1

Introduction: Centring Eastern Africa in the climate crisis

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In 2023, floods caused by ongoing heavy rains devastated parts of Ethiopia, Kenya and Somalia. Within November of that year, more than 795,000 people were displaced in Somalia alone (Spindler 2023). Many of the impacted people were already internally displaced due to ongoing conflict and drought, making the current crisis a second or third displacement for some. The floods have extensively damaged or destroyed homes, with some survivors forced to shelter under trees on higher ground, while others have drowned. The impacts of these floods did not stop there. Already precarious livelihoods were made worse. In one part of southern Ethiopia, over 65 per cent of the land was submerged under floodwaters, severely harming crops production, while in Somalia thousands of livestock and hectares of crops died or were destroyed (Spindler 2023). The floods sparked new or amplified existing sanitation and health risks with hundreds of communal latrines damaged, heightening the risk of waterborne diseases such as cholera, while damage to roads has cut communities off from healthcare providers, with limited other opportunities. Among those most impacted are already displaced people. In five settlements in Ethiopia, 213,000 refugees have been impacted by the flooding, losing shelters and lacking access to clean drinking water and healthcare. Nearly 1,000 families have lost their homes. Meanwhile in Kenya's Dadaab refugee camps close to 25,000 people were affected, often relying on other refugees to give them shelter, prompting overcrowding (Spindler 2023).

In early 2024 the worst drought in a century hit Southern Africa, severely affecting Eastern countries, including Zimbabwe and Mozambique. This crisis deepened during the harvests in March and April 2025. The World Food Programme spokesperson Tomson Phiri reported this 'historic drought – the

worst food crisis yet', devastating 'more than 27 million lives', while 'some 21 million children are malnourished' (Al Jazeera 2024). The drought has been driven by El Niño, which is a regular and naturally occurring weather event; however, the climate crisis in recent years has intensified its effects and led to more frequent patterns. In Zimbabwe alone, the drought has wiped out 80 per cent of the harvest (Al Jazeera 2024), while depleting water resources and pastures. UNICEF (2024) reports that a combination of droughts and extreme transboundary weather events has caused 'compounding humanitarian consequences on food security, nutrition, health, WASH, education, social protection, shelter, agriculture, energy, infrastructure, and cross cutting issues among others'. The drought is heightening the risk of gender-based violence, sexual exploitation and abuse, driving up rates of child-marriage, domestic and intimate partner violence, and irregular migration leading to human trafficking (UNOCHA 2024). For one community in particular, impacts are exacerbated by stigma and social exclusion. An emerging body of work highlights how LGBTQI+ people experience heightened environmental vulnerabilities (McQuaid and Crawford 2025; Dwyer and Woolf 2018; Balgos, Gaillard and Sanz 2012) and are regularly excluded across response, relief and recovery following disasters (see Gaillard et al. 2017; Dominey-Howes et al. 2014). In the context of the droughts in Zimbabwe, queer activists highlight how stigma and discrimination are compounding climate impacts, preventing LGBTQI+ people from accessing the financial assistance needed to cope with and adapt to droughts and other disasters. Queer people are being targeted by local communities who accuse them of causing droughts and the increasing frequency and severity of climate-related disasters. Led by a Zimbabwean network of queer mothers is a community initiative using livelihoods to create a safe space for lesbian, bisexual and trans parents and their children. They provide them with land and guidance in planting sweet potatoes, sugar, beans and tomatoes. This serves to both empower queer people economically and promote their mental health and wellbeing (Ndhlovu 2024).

Disproportionately exposed to such disasters and the compounding effects of climate change are Indigenous people with disabilities. They face multiple axes of oppression, many of which have roots in the historical context and legacies of slavery and colonial violence, that expose them to greater incidences of impairment and limit the access of people with disabilities to their rights. These include increased exposure to disease (Indigenous Peoples and Climate Change 2009), mental health impacts (Vecchio, Dickson and Zhang 2022), land rights conflicts (Namukasa 2017), poor access to maternal healthcare

(UNFPA 2015), poor sanitation and exposure to disease (Jiménez et al. 2014); and overrepresentation in refugee and internally displaced populations (Minority Rights Group International 2017). In Kenya, for example, people with disabilities among the Indigenous Endorois community face intersecting layers of marginalization and disadvantage, including gender discrimination, ongoing historical land injustices, climate change impacts, human exploitation of natural resources and the risks posed by rising water levels of Lake Bogoria (UN, 2024). In Baringo County, Kenya, unpredictable rain patterns have resulted in alternating drought and flood. International Disability Alliance (2023) reports how discriminatory, short-term and non-inclusive evacuation methods have exacerbated health conditions and sometimes proved fatal to Indigenous people with disabilities. Poor access to healthcare, food insecurity and lack of availability and accessibility to quality water, sanitation and hygiene services, have exacerbated health conditions; while they are unable to find meaningful employment after the loss of ancestral lands. Indigenous women with disabilities, already navigating gender discrimination and a lack of protection of their rights to land ownership, suffer multiple disadvantages when displaced. They are expected to perform gendered roles such as childcare and procuring, preparing and providing food for the family while struggling to obtain basic amenities for their own needs. Loss of lands has also meant the loss of invaluable ancestral wisdom, culture and community bonds, all of which are essential parts of building climate resilience. Current approaches to mitigate climate change in Baringo County are reactive, temporary, and non-inclusive of Indigenous peoples with disabilities. The International Disability Alliance's research highlights how climate action that is not inclusive of people with disabilities is maladaptive in nature. Rather than building climate resilience, it leaves the most vulnerable exposed and at-risk. Climate advocacy and action must ensure the full participation and inclusion of Indigenous people with disabilities in the mainstream climate justice movement (IDA 2023:7).

