HORN OF AFRICA BULLETIN

Horn of Africa Bulletin is a publication of the Life & Peace Institute

HORN OF AFRICA

Framing the Climate, Peace, and Security Agenda in the Horn of Africa

Rethinking the Climate Change–Conflict Nexus: Evidence from South Sudan

Climate-Related Security Risks in IGAD Countries: Re-Envisioning National Adaptation Planning

Learning from Insurance Agents: Peacebuilding, Resilience and the Mental Landscape

Revolutionising Food Waste Management in Ethiopia: The Lem Chaka

Life & Peace INSTITUTE

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The Horn of Africa Bulletin ('the Bulletin') is a publication that monitors and analyses current and pressing peace and security topics in the Horn to provide knowledgeable and locally informed analysis for relevant debates and policy processes. For close to 30 years, the Bulletin has published current analysis on regional peace and security issues prioritising local insights, community perspectives, new methods, and alternative opinions. The material published in the Bulletin represents a variety of sources and does not necessarily express the views of the LPI.

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Letter from the Guest Editor

Welcome to the November 2023 edition of the Horn of Africa Bulletin. The papers in this issue acknowledge the ever-evolving climate-security nexus from multiple lenses.[1] The papers are complemented by a beautiful photojournalism piece featuring a local climate-focused initiative. The individual papers recognise the growing consensus that climate change is a threat multiplier of conflicts[2] in the Horn of Africa and beyond[3]. These papers and the photojournalism piece reference the human security threats posed by the effects of climate change and call for coherent and coordinated action by the community of nations.

This issue reinforces relevant policy discussions around climate change mitigation and adaptation initiatives at local, regional, continental, and global levels. The salient discussions in these papers reiterate the aspirations of the African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032). The African Union Strategy is referenced across the papers with cross-cutting themes around adaptation, resilience building and climate financing. Recent discussions that emerged out of the inaugural Africa Climate Summit held in September 2023 in Nairobi are also referenced in this issue. This Climate Summit, which was held ahead of the Conference of the Parties (COP) 28, acknowledged that climate change is the single biggest threat to humanity. It further called on the global community to, among others, reduce emission levels in light with the goals of the Paris Agreement and the operationalisation of the Loss and Damage Fund facility agreed at COP 27 in Egypt. These papers also foreground expected discussions at COP 28 in the United Arab Emirates (UAE), including climate financing and centring nature, people, lives, and livelihoods at the heart of climate action.

In terms of methodology, the papers draw on theoretical and empirical

1 Daoudy, M. (2021). Rethinking the climate–conflict nexus: a human–environmental–climate security approach. Global Environmental Politics, 21(3), 4-25.

2 Froese, R., & Schilling, J. (2019). The nexus of climate change, land use, and conflicts. Current climate change reports, 5, 24-35.

3 Sweijs, T., De Haan, M., & Van Manen, H. (2022). Unpacking the Climate Security Nexus Seven Pathologies Linking Climate Change to Violent Conflict. The Hague Centre for Strategic Studies.

insights. These papers have been subjected to multiple review rounds and offer cutting-edge policy insights relevant to the ongoing climate security debates. These papers not only diagnose climate change threats but are forward-looking with practical policy recommendations at local, regional, and global levels. A common thread running through the analysis is the salient need for governments, regional bodies, and inter-governmental organisations to take a whole-of-society approach in dealing with the threats posed by climate change.

The first paper, by Shewit Gebrehiwot, is titled ***Framing the Climate, Peace, and Security Agenda in the Horn of Africa***. This paper examines how the African Union and the sub-regional mechanism Intergovernmental Authority on Development (IGAD) have framed and responded to the climate-security nexus in the Horn of Africa. The paper evaluates these continental responses in the context of multilateral responses to climate change. The paper acknowledges the human security threats faced in the Horn of Africa and makes several policy recommendations. These include the calls for a coordinated African Union's position ahead of COP 28 in areas of climate mitigation, adaptation and enhanced global cooperation to address the effects of climate change.

The second paper, ***Rethinking the Climate Change-Conflict Nexus: Evidence from South Sudan*** by Israel Nyadera observes that the resurgence of conflict in 2013 in South Sudan has further been exacerbated by the negative impacts of climate change. The study is approached from a human security perspective and debates the nexus between climate change and conflict. It situates how climate change is worsening an already fragile context by aggravating food insecurity and contributing to a humanitarian crisis. The study offers several policy recommendations, including the inclusion of climate forecasting tools and early warning mechanisms for pre-emptive responses, afforestation, and the accounting of climate change in peace negotiations.

Paul Omondi's paper, ***Climate-Related Security Risks in IGAD Countries: Re-envisioning National Adaptation Planning***, examines climate-related security risks in the IGAD region with a particular focus on National Adaptation Planning (NAP). This third paper examines these risks from four pathways contained in the IGAD Conceptual Framework for climate-security nexus, namely: (1) threats to food and water security, (2) climate-induced mobility, (3) historical grievances and cultural practices, and (4) governance and fragility. It argues that these risks continue to impact state fragility with implications for peace and security in the IGAD region. The paper

recommends that member countries align their NAP Planning with the IGAD Regional Climate Change Strategy.

The fourth paper in this issue is by Wairimu Muthike and Mareike Schomerus titled: ***Learning from Insurance Agents: Peacebuilding, Resilience and the Mental Landscape***. This paper draws on fieldwork in Isiolo, Kenya, to make a contextual case for the uptake of livestock insurance as a resilience mechanism to overcome the effects of climate change on livelihoods. The paper is approached from a gendered perspective to account for women's agency in seeking livelihood safety. This paper invites peacebuilders to examine lessons that they can learn from insurance agents. A commonality across the two fields (insurance and peacebuilding) is the sense of safety in the context of uncertainties brought by climate change. The paper applies the notion of the 'mental landscape' by bringing field anecdotes on people's sense of agency and, in particular, how their experiences and sense of safety influence the decisions they make.

Finally, the photojournalism article by Geremew Tigabu, an Addis Ababa-based photographer showcases the work of Lem Chaka, an organisation focused on food waste management, community initiatives, and climate education. The piece features an example of the tangible activities and businesses that are embracing a climate-focused agenda in support of their communities.

These papers overall appraise the current discourses on the climate-security nexus in the Horn of Africa. They recognise the peace and security threats posed by climate change in this region. They offer pragmatic solutions ranging from collective action by the community of nations to the input of regional mechanisms such as the AU and IGAD, including community agency and resilience in mitigating the effects of climate change.

We invite you to enjoy the issue. We hope the debates in the paper raise policy and intellectual discussions that shall be critical in scaling up solutions critical for climate change mitigation and adaptation.

Warm Regards,
John Githigaro (PhD)

John Mwangi Githigaro holds a PhD in International Relations (Peace and Security Studies Track) from the United States International University (USIU-A), Nairobi, Kenya.

Dr. Githegaro has been a recipient of multiple funded research fellowships. He was a Next Generation Social Sciences in Africa Fellow (2016-2019), a program of the Social Science Research Council (SSRC), New York, and also a recipient of the 2021 African Peacebuilding Network Fellowship (APN). His research and teaching interests are in the areas of peace, security, and development in the Horn of Africa. He has published on policing, refugeeism, counter-terrorism, and identity politics in the Horn.

Dr. Githegaro is passionate about finding synergies and connections between academia, policy and the practical world of work. He was previously a Lecturer in Peace and Conflict Studies at St. Paul's University Kenya. Some of his research outputs have been published in the Critical Studies on Terrorism, the Journal of Third World Studies, African Conflict and Peacebuilding Review, Africa Insight, African Peace and Conflict Journal, and the Journal for Deradicalization. Among his recent publications is a 2021 co-authored book with Babatunde, A., Adedimeji, M., Raji, S., Maweu, titled: *Managing Violent Religious Extremism in Fragile States Building Institutional Capacity in Nigeria and Kenya*. London: Routledge. In Autumn 2023, he is an InteRussia Visiting Fellow at MGIMO University, Institute for International Studies, Moscow, Russia.

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Framing the Climate, Peace, and Security Agenda in the Horn of Africa

Shewit Gebrehiwot

Introduction

Climate Risks in the Horn of Africa

The Horn has some of the most fragile and conflict-affected countries on the African continent. At the same time, the region is faced with recurrent droughts, flooding, and rising and shrinking lakes, making it one of the most climate-vulnerable regions on the continent. Rainfall in the Horn is concentrated in two rainy seasons: one from March to May (the long rains) and the other from October to December (the short rains). The main drivers of rainfall variability in the Horn are the El Niño–Southern Oscillation and the Indian Ocean Dipole. These interact with local and short life-span systems that influence the northward movement of the Inter Tropical Convergence Zone (ITCZ), which are moderated by the type of land cover.[1] From the mid-1980s until 2010, precipitation during the long rains has decreased (with some recovery more recently), while the short rains have become wetter. Despite substantial year-to-year variations, these trends are affecting the severity and frequency of extreme flooding, droughts, and ecosystem stability.[2]

Rain-fed agriculture and pastoralism are the main sources of livelihood in the Horn. Climate variability and change in both temporal and spatial domains greatly impact local livelihoods. In 2021 and 2022, the region faced a drought classified by scientists as exceptional.[3] Recurrent failed growing seasons have plagued the region for many years, compounding the challenges faced by the drought. Somalia has faced ongoing drought periods for more than a decade. Similarly, the arid and semi-arid areas of Ethiopia have been facing back-to-back droughts for more than seven years. In Kenya, the 2021–2022 drought was the worst on record since 1981.[4] This drought resulted in more than 21 million people facing high levels of acute food insecurity and more than 8.9 million livestock died across the region.[5]

The increasing regularity of droughts due to increased temperatures are exacerbating human security challenges as they are in many cases followed by heavy rains.[6] As climate scientists explain, the hardening of soil during the drought period results in the inability of soil to absorb water when it eventually does rain.[7] Rainwater runoff then contributes to extreme flooding. In parts of South Sudan alone, floods have affected more than 900,000 people,

1 IGAD Climate Prediction and Applications Centre, "Report on State of Climate, Peace and Security in the Horn of Africa" (Kenya: IGAD Climate Prediction and Applications Centre, November 2022), accessed 28 March 2023, https://www.icpac.net/documents/648/State_of_Climate_Peace_and_Security_in_the_Horn_of_Africa_2022_gttu3PO.pdf.

2 Paul I Palmer, Caroline M Wainwright, Bo Dong, Ross Maidment, Kevin Wheeler, Nicola Gedney, Jonathan E Hickman et al., "Drivers and Impacts of Eastern African Rainfall Variability", Nature Reviews Earth & Environment 4, no. 4 (21 March 2023): 254–70, accessed 29 September 2023, https://doi.org/10.1038/s43017-023-00397-x.

3 "Human-Induced Climate Change Increased Drought Severity in Horn of Africa", World Weather Attribution, 27 April 2023, accessed 6 August 2023, https://www.worldweatherattribution.org/human-induced-climate-change-increased-drought-severity-in-southern-horn-of-africa/.

4 "The Horn of Africa Crisis, Explained", Concern Worldwide, 19 July 2023, accessed 4 August 2023, https://www.concern.net/news/horn-of-africa-crisis-explained.

5 "Horn of Africa Drought: Regional Humanitarian Overview & Call to Action (Revised 21 September 2022)—Ethiopia", ReliefWeb, 21 September 2022, accessed 6 August 2023, https://reliefweb.int/report/ethiopia/horn-africa-drought-regional-humanitarian-overview-call-action-revised-21-september-2022.

6 World Weather Attribution, "Human-Induced Climate Change Increased Drought Severity in Horn of Africa"(World Weather Attribution, April 2023), accessed 28 July 2023, https://www.worldweatherattribution.org/human-induced-climate-change-increased-drought-severity-in-southern-horn-of-africa/#:~:text=This%20change%20in%20drought%20severity,about%20100%20times%20more%20likely.

7 Palmer et al., "Drivers and Impacts of Eastern African Rainfall Variability," March 21, 2023.

displaced more than 200,000, and left roads impassable for another 460,000 people who are already displaced by a mix of both environmental and conflict factors.[8]

The rising internal displacement and in-migration due to the recurrent droughts and flooding has increased tensions between communities due to the low resilience of host communities, natural resource constraints, and other social and political factors. This is especially true where displacement situations are prolonged and migrants are unable to go back home, as was the case for populations displaced by prolonged flooding in Bentiu, South Sudan.

Climate forecasts for the region suggest that the situation will not improve in the near future. The thematic report from ACAPS (formerly known as Assessment Capacities Project) released in July 2023 predicts that as a result of El Niño, the global temperature rise may exceed 1.5°C on multiple occasions in 2023 and 2024.[9] This is expected to result in even more severe and intense heatwaves, wildfires, floods, droughts, and epidemics in the eastern part of Africa (both dry and wet conditions), and in particular in Ethiopia, Somalia, and Sudan, which are already facing humanitarian and conflict crises.

Human Security Risks Arising from Climate Insecurity

Conflict and instability trends in the Horn have followed a negative trajectory in 2023. Given the increasing conflict and human security challenges in the region, national and international support will be tested in order to meet these needs. This is also within a context of declining humanitarian aid to least developed countries from 2017 onwards.[10] These human security challenges are expected to be compounded by climatic challenges and pre-existing conflict conditions such as grievances over inequality, political marginalisation, and unresponsive and poor governance systems.

