh realities of climate impacts and the incredible strength of communities responding to them. Eastern Africa is not just a region of vulnerability; it's a region of resilience, innovation, and deep-rooted environmental wisdom. Across the region, I've seen young people, women, farmers, pastoralists and local changemakers lead the way in driving real solutions from restoring degraded land to shaping national policy conversations. These stories matter. Yet too often, they're drowned out by narratives from the Global North that frame Africa only through the lens of crisis. That's why this book is so important. By amplifying the voices of Eastern African researchers, activists and practitioners, it helps correct that imbalance and creates space for new, more just ways of thinking and doing. The world must stop treating Africa as a site of intervention and start listening to it as a source of leadership.

Obed Koringo (CARE International, Kenya)

There is power in numbers. Strengthening alliances is essential in the fight for climate justice. No single actor can address the climate crisis alone. Building and working within alliances and partnerships amplifies collective voices, enhances influence and drives systemic change. When diverse groups unite, they gain greater decision-making power, which can be used to demand accountability, push for equitable climate policies, and ensure that the most

affected communities are not left behind. These collaborations build trust, foster shared leadership, and lay the foundation for long-term, just climate action. Collaboration with key allies and strategic partners/networks, and when it is done in an inclusive manner and grounded in collective action, can play a pivotal role in shaping policies and ensuring fair representation in decision-making processes.

Pay attention to diversity, inclusion and intersectionality

Climate justice begins with working alongside and truly listening to the communities on the frontlines of the climate and environmental crisis. These communities are not just victims, but they hold knowledge, experience and solutions that are central to shaping climate responses. A just approach requires that decision-making processes are inclusive and grounded in local realities. This also involves paying close attention to diversity, inclusion and intersectionality while ensuring that the voices of the most vulnerable and marginalized are heard, and that power is not concentrated in the hands of a few. This is the only way we can avoid elite capture and build solutions and contribute to policies that are fair, effective and rooted in justice.

Fund and support youth networks

Youth networks are essential to advancing climate justice and must be adequately funded and supported through strong, equitable partnerships. Youth-led and youth-centred initiatives have the unique ability to connect grassroots and frontline communities with national and international climate efforts. These networks serve as crucial bridges, amplifying the voices and priorities of marginalized groups and ensuring that community realities shape climate policies. To achieve true climate justice, young people must be meaningfully and equitably included in high-level decision-making spaces, not just as symbolic participants, but as influential actors shaping transformative solutions. Sustained investment and strategic collaborations are necessary to equip youth networks with the resources and skills they need to drive systemic change.

A fair and just energy transition

A just energy transition in Africa is one of the most pressing issues in today's climate debate. Despite rich renewable resources, nearly three-quarters of the continent's population still lacks access to energy. The Eastern Africa region is no exception. Additionally, investment in renewable energy has been alarmingly low and current statistics indicate that Africa has received less than 2 per cent of global renewable energy funding over the

past 20 years. Energy, climate and development are deeply connected. While energy is vital for meeting basic needs and driving progress, the continued reliance on fossil fuels across Eastern Africa and beyond is a major contributor to the climate crisis. The push to expand fossil fuel extraction (such as oil and coal) in countries like Uganda and Kenya threatens to lock the region into carbon-heavy pathways, with projects at risk of becoming stranded assets.

At the same time, African countries are caught in global energy power plays, as foreign nations compete to access the continent's fossil gas, hydrogen and critical minerals. This rush echoes colonial patterns: raw materials leave Africa while the value and profits stay abroad, keeping African economies dependent and stuck at the bottom of the value chain.

The climate-justice movement must step up to ensure Africa's energy transition is fair, equitable and centred on people, one that brings lasting benefits to communities and doesn't repeat the mistakes of the past.

Ensure carbon markets do not become instruments of exploitation

Governments across Eastern Africa and beyond are increasingly entering carbon market agreements, often without the necessary safeguards to ensure equity, transparency and accountability. Without careful design and oversight, these markets may risk causing significant harm to vulnerable communities while violating fundamental human rights, among other things. For instance, we have witnessed eviction of some Indigenous groups from their ancestral lands to pave way for carbon offsetting schemes. Currently, most of these carbon market mechanisms operate with limited transparency, minimal community involvement, and insufficient independent oversight. The creation of a complex technocratic system and methodologies further shifts power away from people and local governments and communities, and towards a global elite that are the principal cause of the climate crisis, and the main beneficiaries of carbon credits. Furthermore, there is a risk of enabling greenwashing, allowing high-emitting countries to avoid real emissions reductions. The climate-justice movement's work is already cut out by playing a central role in shaping these frameworks to ensure that carbon markets do not become instruments of exploitation. Instead, they must channel benefits directly to frontline communities and support climate solutions that are just, inclusive, and genuinely transformative.

Locally led adaptation is a cornerstone of climate justice

For far too long, decisions about climate action have been made in distant boardrooms and global forums, which are often dominated by elites and

without meaningful participation of those most impacted. This top-down approach has left vulnerable communities marginalized from processes that directly affect their lives and futures. Moving forward, we must shift power and agency to the local level. Locally led adaptation (LLA) must be a cornerstone of climate justice. This means that more than just implementing projects at the local level, there's a need to put local communities in the driver's seat of planning, prioritizing and implementing climate responses. For adaptation to be effective and equitable, finance must flow directly to these communities, through accessible, transparent and accountable mechanisms.

Kenya offers an important example. Its devolved governance system has enabled county governments to set up county climate-change funds, ensuring that adaptation finance reaches grassroots levels. Programmes like the Financing Locally-Led Climate Action (FLLoCA) initiative show that when local governments and communities have the resources and authority to lead, the results are more relevant, sustainable and just. By focusing on this, we move closer to a climate-justice movement that is not only about reducing emissions or securing finance, but about shifting power, building resilience and restoring dignity to those on the frontlines of the climate crisis.

What climate justice means in practice

Climate Justice in Action focuses on climate justice in Eastern Africa, which is important because climate justice remains a relatively misunderstood concept for many people. This book can help close that knowledge gap by providing a clear and contextual understanding of what climate justice means in practice. It serves as a valuable resource for policy makers, practitioners, communities and scholars by offering insights into the region's unique climate challenges and how different actors are affected as well as responding. Additionally, the book serves as a platform to document and highlight climate injustices as well as the justice efforts led by a range of stakeholders, including local communities, youth, and civil society organizations. By capturing both successes and challenges, it not only raises awareness but also promotes learning and the replication of effective practices across the region. Listening to the voices of Eastern African researchers, activists and practitioners is essential because they bring first-hand knowledge of the region's climate challenges and social dynamics. Their insights are critical to shaping solutions that are context specific and truly responsive to the needs of the most affected populations, including women, youth and marginalized communities. Moreover, they also serve as a vital link between scientific research and practical action and their lived experiences ensure that climate policies and solutions are not only evidence based but also grounded in the realities of those most impacted.

Notes

[1] For more information, see equal-victims.lifelineempower.com

[2] For more information, see ja4change.org/

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