These recent examples, the floods in the Democratic Republic of Congo recounted in the Foreword, and those recounted throughout the chapters of this book, vividly illustrate the urgent need for intersectional climate justice. In amplifying stories from the Majority World and challenging conventional frameworks of knowledge production, our book demonstrates how multiple, overlapping vulnerabilities exacerbate the impacts of climate change and disasters. Refugees, internally displaced persons (IDPs), queer people, Indigenous people, people with disabilities and all other communities facing marginalization due to intersectional complexities are already experiencing

conflict, poverty, ableism, gender inequalities and other oppressions. This means they are disproportionately impacted by the compounding consequences of climate change, including floods and drought.

Myriad impacts on healthcare, food security and shelter further show how climate-related disasters – along with other slower onset cumulative crises – intersect with pre-existing social and economic inequalities. For instance, women and girls are at heightened risk in these situations, which is why 'dignity kits' are part of the relief efforts. To understand these examples fully and what appropriate responses would look like, we need to understand not only climate vulnerabilities, but overlapping issues such as displacement, social exclusion and gender norms and roles, and how these intersect to produce unique experiences for particular individuals. Feminist scholars, and queer, Black, decolonial and Majority World feminisms in particular, have led the way in making visible the power relations and inequities that re/produce both the social hierarchies exacerbating climate impacts and the knowledge hierarchies that exclude entire populations from climate knowledge production (Gay-Antaki, 2022). In re/thinking climate research, feminist scholarship has enabled us to better understand climate change 'as embodied, situated, and partial', underscoring the importance of experiential 'subalternized' knowledge 'produced by people who are situated and informed by their sociopolitical position while challenging colonial categories' (Gay-Antaki, 2022, 117–8; Grosfoguel 2007, 212). Feminist perspectives on climate change have raised important questions about epistemology and marginality, uneven development and the ongoing violences of colonial patriarchal systems (Maria Lugones 2007; Rivera Cusicanqui 2010; cf. Gay-Antaki, 2022). In her feminist intersectional analysis of 'overlapping but uneven crises of the [COVID-19] pandemic and climate injustices', Sultana (2021, 448) remarks how 'similarities exist across both, such as gendered differences in increased unpaid care work, differential risks and exposures, disparate access to information and safety measures, increased gender-based violence, and exacerbations of insecurity of livelihoods and financial precarity; however, these manifest differently spatially, temporally, and intersectionally, exposing systemic fault lines and creating new ones'. As the chapters of this book demonstrate, taking a feminist intersectional approach to (climate) justice allows us to expose the very real, very present experiences of global crises by frontline communities today and their roots in overlapping but uneven injustices.

In their chapter, Pemunta and Nyok vividly illustrate the intricacies of challenges facing women and children in Burundi when climate change compounds the effects of complex histories of re/displacement and conflict,

land inequities, poor governance and gender discrimination. Their empirical work highlights how women's reproductive and mental health, livelihoods, food security, caring labour and land access are all compromised. Focusing on Tanzania, Kileli et al. (this volume) draw attention to how climate-induced migration of men away from rural homesteads shifts traditional patriarchal divisions of labour for young Maasai women, many who have been subjected to early marriage, while forcing young pastoralist men into precarious urban conditions. Young women draw on vibrant and loving social support networks established through years of communal age-set and clan systems and ceremonies, as well as livelihoods diversification, to build their resilience to increased responsibilities, negative impacts on educational outcomes and environmental burdens driven by climate change, water scarcity and land conflict and dispossession rooted in both colonial legacies and contemporary tourism. Feminist collaborative methodologies can, we have argued elsewhere, 'foreground polyvocal and embodied local knowledge and responses, and open up new spaces for imagining and articulating alternative radical and inclusive futures that transcend inequalities and thus nurture a politics of hope that speaks directly to local contexts' (McQuaid and Pirmasari 2023: 577).

The intersectional effects of drought and floods highlight how climate change disproportionately affects those who are least responsible for causing it but most vulnerable to its consequences, as for the women with disabilities in Koshin's chapter on flash floods in Somalia and Watson Stanfield and Ngulube's chapter on energy poverty in Malawi. Drawing this link between climate change and social justice highlights the unequal burdens placed on different groups by climate change and emphasizes the need to work towards fair and equitable solutions. 'Solutions' themselves must be critically assessed. In this volume, Basile et al. illustrate the environmental and social injustices perpetuated by 'fortress conservation' policies deeply rooted in, and perpetuating, colonial ideas of nature, disproportionately impacting Indigenous communities across Eastern Africa by reinforcing existing power imbalances. Looking at governance, mitigation and adaptation policies through an intersectional lens, we are able to identify and avoid climate solutions that exacerbate social inequalities and vulnerabilities or create new forms of disadvantage and maladaptation.