Armed groups and extremist groups such as al-Shabaab in Somalia have a history of exploiting local conflict systems during droughts and flooding to gain followers, resources, and territorial control.[11] Similarly, some political actors have been known to use existing competition over natural resources to advance their political agendas. For example, in some areas leaders are known to arm cattle raiders to capture water resources and pastures. In northern Kenya, land and resource competitions have intensified intercommunal violence among rival ethnic groups.[12]

Other effects of the prolonged displacement of populations due to climate change

8 Boris Cheshirkov, "Devastation in South Sudan Following Fourth Year of Historic Floods" (Geneva: United Nations High Commissioner for Human Rights, 12 December 2022), accessed 31 August 2023, https://www.unhcr.org/news/briefing-notes/devastation-south-sudan-following-fourth-year-historic-floods.

9 ACAPS, "El Niño Overview: Anticipated Humanitarian Impact in 2023 | ACAPS", 26 July 2023, accessed 27 July 2023, https://www.acaps.org/en/countries/archives/detail/el-nino-overview-anticipated-humanitarian-impact-in-2023.

10 "The Decline of European State Support for Foreign Aid and What It Means for International Development", International Institute of Rural Reconstruction, 6 January 2023, accessed 31 August 2023, https://iirr.org/the-decline-of-european-state-support-for-foreign-aid-and-what-it-means-for-international-development/; "Foreign Aid Surges Due to Spending on Refugees and Aid for Ukraine", Organisation for Economic Co-operation and Development, 12 April 2023, accessed 31 August 2023, https://www.oecd.org/dac/foreign-aid-surges-due-to-spending-on-refugees-and-aid-for-ukraine.htm.

11 "Climate and Conflict in the Horn of Africa", International Crisis Group, 28 February 2023, accessed 4 August 2023, https://www.youtube.com/watch?app=desktop&v=kkEKKYYrl0g&ab_channel=InternationalCrisisGroup.

12 "How Climate Change Fuels Deadly Conflict", International Crisis Group, 9 December 2021, accessed 4 August 2023, https://globalclimate.crisisgroup.org/.

driven disasters could be the loss of cultural practices, social identity, community cohesion, and indigenous conflict resolution mechanisms embedded in the livelihoods of the people. These examples illustrate that the interaction between climatic distress and other socio-political and economic issues is posing serious human security risks in the Horn.

International Response to the Climate, Peace, and Security Agenda

One of the first formal recognitions of the climate and security nexus is the 2007 publication by then UN Secretary-General Ban Ki-moon in the *Washington Post* in which he acknowledges that "amid the diverse social and political causes, the Darfur conflict began as an ecological crisis, arising in part from climate change".[13] He links this to scientific evidence about the rise in temperature and the resultant reduction in precipitation in southern Sudan by 40% since the early 1980s. In the same year, the United Nations Security Council (UNSC) tabled the climate and security agenda for the first time. Since then, council members have held open debates and integrated the climate and security language into many thematic and country or region-specific issues.

When it comes to adopting a stand-alone UNSC resolution on the agenda, however, this has proven challenging to date. The first major attempt was made in December 2021, when the then co-penholders[14] on the climate and security agenda, Niger and Ireland, drafted a resolution, which requests that climate security analysis become a central component in UN conflict prevention strategies. The draft resolution was vetoed by Permanent Five (P5) member, Russia, while China abstained. The remaining permanent and non-permanent members of the council voted for the resolution, with the exception of India. Russia vetoed the resolution for two main reasons: on the basis that the agenda is an effort to turn a scientific and socio-economic issue into a politicised question, and due to the lack of evidence to justify links. India argued that the UNSC is not the right forum to discuss climate change-related issues, while also stating that the United Nations Framework Convention on Climate Change (UNFCC) should focus on making progress on member state commitments to the Paris Agreement.[15]

Although the draft resolution was not adopted, it received strong support from a majority (113 out of a total of 193) of General Assembly members, who had been invited by Niger and Ireland to co-sponsor the draft resolution. Surprisingly low for a region that suffers the most from the climate–security impacts, only 26 African states, mostly from the Sahel and the western Africa region, sponsored the draft.[16] From the Horn, only Sudan, Uganda, and Djibouti sponsored the resolution. Kenya, one of the leading voices on climate change in Africa, and an elected UNSC member at the time, did not sponsor

13 Ban Ki Moon, "A Climate Culprit In Darfur" The Washington Post, 16 June 2007, accessed 29 July, 2023, https://www.washingtonpost.com/wp-dyn/content/article/2007/06/15/AR2007061501857.html.

14 The term "penholder" designates a role referring to the member of the UNSC (permanent or elected non-permanent) that leads the negotiation and drafting of resolutions on a particular UNSC agenda item. The penholder role is distinct from the chair of a given subsidiary body on the same agenda item.

15 "Security Council Fails to Adopt Resolution Integrating Climate-Related Security Risk into Conflict-Prevention Strategies", United Nations, 13 December 2021, accessed 29 September 2023, https://press.un.org/en/2021/sc14732.doc.htm.

16 "How UN Member States Divided over Climate Security", International Crisis Group, 22 December 2021, accessed 2 February 2023, https://www.crisisgroup.org/how-un-member-states-divided-over-climate-security.

the resolution. This was on the basis of inconsistencies they say they observed between UN member state commitments at the UNFCCC in Glasgow versus at the UNSC, as well as due to council members "consistent resistance to taking action to combat terrorism threat in regions, such as the Sahel".[17] Later, however, Kenya did vote for the resolution. As Kenya co-hosted the first Africa climate summit in Nairobi (4–6 September 2023), President Ruto's intervention focused on African potential for growth through transition to green energy.

Throughout 2022, many UNSC members made efforts to advance the climate–security agenda through mechanisms formerly used by the UNSC, including: the Informal Group of Experts on Climate and Security; the Group of Friends on Climate; and the Climate Security Mechanism. Strong resistance from a small number of UNSC members to climate change language in outcome documents, however, blocked several UN presidential statements from being adopted in 2022.[18]

In contrast, commitment to the agenda in the broader UN system is stronger than what is demonstrated in the UNSC. Through the jointly established UN Climate Security Mechanism in 2018, for example, the UN Development Programme (UNDP), the UN Department of Political and Peacebuilding Affairs (DPPA), and the UN Environment Programme (UNEP) have been doing work to integrate climate, peace, and security considerations to guide conflict prevention, peacebuilding, mediation, and peacekeeping efforts. The UN DPPA is also starting to employ climate security experts for peacekeeping operations, special political missions, and country teams to strengthen climate considerations in their analysis, political strategies, and operational activities. Currently, the UN assistance missions in Somalia, South Sudan, and Sudan, along with the UN Special Envoy Office to the Horn of Africa, have climate and security advisors in place, giving the Horn region a global lead in this regard.

The annual climate event held by the UNFCC, the Conference of the Parties (COP), is not that consistent when it comes to the climate, peace, and security nexus. In comparison to previous COPs, however, the Egyptian presidential role at COP27 brought the agenda more attention. In total, 23 side events on peace, security, and conflict sensitivity were held during COP27. This includes the launch of the Cairo Climate Responses for Sustaining Peace initiative and the German Climate for Peace initiative.[19] In spite of these efforts, however, the final text of the Sharm el-Sheikh implementation plan did not include a resolution on peace and conflict.

The annual COP28 is set to take place from 30 November–12 December 2023. The United Arab Emirates (UAE), which has also been positively active on the climate and security agenda at the UNSC, is to host the event in Dubai. Given the seriousness of challenges witnessed in conflict areas, it

17 Security Council, "Maintenance of International Peace and Security: Climate and Security", S/PV.8926, 13 December 2021, accessed 28 July 2023, https://digitallibrary.un.org/record/3951616?ln=en.

18 Security Council Report, "The UN Security Council and Climate Change: Tracking the Agenda after the 2021 Veto: Research Report: Security Council Report" (New York: Security Council Report, 30 December 2022), accessed 29 September 2023, https://www.securitycouncilreport.org/research-reports/the-un-security-council-and-climate-change-tracking-the-agenda-after-the-2021-veto.php.

19 "Peace@COP27: A Brief Review", Geneva Peacebuilding Platform, accessed 27 July 2023, https://www.gpplatform.ch/sites/default/files/COP27%20Peace%20Report.pdf.

is encouraging to see that the forthcoming COP28 outlines a‘ Relief, Recovery, and Peace Day’ – to be held on 3 December 2023 in addtiona to another new theme to COPs – ‘Health’.[20] The discussions on the ‘Relief, Recovery and Peace’ theme are expected to focus on accelerating adaptation, preventing and addressing loss and damage (including in fragile and conflict-affected contexts), and advocating for policies and investments that support community resilience and stability. This will indeed be a very good opportunity for African climate negotiators to put the issues of access to climate financing for fragile and conflict-affected states, and other critical issues, on the climate–security nexus agenda.

Regional Responses to the Climate Peace and Security Agenda

Many AU policy frameworks recognise risks emerging from climate change and how they undermine human and state security.[21] At the level of the AU Peace and Security Council (PSC), climate, peace, and security has been a recurrent thematic issue since 2016.[22] As of 31 July 2023, the AU PSC has held 12 sessions on the topic, including 2 summit level meetings in 2021. In addition to this, climate change also features in the various country and regional files of the AU PSC. Various AU PSC decisions highlight the importance of early warning, resource mobilisation, and collective action to support member states that are severely affected by climate and insecurity.

Despite progress at normative levels, the AU has not been able to prevent or respond to the challenges associated with the impacts of extreme climate events. This is a deficit across the AU conflict early warning mechanism, whereby early warning does not lead to early response or preventative actions.

More recently, in line with repeated AU PSC requests,[23] the Department of Political Affairs, Peace, and Security (PAPS) of the African Union Commission (AUC) is undertaking a continental climate-related security risk assessment study. The study is expected to inform and help mobilise a common African position on climate change and security, ahead of COP28. The AU PSC commitment could be an indication of the unique challenges Africa faces due to the compounded effects of climate change and insecurity. Once complete, the report may also contribute to increasing awareness and consensus among AU member states and inform policy processes to better prevent and respond to the security risks posed by climate change.

The African Union Climate Change and Resilient Development Strategy And

20 “Thematic Program”, COP28 UAE, accessed 27 July 2023, https://www.cop28.com/en/thematic-program.

21 Vane Moraa Aminga and Dr Florian Krampe. “Climate-Related Security Risks and the African Union” (Stockholm: Stockholm International Peace Research Institute, May 2020), accessed 23 August 2023. https://www.sipri.org/publications/2020/sipri-policy-briefs/climate-related-security-risks-and-african-union.

22 “The 585th Meeting of the Peace and Security Council of the AU: An Open Session to the Theme: Climate Change: State Fragility, Peace and Security in Africa”, African Union, 12 April 2016, accessed 29 September 2023, https://www.peaceau.org/en/article/the-585th-meeting-of-the-peace-and-security-council-of-the-au-an-open-session-to-the-theme-climate-change-state-fragility-peace-and-security-in-africa.

23 “Peace and Security Council 774th Meeting 21 May 2018 Addis Ababa, Ethiopia,” African Union Common Repository, accessed 29 September 2023, http://archives.au.int/handle/123456789/5305; “Communique of the 1051th Meeting of the AU Peace and Security Council (PSC) Held on 26 November 2021 on the Theme: Climate Change and Peace and Security: The Need for an Informed Climate-Security-Development Nexus for Africa”, African Union, 13 December 2021, accessed 6 February 2023, https://www.peaceau.org/en/article/communique-of-the-1051th-meeting-of-the-au-peace-and-security-council-psc-held-on-26-november-2021-on-the-theme-climate-change-and-peace-and-security-the-need-for-an-informed-climate-security-development-nexus-for-africa.

Action Plan (2022–2032)[24] is another important AU strategic framework that sets out brief, but clear objectives for African stakeholders on the climate–conflict nexus. The text calls for context specific, localised solutions and capacity strengthening for practitioners in both the climate and peacebuilding sectors.

IGAD is one of the strongest African institutions with regard to taking practical steps to pursue the climate, peace, and security agenda.[25] One such effort is the series of studies that IGAD conducted in an attempt to determine with statistical confidence the extent to which environmental variables increase risk scores in anticipating subsequent conflict outcomes in the region.[26] The studies find that pastoral conflict incidents reduce when vegetation improves, while the risk scores increase significantly with low vegetation values.

In addition to launching the IGAD Regional Climate Change Strategy and Action Plan (2023–2030), IGAD also released a policy brief and technical report in 2022 entitled "Report on State of Climate, Peace and Security in the Horn of Africa".[27] The report concludes that climate change is negatively impacting the availability of natural resources in the region, which often contributes to intercommunal conflict by worsening livelihood conditions and pushing people to resort to alternative sources of livelihood. IGAD has also partnered with the UN Office of the Special Envoy for the Horn of Africa (UNOSE) to establish a regional climate security mechanism.[28] Once operational, this mechanism will be the first of its kind in UN engagement on climate and security with various regions globally.[29]

Conclusion and Recommendations

Social or environmental phenomena are not products of linear or simple relationships. Climate change impacts societies by disrupting natural environments, human-made infrastructures, and economic and social systems on which people depend. Depending on geographic contexts and social, political, and economic vulnerabilities, the security risk of climate change can be higher or lower. The Horn faces one of the highest risks in this regard, given the multidimensional nature of and complexities underlying the relationship between climate and conflict in the region.

African actors such as the AU and IGAD have increasingly shown greater understanding of the climate change, peace, and security nexus in its systemic complexity and are leading at the policy level. Practical interventions on the ground, however, lag

24 African Union, "African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032) (Addis Ababa: African Union, 2022), accessed 29 September 2023, https://au.int/en/documents/20220628/african-union-climate-change-and-resilient-development-strategy-and-action-plan.

25 The IGAD region stretches over an area of 5.2 million km2. See: "The IGAD Region", Intergovernmental Authority on Development, accessed 29 September 2023, https://igad.int/the-igad-region/.

26 "The Nexus between Climate and Conflict in the IGAD Region", CEWARN, accessed 5 March 2023, https://cewarn.org/2021/11/02/the-nexus-between-climate-and-conflict-in-the-igad-region/.

27 IGAD Climate Prediction and Applications Centre, "Report on State of Climate, Peace and Security in the Horn of Africa" (Kenya: IGAD Climate Prediction and Applications Centre, November 2022), accessed 28 March 2023, https://www.icpac.net/documents/648/State_of_Climate_Peace_and_Security_in_the_Horn_of_Africa_2022_gttu3PO.pdf.

28 "Press Release: The 48th IGAD Council of Ministers Successfully Concluded in Khartoum, Sudan", IGAD, 30 November 2022, accessed 29 September 2023, https://igad.int/the-48th-igad-council-of-ministers-successfully-concluded-in-khartoum-sudan/#:~:text=November%2030%2C%202022%20(KHARTOUM%2C,of%20Foreign%20Affairs%20of%20Sudan.

29 During the recent Africa climate summit in Kenya, IGAD organised a high-level dialogue entitled "Climate Security: Resilience, fragility and displacement in the borderlands of the Horn of Africa", showing its commitment and leadership on matters of climate, peace and security, with a clear focus on what is contextually most relevant for its own region. The 'call to action' in the summit's main outcome document - THE AFRICAN LEADERS NAIROBI DECLARATION, did not however address climate-security risks.

behind policy pronouncements. To some extent, this is interlinked with the financial and organisational resource limitations faced by AU member states and the regional actors across the continent. In contrast, although increasingly integrated in the policy discourse of global governance frameworks, in some cases the climate–security nexus appears to have fallen prey to the growing polarisation of permanent UNSC members.

At the regional level, IGAD must strive to turn policies into actions, including by engaging with international partners to attract climate adaptation financing that focuses on improving the livelihoods of communities to build climate resilience. IGAD could also engage its member states and humanitarian agencies to ensure that humanitarian responses to extreme weather events and calamities (such settlement of displaced populations after flooding) are implemented in a conflict sensitive manner and, moreover, do not create cross border tensions. The recently established IGAD–UN climate and security mechanism should go beyond a research and analysis mechanism to being a platform used to inform and influence global actions that address the climate, peace, and security nexus.
The AU should also translate its policies into practical support to its member states. For example, it could strengthen the newly established Africa Multi-Hazard Early Warning and Early Action system to provide localised meteorological observations and coordinate with the IGAD conflict early warning mechanism to provide early warning on climate-related security risks. Looking ahead to COP28, the AU should ensure that African calls for a stronger position on the climate–security agenda, whereby climate adaptation and mitigation efforts are coordinated, combined, and integrated with prevention, peacebuilding, and peacekeeping efforts, to ensure that a sustainable environment and a sustainable peace are mutually reinforcing.

At the global level, both the UNSC and UNFCC should reflect better on the interlinkages between their respective primary mandates. This would support the UNSC to bring climate consideraions into conflict resolution, peacekeeping, and peacebuilding efforts in political transtion and post-conflict settings. The UN and other international humanitarian actors also need to balance short-term life-saving humanitarian response with the need for building resilience and longer-term preventative work to future climatic shocks and peacebuilding efforts.

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HORN OF AFRICA BULLETIN

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Rethinking the Climate Change–Conflict Nexus: Evidence From South Sudan

Dr. Israel Nyadera

Introduction

Concerns over the long-term consequences of climate change and inaction to mitigate human-induced impacts on the environment have continued to grow over the last decades.[1] Climate change continues to top the national security strategy documents of many countries and the reports of many non-governmental organisations, as the leading threat in the foreseeable future. With the belief that some aspects of climate change such as global warming, loss of biodiversity and extreme weather are likely to be irreversible, calls for urgent interventions are on the rise.

Existing debates taking place at policy forums such as the 2022 COP27 (officially, the United Nations Climate Change Conference, or Conference of the Parties of the UNFCCC, more commonly referred to as COP) held in Sharm el-Sheikh, Egypt, have brought forth important agenda items. These include issues such as resilience, climate finance, gender, climate technology, and innovation, among others. Other debates also reflect on the place of developing countries and the nature of the support they need to face climate change. Given the seriousness of challenges witnessed in conflict areas, it is encouraging to see that the forthcoming COP28, scheduled for 3 December 2023, outlines discussions on health, relief recovery, and peace. Perhaps countries such as South Sudan should be keen to contribute to this meeting, given their experiences. In academic debates, it is more often the case that attention is drawn to how climate change acts as a threat multiplier in the manifestation of conflict.[2] In contrast, the role of climate change in exacerbating human insecurity and suffering during conflicts is only discussed on a muted basis.

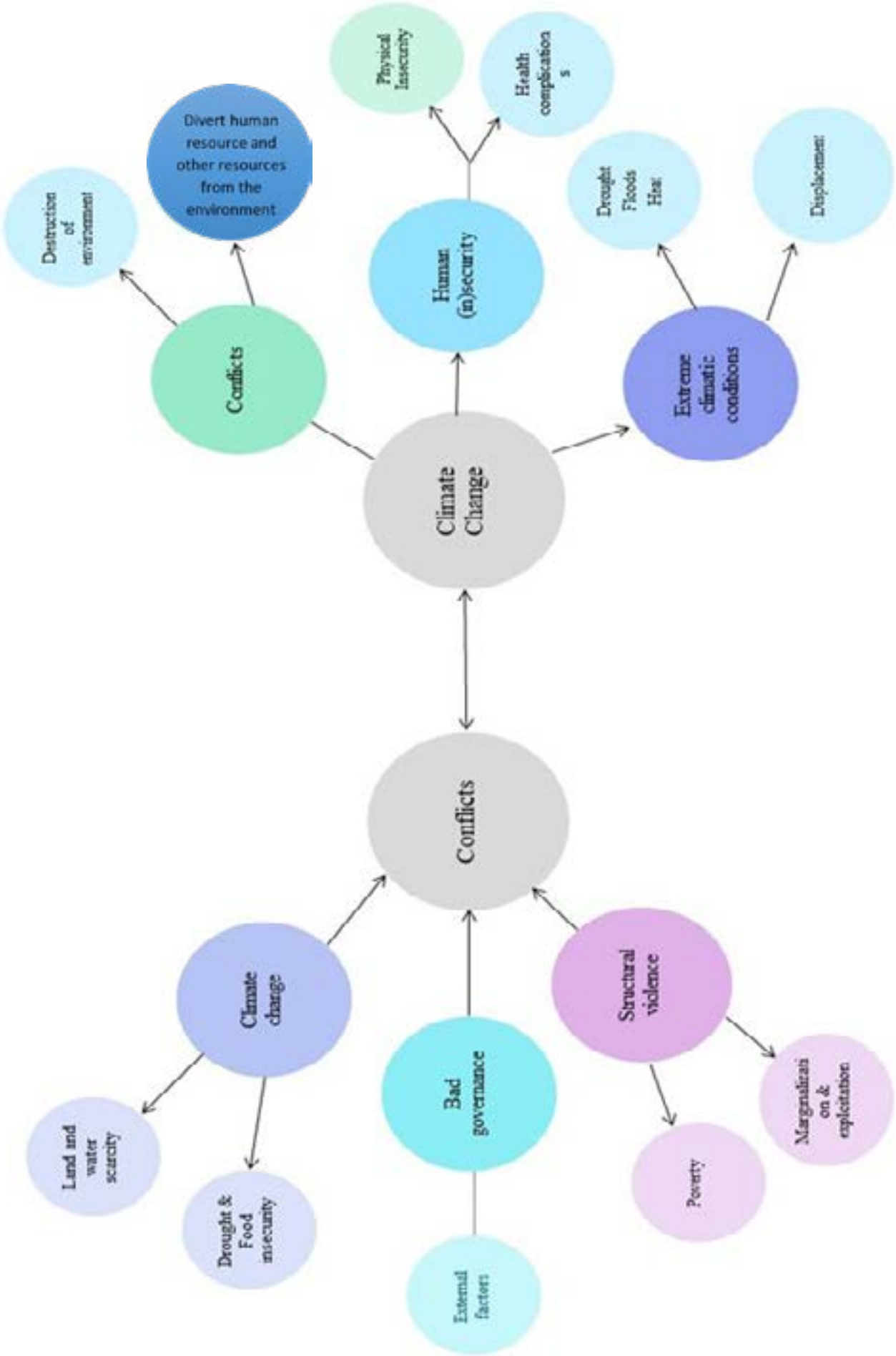
Moreover, for countries that are experiencing conflicts such as South Sudan, the call for urgent environmental intervention may come late. This is because the country is not only already facing a combination of challenges brought about by conflict and climate change, but also faces the difficulty of introducing far-reaching climate change interventions amid a conflict. Among countries that are facing conflict and climate change challenges, South Sudan offers a unique case study, given both the institutional challenges it continues to face as the newest nation in the world and the capacity-building obstacles it has faced historically since the 1950s.

South Sudan passed the National Adoption Plan for Climate Change South Sudan (NAPCCSS) in 2021 and ratified the Paris Agreement in 2016, marking important steps in finding long-term solutions to the South Sudanese climate change experience. At the centre of this problem, however, is the question of peace and security in the country, which would allow both the implementation of the NAPCCSS and the development of institutional capacity to monitor these efforts. This article examines existing academic studies on conflict and climate change, government reports, and publications by local and international non-governmental organisations and inter-governmental agencies. It begins by assessing the complex relationship between climate change and conflict by looking at thematic areas such as food insecurity,

1 Sarah Sunn Bush and Amanda Clayton, "Facing change: Gender and climate change attitudes worldwide", American Political Science Review 117, no. 2 (2023): 591–608.

2 Kjølv Egeland, "Climate security reversed: the implications of alternative security policies for global warming", Environmental Politics 32, no. 5 (2023): 883–902.

Figure 1: Nexus between conflict and climate change



Source: Author design

displacement, and humanitarian response. It then looks at how the ten-year existence of South Sudan has been troubled by a combination of violence and climate change before concluding with a set of recommendations. This analysis adopts a qualitative methodology to explore the nexus between climate change and conflict in South Sudan.

Climate Change and Conflict: A Complex Nexus

When conflict and climate change combine, they present a double tragedy for the affected society. This has already caught the attention of securitisation theorists and other scholars who continue to link climate change and (in)security.[3] The multiplier effects of climate change on conflict areas tend to worsen the humanitarian situation.[4] Most conflicts are caused by scarcity, especially of crucial human needs such as food, water, and land, which are also some of the consequences of climate change. Figure 1 illustrates the interconnection between climate change and conflict.

Whenever there is a conflict, we can deduce several impacts that also contribute to climate change. For example, conflict often leads to: the displacement of people; channelling human resources and other resources to war-related activities; unregulated exploitation of resources, including cutting down trees to generate revenue or simply as a strategy of war such as a scorched earth policy. Equally important, the existence of destructive arms, such as nuclear, chemical, and biological weapons, can have far-reaching consequences if deployed during a conflict. Nonetheless, international treaties and agreements such as the 1949 Geneva Conventions, the 1970 Non- Proliferation of Nuclear Treaty, the 1972 Biological Weapons Convention, and the 1997 Chemical Weapons Convention can help minimise such destruction if well implemented and enforced. What is of greater concern, however, is the disproportionate impact of climate change on already negatively affected members of a conflict-affected society, notably women, children, persons with disabilities, the elderly, and the sick.

Climate change, in contrast, has long been associated with conflict because of its impact on human and environment. At the same time, climate change is also seen as a threat multiplier in the sense that it exacerbates existing problems, thus making the chances of conflict breaking out or deteriorating conditions in an existing conflict more likely. Debates over climate change have led to policies on adaptation and resilience to climate threats, but such policies do not feature among the priority areas for most countries.[5] This can be attributed to the national interests of a country, growing nationalist or populist political movements that reject the idea of climate change, controversies over climate financing, and questions over responsibility. Despite such drawbacks, forums such as the recently concluded Africa Climate Summit in Nairobi (4–6

3 Jeroen Warner and Ingrid Boas, "Securitization of climate change: How invoking global dangers for instrumental ends can backfire", Environment and Planning C: Politics and Space 37, no. 8 (2019): 1471–88. Maria Julia Trombetta, "Securitization of climate change in China: Implications for global climate governance", China quarterly of international strategic studies 5, no. 01 (2019): 97–116.

4 Takato Nagano and Takashi Sekiyama, "Review of Vulnerability Factors Linking Climate Change and Conflict", Climate 11, no. 5 (2023): 104.