Addressing these issues therefore requires integrating an intersectional approach to climate justice that considers the multiple layers of marginalization faced by different groups in climate adaptation and disaster prevention, preparedness relief efforts. It is ultimately a question of power, and how it is experienced, wielded, refracted and transformed through time and space, to

inequitably position some groups of people within systems of domination that expose them to greater climate vulnerabilities. We must centre and amplify the lived experiences, knowledge and responses of such groups if we are to capture the intersectional complexities that result in their positions of privilege or disadvantage. This necessitates also rethinking the power relations of our climate justice knowledge and action: how, where and on what terms are our conceptions of climate justice (re)produced and enacted?

Why intersectional climate justice?

This book evidences some of the myriad ways in which climate change is worsening existing inequalities, particularly for those who are already marginalized due to factors including conflict, poverty, diffability, colonial legacies, sexuality and gender, underscoring the need for climate responses that address these intersecting and evolving vulnerabilities. The emerging field of intersectional climate justice (Mikulewicz et al. 2023; Amorim-Maia 2022; Amorim-Maia et al. 2024; Malin and Ryder 2018; de Jong 2023) highlights that marginalized populations and communities are often more vulnerable to the negative effects of climate change and have fewer resources to adapt or mitigate environmental risks. An intersectional climate justice approach lens allows us to consider the complex and interconnected social, economic and environmental inequalities that exacerbate the impacts of climate change. By considering how different forms of marginalisation intersect, this approach ensures that climate action is focused not only on environmental outcomes but also on promoting fairness and equity, directly addressing the uneven risks faced by certain bodies, communities and populations, which are further exacerbated by the intersectionality of race, ethnicity, age, gender, sexuality, citizenship, cultures, poverty and healthcare inequalities (Pirmasari and McQuaid 2023). Speaking to some of these intersections is the beautiful portrait that adorns the cover of this book – a photograph taken from Fabrice Mbonankira's project, 'Sleeping Queens', awarded first place in the Uganda Press Photo Award's 2023 East African Photography Award. The image, taken in early 2023 in the largest landfill in Burundi's largest city and former capital, Bujumbura, speaks to the connections between gender, ageing, urbanism and environmental and economic precarities. While highlighting vulnerability, the image is primarily one of strength and resilience. As Mbonankira (2023) writes, 'Strong in their tenacity in the face

of adversity, they survive the ups and downs of everyday life on their own and manage, for better or worse, to take care of their children and their families.'

The Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report emphasized the uneven impacts of climate change, including considering specific issues such as migration and urbanization as factors which relate to climate vulnerabilities, as many chapters in this book do. The report states that 'the most vulnerable people and systems have been disproportionately affected by the impacts of climate change' (IPCC, 2023). By adopting a climate justice approach, we can address climate change through the lens of inequality and work to reduce these disparities, rather than perpetuating the status quo (Crawford, Michael et al. 2023). As Farhana Sultana (2022: 119) has argued, 'attention to and engagement with intersectional and transnational feminist insights helps critically advance more nuanced and responsive understandings of climate justice. It can help reframe debates away from reductionist solutions to more accountable assessments and action.' To put it simply, 'Climate justice needs intersectionality' (Mikulewicz et al. 2023: 1281). It also requires an inclusive approach. This is why our book embraces a rich diversity of local perspectives, both on how local actors – particularly marginalized groups – are shaping climate justice but also on how the region's unique economic, sociopolitical, cultural, environmental and historical dynamics intersect with global climate justice movements.

As many of our authors emphasize, temporality is important. Taking a temporal lens compels us to situate current vulnerabilities and inequities in histories that trace legacies of colonialism, structural adjustment, conflict and re/displacement, globalization, neoliberal capital and so on (Farhana 2024). Climate, environmental and social disadvantages stem from the complex workings of power that operate across time, space and place. As the authors here collectively argue, to seek climate justice we must tackle the systemic forces that render some places disproportionately vulnerable to the impacts of anthropogenic climate change, increase environmental burdens in particular spaces within these countries, and drive the exclusion, marginalization and domination of particular people. It is imperative we understand both the situatedness of these forces and the legacies of imperialism, neoliberalism and global capital while linking local impacts and responses to global systems and networks.

Climate justice cannot be intersectional if it does not seek to grapple with these legacies and how they continue to maintain certain bodies and minds in precarious conditions (Puar 2017), constraining responses and access to adaptation and mitigation. As the climate crisis intensifies, so too does the

reproduction of racial, postcolonial, gender and ableist hierarchies. The diversity of such systems and conditions within just one region makes stark the need for critical, inclusive and localized approaches to climate change. As the authors here strive to demonstrate, across Eastern Africa power is experienced, refracted, wielded and subverted in multiple ways. Climate justice must therefore use intersectional complexity as its starting point.

Why Eastern Africa?