5 Vally Koubi, "Climate change and conflict", Annual Review of Political Science 22 (2019): 343–60; Idean Salehyan, "From climate change to conflict? No consensus yet", Journal of Peace Research 45, no. 3 (2008): 315–26.

September 2023) and the African Union Climate Strategy offer African countries a common position and reference on climate change. This can then contribute to other international efforts such as those spearheaded by the United Nations and national strategies that can be adopted by countries such as South Sudan. As such, it is important to look at how developed countries respond to climate change, on the one hand, and the contribution of emerging countries, on the other, without hindering their development goals. In doing so, three issues emerge that are worth examining: sustainability, vulnerability, and resilience.

First, sustainability is an idea that goes beyond questions about whether there are sufficient resources to support the survival of a given group, but also touches on equity. Access to these resources thus becomes a central issue. It is evident that both climate change and conflict can disrupt sustainability, which is even worse for those who experience both conflict and climate change at the same time. Second, climate change and conflict also expose people and populations to various forms of vulnerability. This means that those experiencing conflict and climate change are unable to cope with the pace and scope of the unexpected changes to which they are exposed. Third, it is essential to understand how climate change and conflict affect both the ability and level of resilience for the affected group. Resilience allows for better response to vulnerabilities and can lead to sustainability. In the absence of resilience, levels of vulnerability increase, making it difficult for a group to absorb the socio-economic and political shocks that are caused by both climate change and conflict. In this case, the weakest in the society are affected the most. When discussions around climate change and conflict resolution do not take into account the experiences of those who have had to endure the negative impacts of the two, this means that a lot is left to be desired. One conflict that continues to show visible signs of climate–conflict nexus is the South Sudanese civil war, which began in December 2013, a mere three years after independence.

South Sudan, Climate Change, and Conflict: A Troubled Decade

When examining the nexus between climate and conflict, South Sudan offers important insights on the devastating consequences of this nexus. Although the country has been experiencing civil war since 2013, it is important to recall the long-term impacts of the First Sudanese Civil War, which began as early as 1956 and then briefly halted as a result of the 1972 Addis Ababa Agreement, only to fully resume again in 1983, as the Second Sudanese Civil War, which was halted with the Comprehensive Peace Agreement in 2005. The experience of conflict in the South Sudan region has attracted the attention of international, continental, and sub-continental actors, who have tried to offer solutions during the two civil wars and again during the post-independence civil war in South Sudan.[6] Scholars have also been attracted to the conflict situation in Sudan for years, but mainly with a focus on the root causes, actors, and impact of the conflict,[7] and with less interest in climate-related impacts.

6 Israel Nyaburi Nyadera, "South Sudan conflict from 2013 to 2018: Rethinking the causes, situation and solutions", African Journal on Conflict Resolution 18, no. 2 (2018): 59–86; Israel Nyaburi Nyadera and Yilmaz Bingol, "Human Security: The 2020 Peace Agreement and the Path to Sustainable Peace in South Sudan", African Conflict & Peacebuilding Review 11, no. 2 (2021): 17–38.

7 Naomi Pendle, "Competing authorities and norms of restraint: governing community-embedded armed groups in South Sudan", International Interactions 47, no. 5 (2021): 873–97; Israel Nyaburi Nyadera, Md Nazmul Islam, and Felix Shihundu, "Rebel fragmentation and protracted conflicts: Lessons from SPLM/A in South Sudan", Journal of Asian and African Studies (2023): 00219096231154815; Clémence Pinaud, War and genocide in South Sudan (Ithaca: Cornell University Press, 2022).

It is noteworthy, however, that the European Commission Risk Index database (INFORM) ranks South Sudan as the second most vulnerable country in the world to natural hazards such as flooding and drought.[8] INFORM uses natural and human variables such as geographical location as well as current and projected conflict risk to determine the vulnerability score of a given country. Climate and conflict have exposed the people of South Sudan to a double tragedy, yet only the violent aspect of the conflict seems to be at the centre of efforts to stabilise the country. By simultaneously addressing both conflict and climate change, it becomes more possible to contribute to ameliorating the double suffering of South Sudanese people.

Food (in)security

According to a 2022 UNICEF (United Nations Children's Fund) report on South Sudan, nearly two-thirds of the population is at risk of facing acute hunger and starvation by the end of July 2023.[9] If serious efforts are not made to alleviate the negative impacts of flooding and drought experienced in conflict zones, then even more lives will be at risk. UNICEF puts the number of people at risk of starvation at 7.7 million out of a total population of 11 million. Of these, 1.4 million children are at risk of starvation and malnutrition. The country finds itself in this situation due to a combination of extreme climatic conditions, poor governance, and ongoing conflict—at a time when international funding for humanitarian activities is also on the decline, which only exacerbates the problems. Food insecurity is also worsened by displacement, loss of assets (especially land), and dangers associated with working on farms such as attacks.

Displacement of persons

The two main drivers of displacement in South Sudan are conflict and climate, which combine to create a sense of hopelessness among the many citizens who had great expectations of independence in 2011. According to the International Organisation on Migration (2023), approximately 2.3 million South Sudan refugees have fled the country and about 2.2 million people are internally displaced.[10] Of these, more than 300,000 are considered climate refugees, as record flooding has begun to affect the country since 2021. At that time, UNHCR records show 2.2 million people were displaced in 2023.[11] The displacement of persons has severe consequences on people's lives—families are separated, careers lost, living conditions can become inhumane and there is increased exposure to human security threats.[12] The complexity of displacement in South Sudan is further overshadowed by the relatively new conflict emerging in Sudan, which has not only captured the headlines of mainstream media, but has shifted the attention of donor countries and humanitarian agencies. This creates further challenges for the already stretched resources and personnel of these keyactors.

8 INFORM GRI 2022: Index for Risk Management. European Commission 2022. https://drmkc.jrc.ec.europa.eu/inform-index.

9 UNICEF, South Sudan Food Security & Livelihoods Cluster & Child Protection AoR. 2023 https://www.unicef.org/southsudan/reports/protecting-children-south-sudans-food-security-crisis.

10 IOM Response Overview - Sudan Crisis and Neighbouring Countries 2023 IOM Revised Response Overview - Sudan Crisis and Neighbouring Countries, May 2023 - December 2023 (Published: 5 September 2023) - Sudan | ReliefWeb.

11 UNHCR 2023, Regional overview of the South Sudanese refugee population. 2023 https://data.unhcr.org/en/situations/south-sudan.

12 Israel Nyaburi Nyadera and Billy Agwanda, "Elusive peace and conflict resolution in South Sudan: A human security alternative approach", in Human Security and Sustainable Development in East Africa, eds. Jeremiah O Asaka and Alice A Oluoko-Odingo (Abingdon-on-Thames, UK: Routledge, 2022), 72–88.

Humanitarian response

Urgent humanitarian support and intervention are needed to reinforce the humanitarian efforts that have been disrupted by the impact of violence and extreme flooding. In 2022, more than 70% of the South Sudan was flooded for months, especially areas such as Abyei Administrative Area and in the states of Jonglei, Upper Nile, Unity, Warrap, Northern Bahr el-Ghazal, Lakes, and Western Equatoria[13]. Not only did such flooding make accessing these regions very difficult, it also increased the number of people in need of humanitarian assistance as homes, farms, hospitals, roads, schools, and camps for displaced persons were destroyed. Lack of access to remote areas means that not only food, but also medical supplies can barely reach the stranded people. This raises further concerns over the potential outbreak of communicable diseases caused by flooding and the lack of medical supplies. While seasonal flooding of the Nile can be considered a normal occurrence, flooding of a significant portion of the country is unprecedented and can be associated with effects of climate change[14]. Before the 2021 floods, intense violence had already hindered access to humanitarian support in different parts of the country, leaving millions of people in need of support at the mercy of nature.

Recommendation

To address these challenges, specific measures need to be taken into account, as follows.

1. Afforestation is a strategy that South Sudan can adopt. This would not only improve forest cover in the country, but would also offer opportunities to explore other socio-economic benefits that forests can offer. For example, tree planting efforts such as the target to plant 100 million trees launched in Juba in 2021 can also include planting indigenous and medicinal trees. In this way, the country can contribute to the fight against climate change, while revitalising some of its social-cultural practices such as alternative medicine.
2. Acquiring climate prediction tools and capacities is another urgent measure that needs to be adopted. This can be done through a dedicated public office on climate monitoring and early warning, or at universities and research institutes, which can be equipped with climate prediction tools. The purpose would be twofold: to monitor general climate conditions and to provide warnings about extreme climate conditions that have worsened the humanitarian situation, which is already in a crisis from the conflict. Alongside this, humanitarian actors should adopt better climate forecast tools in their work and establish sufficient early warning mechanisms that can aid in detecting and averting the negative impacts of climate change, especially in populated areas.
3. International efforts such as the forthcoming COP28 (30 November–12 December 2023, hosted in Dubai) need to consider including conflict regions

13 Mayen, John V., Erik Wood, and Tim Frazier. "Practical flood risk reduction strategies in South Sudan." Journal of emergency management 20, no. 8 (2022): 123-136.

14 Lukwasa, Andu Zakaria, Tadesse Terefe Zeleke, Kassahun Ture Beketie, and Desalegn Y. Ayal. "Spatio-temporal rainfall variability and its linkage with large scale climate oscillations over the Republic of South Sudan." Climate Services 28 (2022): 100322.

as part of the climate fund. This would mean that people who have a lower carbon footprint (for example, especially those in low-income countries) could benefit from supplementary funds to help cushion them from the adverse consequences of climate change. The inclusion of issues related to health and peace in the forthcoming COP28 is an important step towards achieving these goals.

4. Beyond the power-sharing proposals that have characterised recent peacebuilding efforts in South Sudan, there is need for all actors involved to commit themselves to upholding climate change measures. For example, the government needs to ensure proper climate polices are adopted. Leaders of the warring parties should ensure their means and methods of warfare not only conform to the Geneva Conventions of 1949 and the additional protocols but also that these means and methods do not have irreversible impact on the environment. Citizens can play a role in environmental conservation practices and nurturing trees. Donors and non-governmental organisations can provide the necessary financial, technical, and civic education support for climate-related projects, backed up by think tanks and consultants working on climate-related issues.
5. Proper sensitisation and awareness raising needs to be undertaken across the country by the central and local government agencies responsible for environment. For example, displaced persons who reside in camps can be involved in environmentally friendly programmes such as tree planting during their stay, which could eventually take place across the country. These government agencies can also call for the establishment of a green army as part of disarming, demobilising, and re-integrating soldiers (especially former child soldiers), should peace be achieved.

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HORN OF AFRICA BULLETIN

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Climate-Related Security Risks in IGAD Countries: Re-Envisioning National Adaptation Planning

Paul O. Omondi

Introduction

The Intergovernmental Authority on Development (IGAD) in eastern Africa was created in 1996 to supersede the Intergovernmental Authority on Drought and Development, founded in 1986 to specifically deal with issues related to drought and desertification in the Horn of Africa. The IGAD region is considered one of the most vulnerable to climate change on the African continent. Drought trends in the region are worse now than they were during the 2010–2011 and 2016–2017 droughts. The March–May 2022 rainy season is the driest on record in the last 70 years, making the 2020–2022 drought worse than both the 2010–2011 and 2016–2017 droughts in duration and severity. Climate change and variability significantly impact economies and livelihoods in the region, as most activities are directly and highly dependent on the total seasonal rainfall and its distribution in both temporal and spatial domains.

This poses risks to peace and security through the displacement of people. In this regard, the drivers of conflict are linked to competing claims over scarce natural resources, as climate change serves as a threat multiplier that worsens the challenges and threats already being faced by people in the region. Some population groups are especially vulnerable to climate change, in particular those dependent on resource-based livelihoods and living in environmentally degraded areas with high disaster risks and low access to protection and assistance.[1] The emerging discourse on the topic of conflict and climate change suggests that new displacement, both internal and across international borders, is triggered by a mix of conflict and climate shocks. For these reasons, Ethiopia, Somalia, South Sudan, and Sudan are priority countries for the Secretary-General's Special Adviser on Solutions to Internal Displacement.[2]

Promoting peace, security, and stability, eliminating sources of conflict, and preventing and resolving conflict are prioritised areas of concern for IGAD.[3] IGAD work on peace and security is guided by its Peace and Security Strategy (2010). Currently under review, it is set for roll out as the Peace and Security Sector Strategy 2025.[4] The sector strategy lays out IGAD priority areas of intervention that are geared towards tackling the complex and highly dynamic human security challenges in the region.[5]The regional body has been at the forefront of assessing climate-related

1 United Nations High Commissioner for Human Rights, "Human Mobility and Climate Change in the IGAD Region: A Case Study in the Shared Border Regions of Ethiopia, Kenya and Somalia. Joint programme for addressing drivers and facilitating safe, orderly and regular migration in the contexts of disasters and climate change in the IGAD region" (Geneva: United Nations High Commissioner for Human Rights, 2023), accessed 5 July 2023, https://environmentalmigration.iom.int/sites/g/files/tmzbdl1411/files/documents/2023-06/human_mobility_and_climate_change_in_the_igad_region.pdf.

2 United Nations High Commissioner for Human Rights, "Global Report 2022" (Geneva: United Nations High Commissioner for Human Rights, 2022), accessed 21 July 2023, https://reporting.unhcr.org/operational/regions/east-and-horn-africa-and-great-lakes.