Eastern Africa is a broad geographical term and not easily defined. According to the United Nations geoscheme for Africa, Eastern Africa includes eighteen sovereign states and four overseas territories or departments (UN Statistics Department, n/d). Meanwhile the Kigali-based Subregional Office for Eastern Africa (SRO-EA) covers fourteen countries, including one country not part of the subregion, but not covering three that are (UNECA, n/d). The African Union categorizes fourteen countries as Eastern Africa, but it is not the same fourteen countries. The East African Community, one of the main intergovernmental organizations in the region, by comparison only has eight member states. Some countries, such as Kenya and Uganda, are generally always regarded as East or Eastern Africa in political and geographical terms, as well as in the popular imagination. However, other countries challenge our notions of who or what constitutes Eastern Africa. The Democratic Republic of Congo, for example, is physically largely in Central Africa and has a coastline on the Atlantic Ocean, but is a member of the East African Community and much of the eastern part of the country is historically, politically, socially and economically intertwined with communities in neighbouring Burundi, Rwanda, Tanzania and Uganda, among others. Other countries, such as Zimbabwe or Zambia, may be more commonly regarded as 'Central' or 'Southern' Africa, but both are part of the Eastern African geoscheme. Sudan is categorized as Eastern by the African Union, but not by the United Nations.

When considering chapters for inclusion in this book we have adopted an open interpretation of what constitutes Eastern Africa, sought to avoid rigid political categorization, acknowledging that climate issues frequently transcend borders, and allowed for self-identification by our authors. Reflecting these considerations, the Foreword of our book begins with an example from the eastern Democratic Republic of Congo, while chapters spotlight issues in

Malawi, Somalia and Zimbabwe, as well as countries considered at the 'core' of Eastern Africa – such as Kenya, Tanzania and Uganda.

Why is it important to focus explicitly on Eastern Africa? The increased frequency and intensity of the climate change impacts are reverberating across this region. In 2024 floods were reported in South Sudan, Kenya, Uganda, Rwanda, Burundi, Tanzania and Somalia. In May 2024, UNOCHA reported that 'Heavy rains and flooding affected nearly 205,000 people in Kenya, 179,000 in Burundi, 127,000 in Somalia and over 125,670 in Tanzania.' Floods have caused displacement; resulted in loss of life; damaged infrastructure, including roads, bridges, houses and schools; and destroyed crops and farmlands, in addition to diminishing access to water and sanitation, while increasing the risk of diseases such as cholera. Malawi and Mozambique were severely affected by Cyclone Freddy in 2023. More than 200 people died, and the subregion has since grappled with extended droughts that have impacted food and water security and resultant impacts such as electricity blackouts due to low hydropower generation, disrupting supply chains and income streams. This is crippling economies that are already suffering from debt crises. Worse still, projections suggest that these impacts will only get worse.

Many of the region's countries have drylands and semi-arid lands which face potential threats of climate change, persistent droughts, aridity and desertification. People across the region depend on climate-sensitive sectors such as agriculture as a source of livelihoods and economic sustainability, while cities in the region are at increasing risk of climate impacts, including sea level rise, impacts on water resources, temperature-related morbidity, food security and extreme weather events like those mentioned above. Research shows the greatest burdens in urban Eastern Africa are likely to fall disproportionately on the urban poor, who lack the most basic urban services (Kithiia 2011), whose experiences of poverty intersect with other factors that position individuals within the city and its population, as so evocatively rendered in Arinda's poem '*Entebbe E'Ntebbe*' (Chair in Entebbe) in this volume.

From increasingly erratic weather, extended dry seasons, heatwaves, drought and food insecurity to flooding and mudslides, for countries across the region, climate change is an issue of today not of tomorrow. With the majority of countries in the region characterized as 'low income', they are less financially able to mitigate or adapt to climate shocks and slow-onset changes. Indeed, around a third of the forty-five countries regarded as 'least developed' are located in Eastern Africa (UNCTAD, n/d). Given this positioning, governments should prioritize accessing international climate finance. Rwanda is leading in this

area, attracting both private and public investments. The majority in the region, however, access finance through multilateral agencies whose capacities need to be leveraged to attract a lot more, and there is still a way to go in demonstrating transparency and accountability in the utilization of the finance, and increasing the spaces and clarifying the roles and responsibilities of (marginalized) community groups in its implementation.

High (and growing) rates of poverty, gender inequality, unemployment and health disparities set against a history of colonialism serve to ensure climate change impacts are unevenly experienced. Colonial regimes amplified inequalities between men and women, the rich and the poor, and continue to perpetuate heteronormative patriarchal practices across the region. Patriarchal norms typically afford privileges, including ownership of land, access to education, access to finance and decision-making power to men, in a region where rain-fed agriculture is the predominant source of livelihoods. In contrast, women are routinely relegated to less visible, unpaid, labour-intensive spaces that keep them dependent on their spouses, brothers, fathers or other male figures. They are responsible for care roles such as fetching water and firewood, provided 'free' by the environment; growing food and cooking it; nurturing children and elders; and taking care of the sick. While this scenario is changing, and refracted through local histories, cultures and contexts, the pace of change does not meet the transformative action required.