3 Intergovernmental Authority on Development, "Annual Report 2022" (Djibouti: Intergovernmental Authority on Development, 2022), accessed 21 July 2023, https://igad.int/wp-content/uploads/2023/05/IGAD-Annual-Report-2022.pdf.

4 Camilla Elowson and Adriana Lins de Albuquerque, "Challenges to Peace and Security in Eastern Africa: The role of IGAD, EAC and EASF", FOI Memo 5634 Studies in African Security (Stockholm: Swedish Research Agency, 2016), accessed 29 September 2023, https://www.foi.se/download/18.7fd35d7f166c56ebe0bb38e/1542369060243/Challenges-to-Peace-and-Security-in-Eastern-Africa_FOI-Memo-5634.pdf.

5 Intergovernmental Authority on Development, "IGAD to Roll out Peace and Security Sector Strategy 2025" (Djibouti: Intergovernmental Authority on Development, 18 June 2022), accessed 20 September 2023, https://igad.int/igad-to-roll-out-peace-and-security-sector-strategy-2025/.

peace and security risks led by the IGAD Climate Prediction and Applications Centre (ICPAC) and the Conflict Early Warning and Response Mechanism (CEWARN).[6] ICPAC has developed the IGAD Regional Climate Change Strategy (IRCCS), which provides a framework for integrated and coordinated mechanisms to address climate change issues. It aims to improve the resilience of livelihoods and the well-being of the people in the IGAD region to climate change and extreme weather events. Result 2 of the strategy is entitled "Climate change strategies and actions are strengthened and mainstreamed in key economic sectors". Its primary thrust is the overarching priority intervention areas being pursued by IGAD member states and the international community as enshrined in the agreement establishing IGAD, the Sustainable Development Goals, and the Paris Agreement, respectively.

In general, the IRCCS provides a framework for integrated and coordinated mechanisms to guide IGAD member states in addressing the challenges and harnessing the opportunities associated with climate change in the region. The IRCCS is aware that climate change will only compound these threats as it acts as a "threat multiplier", given its potential to exacerbate many of the current challenges and threats already being faced in some countries. Security concerns linked to climate change include water stress, land use and food security, natural disasters, and environmental migration.[7]
This article adopts a document analysis approach to explore how climate-related security risks are represented in the NAPs from a comparative perspective. It is positioned in relation to discussion about the four climate–security pathways described in the IGAD conceptual framework; namely: 1) threats to food and water security; 2) climate-induced mobility; 3) historical grievances and cultural practices; and 4) governance and fragility.[8] This analysis specifically aims to understand how IGAD member states prioritise these plans and what gaps exist. The concluding remarks draw lessons learnt for policy implications and looking ahead.

Analysis of Security Risks in IGAD Region

Security concerns linked to climate change have now become the defining issue of the time. The range of threats to peace and security in the IGAD region are too numerous and too diverse. These threats emanate from both inter and intra-state conflicts. They have intensified because of transnational security threats such as terrorism, human and drug trafficking, and the illicit use of small arms and light weapons, among other causes.[9] There is suggestive evidence that climate shocks increase the likelihood of domestic conflicts by as much as 38%.[10] This is due to the fact that climate change impacts lead to an increase in forced migration. According to the United Nations World Food Programme, the number of forcibly displaced people in eastern Africa

6 IGAD Climate Prediction and Applications Centre, "Policy Brief: Addressing Climate Change, Peace and Security in the Horn of Africa" (Kenya: IGAD Climate Prediction and Applications Centre, November 2022), accessed 10 July 2023, https://www.icpac.net/documents/644/Policy_Brief_Clim_2022_final_print.pdf.

7 Intergovernmental Authority on Development, "IGAD Regional Climate Change Strategy and Action Plan (2023–2030)" (Djibouti: Intergovernmental Authority on Development, 2022), accessed 15 July 2023, https://www.icpac.net/documents/619/IGAD_IRCCS_v_61.pdf.

8 IGAD Climate Prediction and Applications Centre, "Policy Brief: Addressing Climate Change, Peace and Security in the Horn of Africa"

9 "The IGAD Region", Intergovernmental Authority on Development, accessed 21 July 2023, https://igad.int/the-igad-region/.

10 Yoro Diallo and René Tapsoba, "Climate Shocks and Domestic Conflicts in Africa", IMF Working Paper, Africa Department (Washington DC: International Monetary Fund, December 2022).

has nearly tripled, from 1.82 million in 2012 to almost 5 million in 2022, including 300,000 new refugees during the previous year alone.[11] Most of these displacements directly result from extreme weather events or conflicts associated with the knock-on and ripple effects of climate variability and extremes.[12]

An analysis of conflict trends is useful for attempting to understand the connections between climate change and conflict risks. The data used in this analysis is from the Uppsala Conflict Data Program (UCDP), covering the past two decades, from 1990 to 2022.[13] The UCDP divides armed conflict into three categories: 1) state-based conflict; 2) non-state conflict; and 3) one-sided violence. This analysis is focused on category 2, non-state conflict. The UCDP defines a non-state conflict as "the use of armed force between two organised armed groups, neither of which is the government of a state, which results in at least 25 battle-related deaths in a year".[14] A previous study found that the effects of climatic shocks on the risk of violent conflicts are found to hold only for intercommunal conflicts, not for government-involved conflicts.[15] Our interest here then is on intercommunal conflicts instead of state based violence or one-sided violence.

Table 1 presents the spatial distribution of conflict across IGAD countries. Note that South Sudan figures are based on data available from 2011 onward. Analysing the data, IGAD member states collectively experienced a total of 2,485 non-state conflict events between 1990 and 2022, and ordered from left to right according to the conflict events. Somalia stands out as the most affected by conflicts, accounting for just less than one-third (29%) of total events. The least affected countries are Eritrea, with no conflicts reported, and Djibouti, with only 5 conflicts reported. It is however not certain to what extent what is reported for Eritrean can be deemed to represent an accurate count of occurrence of conflicts. Conflict intensity is reflected in the number of conflict-related deaths, with estimates suggesting at least 53,692 deaths. Data shows that 40% of all fatalities are linked to Sudan. Although it can be difficult to attribute insecurities to drought, the general trend suggests that climate change and drought have become an existential security threat in the IGAD region. The risk of local conflicts does appear to be increasing with increasing drought shocks. There is a peak in the incidence of conflicts between 2008 and 2010, as an upward trend occurred, seemingly attributable to the three drought

11 UNHCR, "Spiraling costs, surging conflict, and soaring climate disasters create a desperate future for millions of refugees across Eastern Africa", WFP and UNHCR Joint News Release, 13 April 2022, (UNHCR, 2022), accessed 10 October 2023, https://www.unhcr.org/news/news-releases/spiraling-costs-surging-conflict-and-soaring-climate-disasters-create-desperate.

12 IGAD Climate Prediction and Applications Centre, "Report on State of Climate, Peace and Security in the Horn of Africa" (Kenya: IGAD Climate Prediction and Applications Centre, November 2022), accessed 20 September 2023, https://www.icpac.net/documents/648/State_of_Climate_Peace_and_Security_in_the_Horn_of_Africa_2022_gttu3PO.pdf.

13 Uppsala Conflict Data Program, "UCDP Dataset Download Center", Yearly Datasets covering 1989 – 2022 - UCDP Non-State Conflict Dataset version 23.1, (Uppsala Conflict Data Program, 2022), accessed 10 July 2023, https://ucdp.uu.se/downloads/nsos/ucdp-nonstate-231-xlsx.zip.

14 Therése Pettersson, "UCDP Non-State Conflict Codebook" Version 2.5-2016, (Uppsala Conflict Data Program, 2014), accessed 10 October 2023, https://ucdp.uu.se/downloads/replication_data/2016_c_666956-l_1-k_ucdp-non-state-conflict-dataset-codebook-v2.5-2016.pdf.

15 Yoro Diallo and René Tapsoba, "Climate Shocks and Domestic Conflicts in Africa", IMF Working Paper, Africa Department (International Monetary Fund, 2022). Accessed 18August 2023.
https://www.imf.org/-/media/Files/Publications/WP/2022/English/wpiea2022250-print-pdf.ashx.

periods of 2010–2011, 2016–2017, and 2020–2022.

Table 1. Intercommunal conflict trends, by country (1990–2022)

	Total	Somalia	Ethiopia	Kenya	Sudan	South Sudan	Uganda	Djibouti	Eritrea	Deaths
1990–92	61	9	17	24	8	N/A	2	1	-	7,035
1993–95	144	77	8	31	26	N/A	-	2	-	6,921
1996–98	177	102	6	31	34	N/A	4	-	-	4,167
1999–01	205	79	46	36	17	N/A	27	-	-	4,544
2002–04	262	150	58	10	12	N/A	32	-	-	4,069
2005–07	235	78	46	48	44	N/A	19	-	-	3,985
2008–10	373	141	46	107	68	N/A	11	-	-	5,554
2011–13	247	28	6	90	70	53	-	-	-	5,282
2014–16	218	6	5	89	96	20	2	-	-	3,400
2017–19	305	43	70	73	55	63	-	1	-	3,677
2020–22	258	18	47	20	90	82	-	1	-	5,058
Total conflicts	2,485	731	355	559	520	218	97	5	0	
Deaths		11,654	8,331	4,334	21,639	5,713	1,980	41	0	53,692

Source: Author compilation based on UCDP county specific data[16]

Analysis undertaken by Stockholm University on the most common pathways from climate-related environmental damage to local or intrastate violent conflict in East Africa found that climate change or climate variability can contribute to conflict in any of three ways: (1) by worsening livelihood; (2) by increasing migration, thus triggering in-migration tensions with the host communities; or (3) by pushing pastoralists to move beyond their traditional routes, bringing them into conflict with other pastoralists or farmers.[17]

Regional Climate Change Strategy: Dynamics of Climate-Related Security Risks

Climate vulnerabilities in the IGAD region are among the highest in Africa. In efforts to promote peace and security, IGAD has made efforts to refocus attention on climatic drivers of human insecurity. Climate change and environmental stressors are identified in the IRCCS as one of the threats to peace and security in the region. Ministerial-level meetings

16 Uppsala Conflict Data Program, "UCDP Dataset Download Center" Sagal Abshir, "Climate Change And Security In The Horn Of Africa: Can Europe Help To Reduce The Risks?", Climate-Fragility Policy Paper, (European Institute of Peace & Climate Security Expert Knowledge, 2020), accessed 10 October 2023, https://www.eip.org/wp-content/uploads/2020/10/csen_policy_paper_climate_change_and_security_in_the_horn_of_africa.pdf.

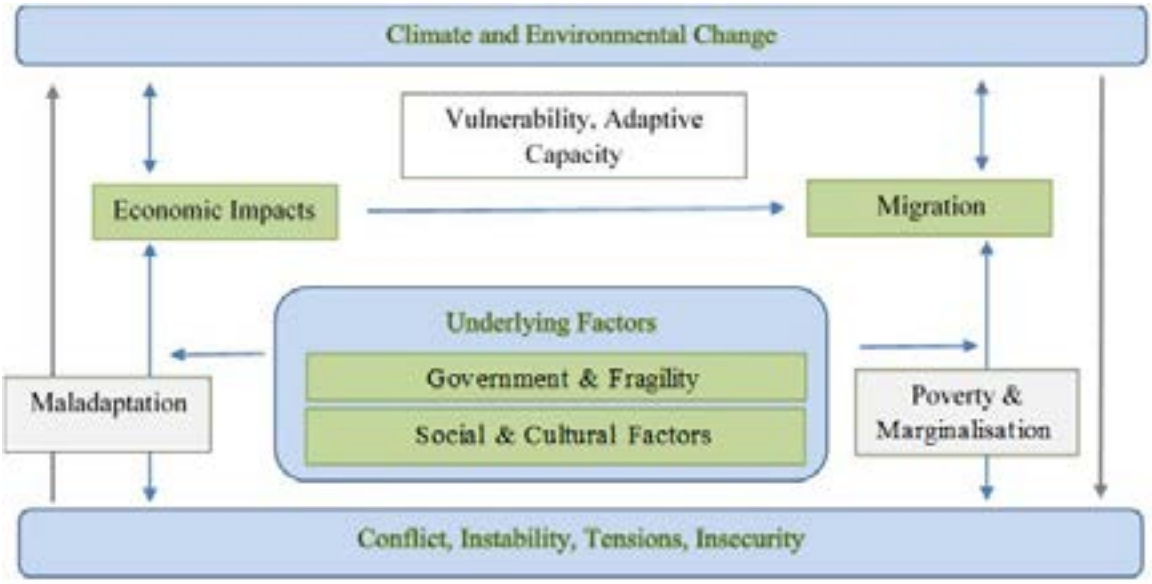
17 agal Abshir, "Climate Change And Security In The Horn Of Africa: Can Europe Help To Reduce The Risks?", Climate-Fragility Policy Paper, (European Institute of Peace & Climate Security Expert Knowledge, 2020), accessed 10 October 2023, https://www.eip.org/wp-content/uploads/2020/10/csen_policy_paper_climate_change_and_security_in_the_horn_of_africa.pdf

on the food crisis and land conflict in the Horn of Africa, held in Kampala in July 2022, voice concerns over the adverse effects of climate change and its impact on displacement, food security, and conflict. The ensuing policy paper provides a conceptual framework for the climate–security nexus. The framework is based on four inter-related pathways and focuses on the effect of climate change on conflict, mediated through economic impacts and migration. The pathways include:

1. Threats to food and water security: This pathway considers the role of climate extremes and environmental degradation in generating food and water insecurity that make it difficult for vulnerable populations to break the cycle of poverty.
2. Climate-induced mobility: This pathway notes the role of and how climate-related hazards are contributing to the displacement of people and loss of assets across the region, including wildfires, drought, floods, cyclones, rising lake levels, and rising sea levels.
3. Historical grievances and cultural practices: This pathway considers the role of climate extremes in creating conditions that can trigger historical grievances and mistrust among bordering communities and countries when shared natural resources are affected.
4. Governance and fragility: This pathway considers the role of weak governance and fragility in exacerbating drivers of conflict and insecurity. The climate crisis has been exploited by actors, including political actors, extremist groups, commercial groups, and organised criminal groups, among others, to incite conflict and insecurity for their personal gain, particularly in the context of weak governance and fragility. Land access and land rights are also identified as critical underlying factors that can contribute to mistrust of governments, conflict over boundaries, and pastoral and wildlife conflict.

These pathways illustrate: the relationship between short and long-term environmental changes linked to climate change; their impact on the causes and dynamics of conflict; and the critical role of human action in conflict outcomes. Figure 1 presents the IGAD conceptual framework for climate security. The conceptual framework provides an overview of key concepts and perspectives around regional strategic approaches to adaptation to address the security concerns of climate change.

Figure 1. IGAD conceptual framework for climate security



Source: Adapted from IGAD conceptual framework for climate security[18]

National Adaptation Plans (NAPs) and Climate Security: Risk and Response Analysis

The NAP is an important way that countries can integrate a climate security lens into planning processes that address many core and overlapping vulnerabilities to both conflict and climate change.[19] Before examining the range of risks and response in IGAD member state NAPs, it is useful to describe the approach employed to review the NAPs.

The NAPs are sourced from the United Nations Framework Convention on Climate Change website.[20] This analysis follows the approach outlined by the United Nations Development Programme for examining the extent to which climate, peace, and security intersections are addressed in an NAP.[21] The following three steps are described:

1. Scanning the NAP documents to determine the presence or references to selected security-related terms. This is performed by typing the search terms into the text box inside the "Find dialog" box. Table 2 lists the keywords used for this analysis.

18 IGAD Climate Prediction and Applications Centre, "Policy Brief: Addressing Climate Change, Peace and Security in the Horn of Africa"

19 Alec Crawford and Clare Church, "The NAP Process and Peacebuilding", Briefing Note (Winnipeg, Canada: NAP Global Network, February 2022), accessed 1September 2023, https://napglobalnetwork.org/wp-content/uploads/2020/02/napgn-en-2020-the-nap-process-and-peacebuilding.pdf.

20 "Submitted NAPs", United Nations Climate Change, accessed 10 July 2023, https://napcentral.org/submitted-naps. Note: Because Djibouti is on its first generation NAP, an alternative data source is utilized; i.e. National Adaptation Plan-Global Support Programme, "National Adaptation Plans in focus: Lessons from Djibouti" (New York: National Adaptation Plan-Global Support Programme, n.d.), accessed 10 July 2023. https://www.adaptation-undp.org/sites/default/files/resources/nap_in_focus_lessons_from_djibouti_eng_final_web.pdf.

21 United Nations Development Programme, "Re-envisioning Climate Change Adaptation Policy to Sustain Peace: A Typology and Analysis of the National Adaptation Plans" (New York: United Nations Development Programme, 2023), accessed 10 July 2023, https://www.undp.org/sites/g/files/zskgke326/files/2023-05/Re-envisioning%20Climate%20Change%20Adaptation%20to%20Sustain%20Peace%20-%20UNDP.pdf.

2. Performing a detailed context review of each reference in order to obtain a clearer indication of how the security-related issues are presented in relation to adaptation efforts, andanalysinghow the adaptation priorities identified in the NAP respond to these security threats.
3. Classifying each of the vetted climate–security mentions according to the typology of the four climate–security pathways described in the IGAD conceptual framework.

This then leads to synthesis of the major climate, peace and security related themes as identified in the NAPs. The specific associated with each of the typological classifications for each category are presented.

Table 2. Distribution of reference to the term "conflict" in IGAD member states' NAPs

	Total	Somalia	Ethiopia	Kenya	Sudan	South Sudan	Uganda	Djibouti	Eritrea
Total	230	108	7	7	54	32	22	0	0
Conflict	118	40	7	2	31	20	18		
Peace	45	34		2		9			
Stability/ Instability	17	13			2	1	1		
Security	17	11		3	1	2			
War	14				13		1		
Reconciliation	5	5							
Dispute	5	1			3		1		
Violence	4	4							
Strife	3				2		1		
Friction	2				2				
Feud									
Combat									
Attack									

Source: Author compilation based on key word searches (IGAD member states' NAPs and Djibouti documentation)

Table 2 shows the number and distribution of the references made to conflict in IGAD member states NAPs, ordered from left to right according to the the number of conflict events reported (see table 1). Keyword searches of terms in the seven submitted IGAD member state NAPs, along with a key word search in the main document for Djibouti, reveal a total of 230 references. This mapping finds varying references to conflict themes. Percentages based on column totals show that the highest number of references were made to the term "conflict", distantly followed by the term "peace". The analysis surfaces two key observations. The first point to note is the striking variation in distribution of the references across the IGAD member states. Somalia stands out in this regard, in terms of integrating conflict considerations into its adaptation planning process. This is followed by Sudan, South Sudan, and Uganda, in the order cited. A second key point is the limited attention to the security dimension of existing efforts on climate action in Kenya and Ethiopia, in spite of the elevated levels of threat to human security in these two countries.

This mapping then probes deeper into the regional synergy in the planning for adaptation. A detailed evaluation of the references made to the term "conflict" was performed to gain an understanding of the pathways for integrating security considerations into adaptation planning processes. The pathways are the areas in which the physical and human impacts

of climate change interact with local political or socio-economic factors. There is significant disparity in how these pathways are conceived by each NAP.

Table 3 shows the number and distribution of direct connections to pathways in the NAPs. Based on the analysis of the references made to conflict, there are strong interlinkages between the country NAPs and the IGAD regional climate change adaptation framework. The results indicate that 206 out of the 228 references identified make a direct connection to a pathway.

Table 3.Pathways for integration of security considerations in the NAPs of IGAD member states

Pathways	Total	Somalia	Sudan	South Sudan	Uganda	Kenya	Ethiopia	Djibouti	Eritrea
Total	206	93	53	28	22	3	7	-	-
Threats to food and water security	105	29	37	16	14	2	7		
Governance and fragility	67	48	11	7	1				
Historical grievances and cultural practices	21	14	1	3	3				
Climate-induced mobility	13	2	4	2	4	1			
Not connected	22	15	1	4		2			

Source: Author compilation based on deep analysis of connections to pathways (IGAD member state NAPs and Djibouti documentation)

The largest number of direct connections to a pathway is found in Somalia, pointing to the salience of these pathways in Somali climate–security nexus. Djibouti and Eritrea fail to make any clear connection to pathways for integration of security considerations into adaptation planning processes. In these two cases, lack of political ambition to integrate or mainstream security into climate action planning seems to be an important explanation.

It is apparent that the pathways IGAD member states follow are geared foremost towards actions to reduce threats to food and water security. Whereas the IGAD regional strategy underscores the critical role that climate-related migration plays in insecurity, the results of this analysis show limited (and in the case of Ethiopia, no) elaboration of this pathway or solutions needed to address climate-induced displacement and migration.

At the same time, the NAPs for both Kenya and Ethiopia do not respond explicitly to or take into account risks associated with governance and fragility, and historical grievances and cultural practices.

Conclusion

The drive to connect climate change with security issues is gaining ground in the IGAD region, as evidenced by the number of member states that make reference to conflict themes in their NAPs. At the same time, however, it is clear that more can be done to mainstream climate-related security risks into adaptation planning, especially among those states that give little attention to conflict considerations in the NAP process. Against a backdrop of diverse threats to human security, and the need to enhance preparedness for identifying, preventing, and responding to climate-related security risks, IGAD member states must address issues that go beyond the customary focus area of threats to food and water security. Hence, addressing the multifaceted security risks posed by climate change requires that the economic, social, and environmental-related risks arising from climate change are all taken into account. Importantly, considering the role that climate-induced displacement and migration can play in the risk and intensification of conflict, strengthening actions to reduce the risks associated with climate-induced mobility is a key policy option.

As IGAD continues to consider opportunities in climate-conflict interventions, it seems obvious that the way that climate security challenges will be addressed will be by focusing on the longer term and less noticeable climate change effects on conflict drivers. This analysis outlines two important implications for climate security in the IGAD region. First, for IGAD to be effective in its mandate of maintaining regional peace and security, the organisation should strongly encourage all member states to fulfil their commitments to the IRCCS. Understanding vulnerabilities to climate change is useful for informing action plans and developing strategies to address these vulnerabilities. An opportunity exists—through the NAPs and related planning processes—to enhance the robustness of climate action in the region. Moreover, this can happen in a manner that is consistent with African Union and IGAD climate change policies, strategies, and frameworks, as well as the Paris Agreement and the anticipated discussions at COP28 (30 November–12 December 2023, hosted in Dubai).[22]It is also imperative that the IRCCS increase collaboration with national and regional initiatives to support a multidimensional regional approach to climate security.

22 Commonly referred to as COP, officially this is the United Nations Climate Change Conference, or Conference of the Parties of the UNFCCC.

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Learning from Insurance Agents: Peacebuilding, Resilience and the Mental Landscape

Wairimu Muthike & Mareike Schomerus

Introduction[1]

Peacebuilders and insurance agents do not easily interact. Peacebuilders tend to work by meeting communities to help unpack conflict causes and dynamics and finding community-based ways of changing these. Insurance agents aim to understand risk, payments, and pay outs. Yet, both peacebuilders and insurance agents seek to support a similar sentiment: they try to find ways in which humans can feel safe in their everyday situations so they can live fulfilling lives and make good choices. So, what can peacebuilders learn from insurance agents?

Feeling safe is impossible when the threat of violence looms. Feeling safe in the face of climate change is particularly difficult for people whose livelihoods are based on agriculture or animal husbandry—crop yields decrease due to rising temperatures, livestock dies due to droughts, and floods damage infrastructure, all of which contribute to the experience of uncertainty.[2] One way to offer resilience has been through livestock insurance. The benefits of insurance are not just material. They have also been linked to people feeling safer, more adaptive, and more resilient, allowing them to make more considered choices for the future.

These are all qualities that peacebuilders also seek to champion when they support people to not choose violence when under threat, including under threat from the livelihood effects of climate change. To support non-violence also requires people to feel safe. Peacebuilding often takes as a given that peace is also a frame of mind, emphasising behavioural approaches such as dialogue and negotiation,[3] while structural measures emphasise conflict management through resource sharing or infrastructure.[4] With the very real changes in the living environment, however, it is useful to broaden the definition of what it means to feel safe. In this article, the notion of the mental landscape is used to capture the link between experiencing one's environment, what sense of peace this might create, and how it influences decisions that shape the future.

Developed as a concept during the course of researching the challenges of post-conflict recovery in northern Uganda, the mental landscape describes the many factors that shape how people experience their world and how they make decisions based on that experience; their sense of self and agency; their memories of their own lives and that of their communities; or their assumed roles.[5] A crucial insight is that a sense of safety or possibility of safety might play

1 This analysis draws on two research strands: 1) conceptual work derived from years of research on violent conflict in different settings; and 2) empirical research with 110 respondents in Isiolo (northern Kenya) between July 2020 and July 2022, which tested the Market Systems Resilience framework, a measurement tool developed by USAID to understand how climate-change induced livelihood shocks are experienced. Also see: J Downing et al., "Building Capacity for African Agricultural Transformation (Africa Lead II)" (Washington, DC: United States Agency for International Development Bureau of Food Security, 2018). Please note: Throughout this text, unless specified otherwise, the source of any reference to study respondents is derived from the empirical research.

2 Z Kundzewicz, WM Szwed, and I Pińskwar, "Climate variability and floods—A global review", Water 11, no 7 (2019): 1399; A Cohn, "Leveraging Climate Regulation by Ecosystems for Agriculture to Promote Ecosystem Stewardship." Tropical Conservation Science 10 (2017).

3 Organisation for Economic Co-operation and Development, "Evaluating Peacebuilding Activities in Settings of Conflict and Fragility: Improving Learning for Results", DAC Guidelines and References Series (Paris: OECD Publishing, 2012).

4 A Boin and A McConnell, "Preparing for critical infrastructure breakdowns: the limits of crisis management and the need for resilience", Journal of Contingencies and Crisis Management 15, no 1 (2007): 50–9.

5 M Schomerus, "Vertical columns of accelerated air: The mental landscape", in Lives Amid Violence: Transforming Development in the Wake of Conflict, ed. M Schomerus (London: Bloomsbury, 2023); M Schomerus, "The mental landscape of lives in conflict: policy implications" (London: Secure Livelihoods Research Consortium, Overseas Development Institute, 2021).

a big role in how people move forward in their decisions. So, if insurance and peacebuilding both are aware of the need to create a sense of safety, it might be good for the two sectors to have a conversation.