Our book examines how climate change is intensifying traditional inequalities between men and women, and those identifying as sexual and gender diverse, and especially women and queer people who also have disabilities, are Indigenous or are marginalized in other ways, thus deepening vulnerabilities. The chapters further reveal how loss and damage are urgent, lived issues. Actors need to be intentional not only in developing gender-responsive climate actions, inclusive disaster preparedness and agile response measures but also in implementing them, combining them with interventions such as land reforms, safeguarding and conflict redress mechanisms. This demands recognition of marginalized communities as agents of change in climate resilience, and the acknowledgement and leveraging of this power to drive transformation.

A focus on Eastern Africa thus provides an important and timely opportunity to look at the diversity of lived realities of the climate crisis today. The research in these pages offer a key place to learn from and explore questions and issues relating to the inherent structural inequalities of climate change and claims for a 'right to development', as well as efforts to curb environmental catastrophe and level the global playing field. This includes questions of gendered climate impacts, space-

based hazards and adaptations, health-environmental links, whose knowledge is heard and utilized, social inclusion and equity, and the formation, adoption and implementation of new climate change legislation and policy. Our book therefore offers insights into some of the historical and prevailing sociopolitical systems responsible for creating, intensifying and prolonging climate impacts and injustices in the region; and evidences both impacts and potential solutions and innovations to adopt and scale up. A focus on the multidimensional perspectives and experiences of communities in Eastern Africa, and embrace of authors' complex positionalities and creative methodologies, offers an important means to bridge theory, case studies and creative storytelling, which are critical to undertaking an intersectional approach to climate justice and understanding lived experiences and historical and social inequalities.

Our book therefore centres and prioritizes scholarship on and of Eastern Africa, particularly, as mentioned above, authors from and based in the region. Centring Eastern Africa and its enormous wealth of diverse experiences, interventions, research and governance helps us to decentre climate justice and offer new Majority world-led routes towards understanding what intersectional climate justice could and should look like. In the process it responds to calls for a production of knowledge that is defined by 'Africa-centredness' (Cooper and Morrell 2014, 2). The term 'Majority World' (and corresponding 'Minority World') shifts attention to population differences, wealth inequality and unequal power dynamics, while also highlighting the vast diversity and wealth of knowledge that exist globally. In contrast, terms like 'Global South' and 'Developing Countries' are geographically limiting and misleading. They imply a linear path towards economic prosperity, restrict alternative views of human progress and depoliticize global relationships (Crawford, Michael et al. 2023). As we note in a section further below, this book seeks to critically redress the global economy of climate change knowledge and the epistemic inequalities it perpetuates. In this way, we collectively argue that the field of climate justice itself must be inclusive, diverse and embodied, taking a transdisciplinary approach in order to embrace multiple ways of knowing and being. This book serves, then, not just as a call for intersectional complexity or justice but should itself be a conduit for embracing diversity and a decentring of hegemonic concepts and knowledge production.

As a field of study, climate justice is rapidly growing. However, most of the book-length treatments of experiences and learnings to date are centred on the Minority World, even when they give particular focus to factors important in intersectional work, such as gender (Cassegard et al. 2017; Fletcher and Reed 2023). There are a growing number of books which focus on climate justice in the Majority World

(Tokar and Gilbertson 2020; Crawford, Michael et al. 2023), though given their geographic breadth, Eastern Africa received limited attention. Other locations have received specific regional or county examinations, such as work focused on Africa (Jegede and Adejonwo 2023), Southern Africa (Moyo 2024), North America (Rosier 2024) or India (Kashwan 2022). However, as Patrick Bond (2014: 205) reminds us, Africa is essential in the history of the climate justice movement. It emerged in part from the continent in the early 2000s, with Africa becoming 'the source of some outstanding examples of social mobilization against climate change, its sources, and its impacts'. The first example Bond uses to support this claim is the Pan African Climate Justice Alliance, which is headquartered in Nairobi. By comparison, at the time of writing, Eastern Africa has not received similar research attention. Our book therefore addresses key gaps in the climate justice literature by providing a rich range of case studies of the consequences and intersecting impacts of, and responses to, climate change in a part of the world which is among the hardest hit, yet comparatively under-researched.

Rethinking climate knowledge

Intersectional Climate Justice in Eastern Africa foregrounds work that is being done by authors who are from or have a deep engagement with Eastern Africa. The majority of the nearly fifty contributors live and work on the African continent. More still live and work in other parts of the Majority World, or have previously lived in the Majority World, particularly in Africa. This was intentional, aiming to address the ongoing epistemic injustices around those who can write on and about climate change not just in Africa but globally. Michael et al. (2023: 13) note 'how urgent and necessary it is to open up climate justice scholarship to the perspectives and knowledges from the Majority World', as well as early-career researchers, who, like many Majority World-based academics, possess 'valuable contributions to climate change and justice scholarship', however, 'lack the authorship experience and the professional connections needed to gain access to, and be published by, "top-tier" journals and press'. Recently Mikulewicz et al. (2023: 1281) compelled us to ask: 'Whose voices and knowledges has climate justice favoured and omitted since its emergence over three decades ago?' We hope that our work here offers a partial correction, and action, to this question.