Linking Physical and Livelihoods Safety: New Peacebuilding Tool for Resilience?

Broadening the impact of climate change to include uncertainty as a measure that challenges peacebuilding activities is a novel way to think about violent conflict in pastoral or agricultural communities.[6] It allows us to look at inter-community conflict as well as other types of violent conflict as experienced by people in uncertainty more holistically as part of their mental landscape, where intercommunal and other types of conflict create both an unsafe environment and related challenges for resilience.

People in low-income countries are likely to be particularly exposed to climate change shocks and stresses, which requires resilience. The United States Agency for International Development (USAID) defines resilience as "the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth".[7] Resilience is, however, not a blanket or standardised concept. What it means differs for each individual, including in low-income countries. Formulating equitable and ethical support for resilience necessitates comprehending distinctive strategies for coping and adapting to challenges because factors such as behaviours, environmental context, and individual mental landscapes significantly shape how someone recovers from setbacks.

Experiencing livelihood uncertainty can be particularly disruptive for women through knock-on effects of resource scarcity, which becomes a source of conflict in the household.[8] Livelihood shocks are also a major factor in people experiencing their environment as lacking peace. Recent years have seen an increasing amount of work on understanding the impact that scarcity has on decision-making, as the sense of feeling safe does not just come through lack of physical attacks, but also through stable livelihoods and the stability of household relationships and physical security this can bring within the household, particularly for women.[9]

Background: Uncertainity in the Isiolo Livestock Economy

The case of Isiolo in northern Kenya contributes to understanding the complex links between livelihood shocks, feeling

6 There is much emphasis on the conflict potential created by climate change through pressures on livelihoods, population movements, and resource competition. While the direct linear relationship between climate change as a cause for violent conflict is disputed, it is clear that climate change has an effect on relationships. See: T Forsyth and M Schomerus, "Climate Change and Conflict: a systematic evidence review", Working Paper, The Justice and Security Research Programme. (London: London School of Economics and Political Science, 2013).

7 D Walunya Ong'are and AN Omambia, "Building Pastoral and Agro-pastoral Community Resilience Against Drought in the Context of the Paris Agreement: The Case of Isiolo County, Kenya" in Handbook of Climate Change Resilience, ed. W Leal Filho (New York: Springer, 2020).

8 ER Carr and SN Onzere, "Really effective (for 15% of the men): Lessons in understanding and addressing user needs in climate services from Mali", Climate Risk Management 22 (2018): 82–95.

9 T Atim, "Looking Beyond Conflict: The Long-term Impact of Suffering War Crimes on Recovery in Post-conflict northern Uganda" (Wageningen NL: Wageningen University, 2018); J Haushofer and E Fehr, "On the psychology of poverty", Science 344 (2014): 862; S Mullainathan and E Shafir, Scarcity: Why Having Too Little Means So Much (New York: Times Books, 2013).

unsafe in different ways, and adapting to realities of livelihoods as the climate changes in sustainable ways that can help build peaceful futures. It can offer some speculative ideas on how the logic of peacebuilding can learn from the logic of insurance if it takes seriously the notion that a mental landscape of feeling safe has broad positive implications for more peaceful situations.

Northern Kenya is suffering from prolonged severe drought conditions, creating an imperative for individuals and communities to take on multiple resilience mechanisms. Developing and integrating such mechanisms might include prioritising water conservation and management techniques to maximise the utilisation of any available rainfall. It could mean diversifying livelihood options to agro-pastoralism, which is the case among one traditionally migratory pastoralist community, the Maasai of the great Rift Valley of southern Kenya and northern Tanzania. It could also entail establishing effective early warning systems, along with disseminating knowledge about climate change and adaptive strategies.[10]

Most residents of Isiolo in northern Kenya are pastoralists, dependent on a red-meat-and-milk value industry focused on rearing cattle, camels, sheep, and goats.[11] Cattle and camels are kept for preservation of social capital. Goats and sheep, as market actors explain, are highly liquid cash assets, ready to be sold for immediate household expenses and other short-term transaction requirements.[12]

The arid and semi-arid region of Isiolo county has suffered from three significant droughts during the past decade (2010–2011; 2016–2017; 2020–2022). The most recent drought was the most severe and prolonged, which means that the impact on livelihoods has been extensive and many people have been displaced.[9] Lasting drought has closed down local markets, as there are fewer animals to trade. Climate change further exacerbates an adversarial relationship between brokers and pastoralists. Research on the livestock market system in Isiolo county reveals that connectivity (which assesses the degree or number of connections between actors in a market system that can either facilitate or inhibit market systems resilience) at the livestock producer level is largely limited to communal connections among identity groups.[13] The research shows some limited commercial connections between retailers, traders, etc., with commercial interactions perceived as inherently adversarial. While livestock brokers are well connected, they use that connection in an adversarial manner, with high levels of collusion to extract maximum margins from smallholder livestock producers.

10 C Hemingway, H Cochet, F Mialhe, and Y Gunnell, "Why pastoralists grow tomatoes: Maasai livelihood dynamics in Amboseli, southern Kenya", Journal of Rural Studies 92 (2022): 253–68.

11 Regional Learning & Advocacy Programme for Vulnerable Dryland Communities (REGLAP), "Key statistics on the drylands of Kenya, Uganda and Ethiopia", REGLAP Secretariat (Addis Ababa: REGLAP: October 2012).

12 ASAL Humanitarian Network and AHN, "Drought situation in the Kenya ASAL areas now at crisis level", Joint statement by the ASAL Humanitarian Network–AHN, 5 October 2022, accessed 2 October 2023, https://reliefweb.int/report/kenya/drought-situation-kenya-asal-areas-now-crisis-level#:~:text=Nairobi%2C%20Kenya%3B%20%20October%205th%2C,and%20%20massive%20%20displacement%20of%20%20populations.

13 Also see: Downing et al, "Building Capacity for African Agricultural Transformation".

Figure 1 Location of Isiolo County

Apart from commercial implications, the effect on the livestock market system in this region is strongly tied to household livelihoods and conflict in the region. Yet, after years of support—some of it under a humanitarian label—it is clear that assistance does not reliably leave households better prepared for the next shock.[14] Examples of such programming include the World Food Programme Food for Asset Creation Project. From 2009, this project was implemented through the National Drought Management Authority in 13 dryland counties to boost the adaptive capacity of pastoralists to withstand shocks, become independent of relief food, and attain sustainable diversified livelihoods.[15] The project concept was anchored on resilience building through asset creation, which is considered to be more cost effective and better in stabilising livelihoods than humanitarian emergency responses.[16]

While the impact of drought is visible at the communal level, this analysis focuses on the household level, where a crisis usually hits first. Looking through a magnifying glass at the household level allows for the identification of unconventional approaches to peacebuilding as it moves women, their mental landscapes, and their coping mechanisms centre stage.

Women suffer livelihood shocks differently

How people experience the impacts of climate change is heavily gendered, which means the effect on women is very different than the effect on men.[17] Women are affected by livelihood shocks through the changing nature of their material and social safety net, and through the effects that livelihood shocks can have on peace in the household.

14 United Nations Office for the Coordination of Humanitarian Affairs, "Position Paper Resilience", accessed 2 October 2023, https://cerf.un.org/sites/default/files/resources/OCHA%20Position%20Paper%20Resilience%20FINAL.pdf.

15 M Thomas, O Wasonga, and P Ragwa, "Technical evaluation of drought mitigation technologies implemented under food/cash for assets project in Isiolo County. An evaluation report submitted to Food and Agriculture Organization of the United Nations/World Food Programme", (Rome: World Food Programme, 2016); World Food Programme, "Fact Sheet: Asset Creation" (Rome: World Food Programme, 2016); World Food Programme, "Building resilience through asset creation", (Rome: World Food Programme, 2013).

16 DN Muricho, DJ Otieno, W Oluoch-Kosura and M Jirström, "Building pastoralists' resilience to shocks for sustainable disaster risk mitigation: Lessons from West Pokot County, Kenya", International Journal of Disaster Risk Reduction 34 (2019): 429–35; African Union Inter-African Bureau on Animal Research (AU-IBAR), "Rational use of rangelands and fodder crop development in Africa", Monographic Series Number 1 (Nairobi: AU-IBAR, 2012); A Pain and S Levine, "A conceptual analysis of livelihoods and resilience: Addressing the insecurity of agency", Working Paper, Humanitarian Policy Group (London: Overseas Development Institute, 2012).

17 ST Partey et al., "Gender and climate risk management: evidence of climate information use in Ghana", Climatic Change 158 (2020): 61–75.

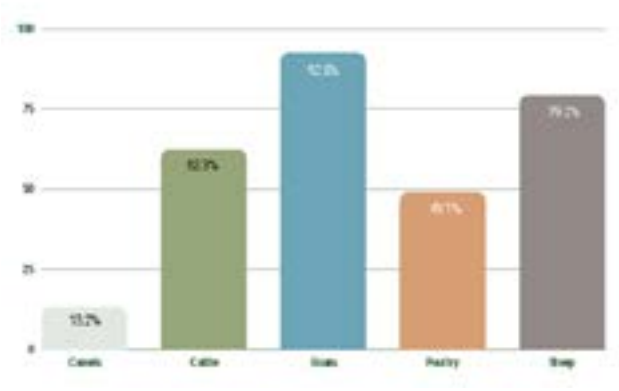

Figure 2 Animal ownership in Isiolo

In Isiolo, this phenomenon is rooted in gendered livelihood roles: in non-crisis times, men manage the trading of all animals, but are mainly concerned with the upkeep of larger animals such as cattle and camels. Because large animals represent material day-to-day value (they provide milk critical for nutrition in the household), they offer much higher social value as an asset. This is critical for maintaining the bonds and status that traditionally act as safety nets. Producers argue that owning large animals improves social reputation because it is seen as a cultural representation of wealth. Cattle and camels thus are also social capital. Women care for smaller animals, such as sheep and goats. These offer both day-to-day cash benefits for the household (also in the form of milk) and function as a household kitty (shared fund) that can be drawn from for daily expenses. Sheep and goat thus represent spendable capital.

Due to the liquidity value of sheep and goats, during drought conditions it is women-managed livestock enterprises that are traded first to provide the household with some level of economic resilience. Under pressure, communities shift to goats and sheep as these offer faster and more reliable income. While women continue to have less access to cash,[18] this shift allows pastoralists greater security that they will have the savings needed to manage family needs. In Isiolo, owners of sheep and goats on average sold at least half of the animals within a year,[19] while vendors of cattle and camels sold less than one third, indicating the lower turnover of larger animals.[20] Under the increased drought pressure experienced in the past years, two strategic changes are observable. First, study respondents report a shift from rearing cattle to rearing camels, primarily via wealthier pastoralists with improved access to information and choice. These pastoralists indicate that the advantage of rearing camels over cattle is that camels are better suited to the changing environment, while still producing the desired social capital outcomes. Second, people turn toward more commercial-oriented sectors such as goats, sheep, and agro-pastoralism as these offers faster and more reliable income. A deduced unintended effect of this is that women have less access to assets.[21] Overall, however, these two shifts allow pastoral households greater certainty that they will have the savings needed to manage family needs.

As already noted, sheep and goat enterprises that are primarily women led, provide viable solutions for household economic safety. This is increasingly important: According to study respondents, in times of drought, communities search for alternative means of survival. This can result in resource-related conflicts both at the household

18 C Perez et al., "How resilient are farming households and communities to a changing climate in Africa? A gender-based perspective", Global Environmental Change 34 (September 2015): 95–107.

19 EA Ameso et al., "Pastoral Resilience among the Maasai Pastoralists of Laikipia County, Kenya", Land Degradation & Development 7, no 2 (2018): 78.

20 AW Kagunyu and J Wanjohi, "Camel rearing replacing cattle production among the Borana community in Isiolo County of Northern Kenya, as climate variability bites", Pastoralism 4, no 1 (2014): 1–5.

21 Perez e al., "How resilient?".

and community level such as those linked to grazing land and watering holes, where non-pastoral options are not viable.