As the chapters demonstrate, there are a wealth of ways in which affected communities are responding to climate impacts, as well as navigating multiple intersecting inequalities and injustices at the roots of vulnerability. Their

knowledges, strategies, needs and perspectives must be amplified and put at the centre of climate action. Climate adaptation in turn must recognize and champion their lived expertise – the work they do and the knowledge(s) they wield. As Oriaso et al. (this volume) highlight, climate information itself is mired in (patriarchal) and geographical inequities. They demonstrate how women in rural Kenya are deeply positioned to adapt to climate change as key change agents; however, their capacities to respond to climate risks are compromised by their multiple exclusions from climate information systems and decision-making. This cannot be resolved by better access to information alone but an intersectional approach that simultaneously addresses material deprivation and time poverty is also needed. It is therefore a case of championing complex approaches that embed a power *with* framework of collaboration that creates meaningful spaces for leadership, knowledge co-production and ecologies, and participation in climate knowledge and action. It must respond to local realities and embrace Indigenous and grounded knowledge. It must also reflect the affective elements of climate research and action. As Unnikrishnan's deeply reflective poem (in this volume) compels us, we must challenge many of the binaries common to climate scholarship (and action) in order to embrace the emotional complexities of living energy transitions and engaging in research on intersectional injustice.

In the spirit of re/interrogating climate knowledge we must address our own positionalities and how this book came about. On 9 August 2023 we convened an online workshop on the theme 'Intersectionality and Climate Justice in Eastern Africa'. Two of the convenors, and now book editors, are from Eastern Africa and live, work and research climate change in the region. Susan Nanduddu lives in Uganda and has a keen interest in climate justice, gender equality and trade empowerment; she advocates for increased, flexible and accessible climate finance mobilized by the Minority World to reach local levels. Elvin Nyukuri lives in Kenya and her research focuses on climate change policy, environmental governance and food security. The other two convenors and editors are Minority World researchers who have spent extensive time living and working in Eastern Africa on climate change issues. Katie McQuaid has conducted ethnographic and applied research in Uganda since 2011, focusing on the gender-age-urban interface of climate change. Neil J. W. Crawford has lived and conducted research in both Kenya and Uganda, with a focus on displacement, urbanism, and gender and sexuality studies.

Reflecting our transdisciplinary backgrounds and experience, we share a passion for better understanding climate impacts, applied research in the pursuit of justice and amplifying communities frequently neglected in climate

scholarship and policy. It was therefore important to us that our workshop included presentations not just from members of the research community but also from activists and practitioners, especially those in their early career, as a key place to learn from. We were overwhelmed by interest in exploring the lived realities of the climate crisis today and exploring questions and issues relating to the inherent structural inequalities of climate change. The full-day workshop had three panels comprising fourteen presentations from seventeen authors, with an invited keynote from renowned activist Ineza Umuhoza Grace, who has warmly extended her contributions to this book's foreword, along with eight other members of the Loss and Damage Youth Coalition. The workshop, and now this book, aimed at an in-depth exploration of an intersectional approach to climate justice from the perspectives of Eastern Africa. Uniting all our presenters was a passion to not only decentre climate knowledge production but explicitly centre and celebrate African knowledges, responses, policy frameworks and epistemologies. Many of the chapters included in this book started as papers during this workshop, and have been expanded and developed in collaboration with the editors in the months that followed. In the process, and as we hope is evident across the chapters of this book, is that an intersectional approach to climate justice demands transdisciplinarity. The chapters showcase and embrace a toolbox of different methodologies that encompass the creative, the ethnographic, the qualitative and the policy-focused.

In addition, therefore, to thinking about who we hear from, we must also think critically about what constitutes climate knowledge and the mediums this can come in. As the cover of this book illustrates, photography can serve as a key means of unending dominant narratives and telling new stories of how people experience and respond to environmental issues. We explored this in-depth with *See Change: Visualising the Urban Climate Crisis* – an open access visual media book and exhibition held in 2023 at the Uganda National Museum in collaboration with the Uganda Press Photo Award (Crawford, Kućma et al. 2023). Another example is African climate fiction, which, as Carl Death (2023) articulates, highlights the unique challenges Africa faces in the context of climate change while drawing from the continent's diverse cultural perspectives. This important medium blends speculative storytelling with real environmental concerns, offering imaginative solutions and amplifying marginalized voices. By envisioning future scenarios, or fictionalizing recent or current events, it raises awareness and encourages discussions about sustainability, resilience and the need for urgent climate action across the African continent. It also emphasizes the potential of local knowledge and creativity in addressing global environmental crises. With this in mind, our book aims to expand the

methodological scope of climate justice research. We include a new short story by Davina Philomena Kawuma, highlighting not only the value of fiction to understanding the different ways vulnerability and resilience to climate change occur but also the importance of disrupting the locations in which we engage with such material. For example, Daphine Arrinda's poem 'Chair in Entebbe' and Hita Unnikrishnan's ethnographic poem 'The powers that be?' act to disrupt not just conventions of climate knowledge but also the binaries exposed by much existing work on gender and climate change. Michael Roberts and Daniel Lumonya's chapter on soundscapes demonstrates the empirical richness that can be gained from walking around a city and actively listening to the sounds that are encountered. These more creative pieces are importantly housed in a collection primarily made up of academic chapters, engaging with and complementing them, not siloed off in an all-creative collection. Our authors seek to present grounded accounts of intersectional complexity that amplify marginalized voices and in so doing decentre and advance our understandings of climate justice. Creative, empirical and policy interventions converge in a collective effort to present the multidimensional ways in which climate justice is an intersectional issue.

Our book

To maximize cross-learning, our book seeks to be pragmatic, polyvocal, transdisciplinary and, above all, a centring of knowledge of or on Eastern Africa. As presented here then, climate justice scholarship is rooted in transformation, demonstrated by the multiple recommendations and calls to action from the authors. Understanding the intersectional complexities of climate change spurs the translation of knowledge into action, directing stakeholders and policymakers towards interventions that embrace equity, diversity, inclusion and multiple interlocking forms of justice: social, environmental, economic, gender and so on. Balancing academic and policy analyses on systemic inequalities with narrative and creative storytelling, our book comprises fifteen empirically rich, research-driven chapters that address a wealth of different regional, national and local settings and methodologies.

In 'Land use, conflict, re/displacement and post-conflict histories in Burundi', Ngambouk Vitalis Pemunta and Maurine Ekun Nyok adopt a temporal lens to examine how the interplay of historical conflict, mass displacement, post-conflict resettlement, land use and subsequent climate-related displacement manifest in intricate webs of vulnerabilities for women and children. They

highlight how gender-based discrimination exacerbates disparities in resource access, reproductive, mental and physical health, and food security, particularly for women reliant on rain-fed agriculture in rural Burundi.

Sahra Ahmed Koshin's 'Badbaado Haween (women saving lives): An intersectional analysis of flash flood impacts on women and girls in Qardho, Somalia' takes a richly empirical approach to explore the intersectional impacts of flash floods on women and girls in Qardho district, Somalia. The chapter highlights the diversity of lived experiences and coping mechanisms of women and girls in the aftermath of this climate-related disaster, with a particular focus on how disability, age and ethnicity intersect with prevailing patriarchal power structures that shape policymaking, humanitarian responses and everyday life before, during and after disasters.

Michael Roberts and Daniel Lumonya's chapter 'Sound and situated knowledge in Entebbe's urban wetland borderlands' considers multispecies justice in Uganda's rapidly urbanizing areas through the lens of sound. Using 'soundwalks' in Entebbe, the chapter explores the ways sound shapes and reflects urban landscapes, social interactions and environmental changes. The authors listened to a range of sounds – such as birds, transportation and human activities – across various urban and natural spaces, analysing how sound reveals complex dynamics between human and nonhuman elements in the face of urban development and climate change.

In 'Breaking barriers: unravelling the climate justice struggles of Maasai women and girls in Tanzania', Emmanuel Ole Kileli, Monica Kurumbe, Sophia Carodenuto, Katelynne Herchak and Crystal Tremblay draw on visual and narrative research to explore how young Maasai women respond to climate-induced environmental degradation, land dispossession, poverty, political marginalization and tourism in Tanzania. They invite us to follow the conversations of Nashipai to better understand the growing sociocultural pressures, poverty, gendered discrimination and coping mechanisms of young pastoralist women, many of whose husbands have migrated to cities.

Hita Unnikrishnan's (auto)ethnographic poem 'The powers that be?' and commentary capture some of the intersectional and emotional complexities of community energy systems and sustainable energy transitions in Ethiopia, Malawi and Mozambique, through the lens of an Ethiopian hydroelectric power plant in the face of the Tigray War, Mozambican nurses assisting births by candlelight, the reproduction of inequitable binaries by energy and utility companies, and work in Mozambique to encourage small energy operators to be accountable for gender equality and social inclusion.

In 'Beyond fortresses: rethinking conservation and upholding indigenous peoples' rights', Julia Basile, Elsa Jarkedian, Silvia Ottinetti and Nicolás Süssman Herrán compel us to rethink the intrinsic exclusion dynamics of climate mitigation strategies in order to uphold Indigenous Peoples' Rights. They recount the historical and contemporary human rights violations, land dispossession and forced displacement perpetrated against Indigenous people in the name of environmental preservation and biodiversity conservation in Uganda, Tanzania and Kenya. Their chapter champions community-led conservation models and reformulating 'fortress conservation' frameworks to centre Indigenous people's participation and consent and respect and advance their land tenure rights.

In 'The legacy of colonialism, present-day climate injustice: the experiences and knowledge of San communities in Tsholotsho, Western Zimbabwe', Douglas Nyathi, Joram Ndlovu and Admire Mare explore the severe impacts of climate change on Indigenous San communities in western Zimbabwe. They highlight how erratic weather, drought and flash flooding due to climate change exacerbate vulnerabilities, especially for communities whose agricultural practices are heavily impacted by unpredictable rainfall. Their reliance on rain-fed agriculture and natural resources, combined with ongoing structural inequalities rooted in colonial history, leaves them especially exposed to food insecurity and poverty. The chapter emphasizes the importance of the San's Indigenous knowledge in managing environmental changes in arguing for an inclusive approach to climate resilience.

Eilidh Watson Stanfield and Ethel Ngulube's chapter 'Rural women and the overlapping climate and energy injustices in Malawi: an intersectional feminist overview' offers an intersectional feminist case study of the different climate injustices and energy poverty challenges experienced by women in rural villages in Northern Malawi. They explore how women's experiences of energy poverty and their coping strategies are differentially shaped by gender, age, disability and poverty, and highlight in particular the intersecting injustices and costs for women who have low or limited access to household income.

In 'There are other roads' Davina Philomena Kawuma presents a piece of experimental fiction to encourage us to interrogate questions of citizenship, displacement and power amidst a changing climate in Uganda. The chapter creatively weaves together an online chat, radio dialogue and a fictitious policy brief to tell a story from different angles. Reflecting on this approach, the author notes: 'Experimental formats also help make global issues much less overwhelming. Issues that seemed too big, too complex, too overarching, at first glance suddenly become a bit more manageable when I think "Hmn! What if

I explored this through an email thread or a comments section instead of the standard linear story?'"

In their chapter 'Rural women, climate change and information ecosystems in Kenya', Silas Odongo Oriaso, Jacinta Mwende Maweu, Chris Paterson, Lata Narayanaswamy, Jasmin Surm and Dorcas Kalele address rural women, climate change and information ecosystems. They analyse what climate information is available to rural women in East, West and Coastal Kenya, where it comes from, and its utility in building resilience to climate change. They ask how local and Indigenous knowledge interacts with externally sourced climate information in the pursuit of effective adaptation strategies. They highlight weak information ecosystems and a lack of 'listening infrastructures' to women's needs and environmental and experiential knowledge.

Sneha Krishnan, Philomena Wambui and Nitesh Lohan examine the intersecting crises of conflict, climate change and Covid-19 in '"We let the blood flow": Flooding, health and overlapping crisis as experienced by south Sudanese women'. Their chapter highlights the resilience of South Sudanese women as they navigate displacement, food insecurity and inadequate health infrastructure. Drawing on rich data gathered in Jonglei state in 2021 and Juba in 2023, they emphasize the need for gender-sensitive policies and policy responses that attend to the specific needs of vulnerable groups, recognize the essential roles women play and address systemic inequalities that heighten their risks amid ongoing humanitarian crises.

Daphine Arinda's poem 'Chair in Entebbe/Entebbe E'Ntebbe' addresses the multiple and intersecting impacts of the urban climate crisis on lesbian, bisexual and queer (LBQ) women in Kampala, Uganda. It weaves together the lived experiences of LBQ women shared during a two-day creative writing workshop on their lived experiences of climate change and environmental, social and political injustices. It invites us to consider the frequently invisible and neglected climate vulnerabilities of LBQ women while also celebrating their creativity, agency and resilience.

In their chapter 'Queer diffabilities in Uganda: experiences of intersectional complexity and the urban climate crisis', Katie McQuaid and Neil J. W. Crawford draw on the lived experiences of queer people with disabilities in Kampala to highlight how queerphobia and ableism re/produce social inequalities, marginalization and exclusion that position some minds and bodies more vulnerable to climate change. They invite new approaches to intersectional climate justice that interrogate normativity, provide space for a greater embodied diversity of lives impacted by climate change and (re)vision just futures that centre inclusion, social and environmental justice.

In 'The Covid-19, equity and climate change nexus: the case of the East African Region', Joanes Atela, Leah Aoko Otieno, Elvin Nyukuri and Florence Onyango explore climate change policies and strategies in the region and how they guided responses to the Covid-19 pandemic. They observe how the pandemic widened gender inequalities in part because of an economic approach that paid little attention to social vulnerabilities and existing climate injustices. These dual crises reveal the interconnectedness of social challenges and the need for holistic strategies to safeguard against future global challenges not only preserving natural resources but also protecting public safety, health equity and social resilience.

Abbas Mugisha and Sabiti Makara, in 'Climate change, migration and displacement: considering psychosocial impacts in Uganda', consider the increase in displacement due to climate-related disasters, emphasizing how vulnerable populations, are disproportionately affected. The short think-piece highlights the case of floods in Kasese, Uganda, in 2024 as an example of the prevalence of psychosocial impacts.

Together, these diverse contributions – in form, approach, methodology and thematic and country focus – provide a series of insightful examples of how climate change can be seen in Eastern Africa today and how focusing on questions of justice and intersecting considerations is imperative. While one book could never encapsulate the richness of issues and experiences in such a diverse region as Eastern Africa, we hope that it serves as an important extension to what is known already, ensuring a key focus on an area detrimentally impacted, but relatively neglected. We hope that this book is followed by more work that captures and helps expand our knowledge and understanding of Eastern Africa's climate vulnerabilities and shocks, the rich diversity of local responses and work towards justice, as well as the insights and knowledges that can help worldwide in the fight against climate change.

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