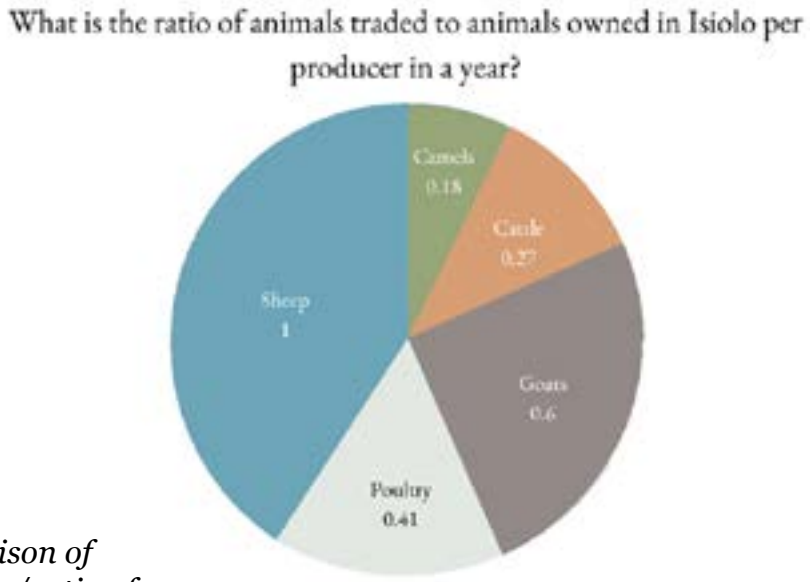

Figure 3 Comparison of animal ownership/ratio of animals traded

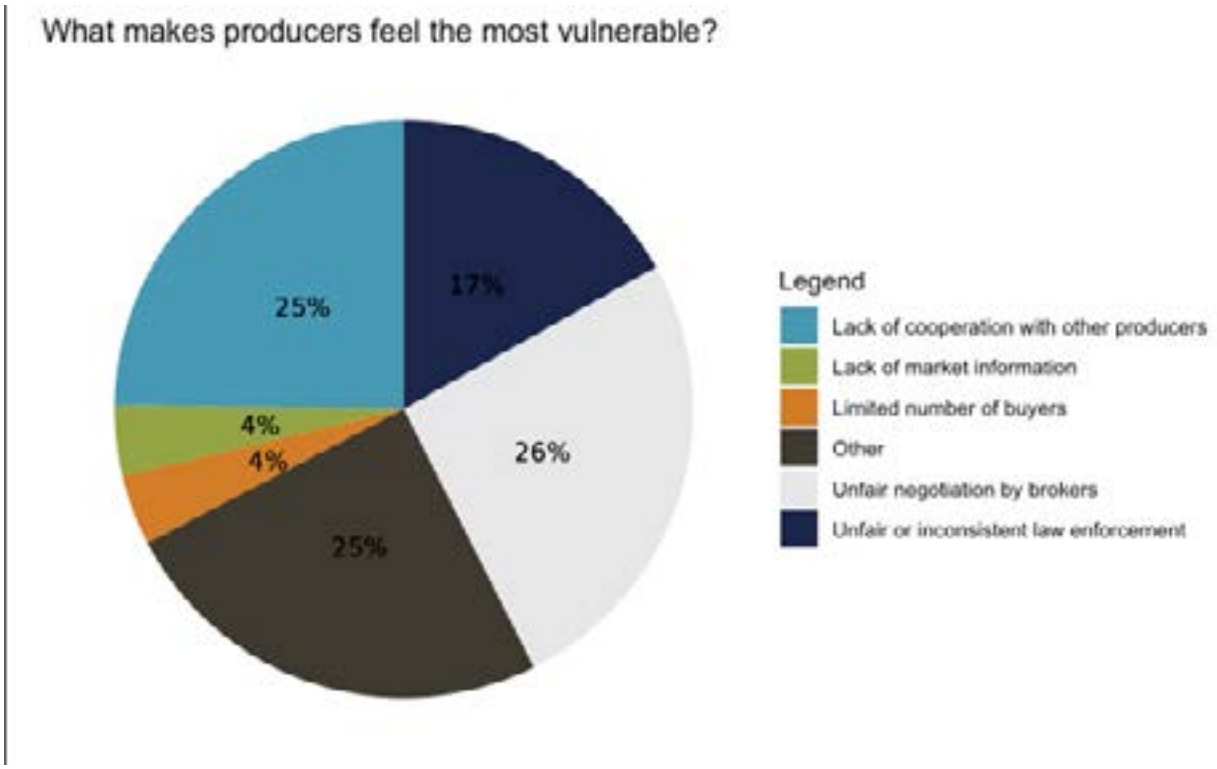

Figure 4 Factors contributing to producer vulnerability

As such, study respondents perceive that traditional safety net mechanisms that regulate mutual access to resources are not working as conflicts are more recurrent with the changing climate. Additionally, due to communities not destocking cattle, even after clear official warnings, pastoralists are reported to have a high volume of animals at the start of and during periods of shock such as drought, which drives prices down. This downward pressure is then capitalised upon by traders to push prices further down. In turn, this negatively influences power dynamics in the market.

In contrast, research suggests that households and communities that take on initiatives such as rebalancing the family economic mix (i.e. away from cattle), as is being done with sheep and goats by women, which is attributed to the flexibility that these smaller livestock offer, are better off for everyday survival in drought conditions.[22] At the same time, this also has knock-on effects for household dynamics, where tensions can create conflict.

Livelihoods shocks and the mental landscape

Women's enterprises (sheep and goats) are increasingly responsible for the income stability of the household during periods of stress and shocks (such as drought), which creates potentially volatile dynamics at home. This is related to the shift of bargaining power related to income or relative income between partners in the household. This experience of living in a situation of tension and sometimes violence at home becomes part of the mental landscape of women. A perception of the multiple shocks that women experience—their shifting role as the need to trade sheep and goats to buffer the household from economic shock increases, their role in caring for the small animals with urgency over the utilisation of household income, or the experience of watching their husbands lose both their traditional livelihoods and social safety net presumably adds to a deep sense of insecurity and volatility.

The Changing Nature of Safety Nets: Adaptation and Peaceful Environments

While male pastoralists struggle with the reputational need for big herds of large animals, market pricing and zero-sum negotiating tactics (with the impact of these dynamics on women apparent), there is limited take up of effective response mechanisms geared to changing cattle management practices such as timely destocking. Cattle farmers seem to perceive an unacceptable trade-off between their reliance on informal social safety net services that are connected to cattle management practices and efforts to more fully commercialise cattle management.

Pastoralists regard traditional social safety net services as more reliable than social safety nets provided by government and private sector. This is linked to a mutual aid system in which resources are shared, especially during periods of shocks and stresses such as drought, when the social norms of equity, reciprocity, and communal responsibility gain importance. It is in the social safety net they know that they seek their mental landscape of safety and protection. With recurrent shocks and stresses in the region, however, traditional norms and customs upon which people rely to manage shocks and stresses are perceived as not working. Study respondents talk about trade-offs, recognising that market-based formal social safety nets such as livestock insurance can help de-risk communities, as an expert in livestock in Isiolo explains:

22 S Dibakoane, P Siyongwana, and AN Shabalala, "Vulnerability, impact and adaptation strategies of female farmers to climate variability", Jàmbá: Journal of Disaster Risk Studies 14, no 1 (2022).

> You cannot completely shift from the community social safety net because ethnicity plays a strong role in the trust system and this market system is the trust system. Getting a mix of the two is very important. … Intercommunity collaboration is very hard to achieve in a life of trade. You can achieve intercommunity collaboration among the traders where I buy and you help me sell in Nairobi, but not between livestock keepers.[23]

Given the shift to sheep and goats—driven by women and proving to be a major livelihood safety net—women are also developing a more diversified notion of safety nets. These formal safety nets, offered from outside the community, come through asset protection insurance, provided in partnership between the government and private sector partners. The asset protection insurance available in Isiolo is designed as a safety net focused on compensating for livestock losses induced by drought.[24]

For peacebuilders, thinking of a commercial product such as asset protection insurance as a mechanism to support peace is unusual—and can feel uncomfortably business-related. Yet, in seeking to support solving conflict dynamics, it only seems to make sense to think of insurance logic when a mental landscape perspective is applied. This entails a holistic understanding that recognises that a sense of safety can be supportive of non-violent behaviour and that this sense of safety can have different sources—for example, the safety provided by asset insurance. Lessons are already pointing to the effectiveness of increasing both experienced and perceived livelihood stability.[25]

Again, women play a unique role: 45% of pastoralists taking up asset protection insurance are women, with financing of these insurance policies coming from the sale of goats and sheep.[26] These products reduce reliance on traditional coping mechanisms that are often based on social norms, ethnicity, hierarchy, or gender, which can result in uneven access. Traditional mechanisms can exacerbate household tensions if the male breadwinner sees himself losing due to having less social capital through a diminished herd. For women, seeking livelihood protection over protecting a social reputation is crucial and has turned out to be a lifeline for drought-affected communities.

Various benefits are observable. Others are speculative, but potentially helpful. Insurance pay outs have been utilised to buy food for humans and fodder for livestock, thus minimising the strain on households and women as providers.[27] Such payments are supporting communities under extreme stress during droughts.

23 Interview with male livestock value chain expert (affiliated with a research institute) in Isiolo, conducted virtually, 14 January 2021.

24 SA Janzen, N Jensen, and A Mude, "Targeted social protection in a pastoralist economy: case study from Kenya", Revue Scientifique et Technique de l'OIE 35 (2016): 587–96.

25 Schomerus, Mareike. "Money Can't Move a Ton of Bricks: The Real Currency of Economic Life." In Lives Amid Violence: Transforming Development in the Wake of Conflict. London: Bloomsbury, 2023.

26 F Lung, "After 10 years in Kenya and Ethiopia, are we ready to scale up livestock insurance in the Horn of Africa?, International Livestock Research Institute, 9 July 2021, accessed 2 October 2023, https://www.ilri.org/news/after-10-years-kenya-and-ethiopia-are-we-ready-scale-livestock-insurance-horn-africa.

27 AG Timu, CR Gustafson, and T Mieno, "The gendered impacts of index-insurance on food-consumption: Evidence from southern Ethiopia", Climate Services 30 (2023).

Applying Insurance Logic to Peacebuilding

The logic of insurance uptake might guide different ways of thinking about peacebuilding activities for drought-affected communities. As effects of climate change become noticeable while population density increases the likelihood of resource conflicts, traditional conflict resolution mechanisms are buckling under the pressure of recurrent shocks and stresses.[28] While the trigger is a perception of scarcity, much of the resource (cattle) loss is avoidable via more proactive planning. Research indicates that communities and families that are taking some of these more proactive management steps, such as insurance policies, are faring better during shocks and stresses.[29]

Having understood the nature of resource conflicts, peacebuilding activities that aim to optimise economic circumstances (such as employment or training programmes) often fail to prevent community violence such as cattle raiding.[30] This is because such raids are not always or simply economic, but are also based on different values. That is, they are not solely about the cash values of cows, but the preciousness and dignity of social value.

Livestock insurance works on asset *protection* as opposed to asset *replacement*, seeking to prevent the loss of livestock induced by drought. This is crucial as asset *replacement* for cattle focuses on the monetary value of the animal. In addition to having a cash value, however, the value of a cow is also social. It is equivalent to a family heirloom. Whereas a ring made of silver can be easily replaced with a cash payment, if that ring was worn by a grandmother on her wedding day, its value becomes irreplaceable. This social value—dignity, prestige, power—does not come embedded in the asset replacement insurance model.[31] This is likely why peacebuilding to prevent cattle raiding requires attention to the dignity and social value attached to cattle.

Yet, acute crisis situations highlight the need for a shift—and also that insurance can work. Multiple studies highlight the positive outcomes achieved by Index Based Livestock Insurance (IBLI) schemes in preserving livestock and pastoralist livelihoods during droughts, paying out after recent major droughts. Over the past decade, pastoralists in Kenya and Ethiopia bought approximately 50,000 individual IBLI policies. Since 2014, more than 100,000 pastoralist households have been supported through macro-level social protection IBLI initiatives.

Nevertheless, broad adoption of IBLI schemes remains limited. In 2019, 33,000 pastoralist households (with 200,000 household members) were insured across all IBLI programmes in Kenya and Ethiopia. This figure is notably small considering that roughly 19 million pastoralists and agro-pastoralists live in the two countries.[23]

This indicates that there are cultural barriers to uptake. Overcoming these barriers will require understanding how to navigate the mental landscape of social values and the

28 Vikāra Institute Resilience Measurement of Market Systems in Kenya: Analysis and Findings. Vikāra Institute. 2022

29 A Mitchell, "Risk and Resilience: From Good Idea to Good Practice. A scoping study for the Experts Group on Risk and Resilience (WP 13/2013)" (Paris: Organisation for Economic Co-operation and Development, 2013).

30 Eaton, D. "The Business of Peace: Raiding and Peace Work Along the Kenya Uganda Border (Part I)." African Affairs 107, no. 426 (2008): 89.
Eaton, Dave. "The Business of Peace: Raiding and Peace Along the Kenya-Uganda Border (Part Ii)." *African Affairs* 107, no. 427 (Mar 28 2008): 243 - 59.

31 Feed the Future, "Index-based Livestock Insurance: From Asset Replacement to Asset Protection in East Africa (an AMA Innovation Spotlight)" (Washington, DC: United States Agency for International Development, 2016).

sense of uncertainty. Prevention—a sense that a crisis is not inevitable—is likely a crucial plus for communities seeking to identify their best coping mechanisms. The sense of agency that might come from being able to protect oneself from asset loss is likely a crucial part of a mental landscape that supports adaptation, collaboration, and cooperation going forward.

Conclusion

Is it possible to understand livelihood shocks as a collaborative opportunity? If community-based safety mechanisms can be understood to play a supportive part in peacebuilding, various lessons can be learnt from the insights into cattle keeping mechanisms in Isiolo. First, these mechanisms work for some, but not for all, and are likely to be under extreme duress in times of crisis. Those who no longer feel able to access those mechanisms—likely due to loss of social status brought on by a drought-induced smaller herd—have to seek protection elsewhere. While there is some distrust of external mechanisms such as livestock insurance, there are measurable benefits to the approach, as well as likely beneficial effects on the mental landscape.

Asset protection insurance mechanisms to support women ensure over time—that is, past the initial sale of a few of the smaller animals to finance the insurance premium—that they have greater agency over their sheep and goats. This is actualised because the insurance cover allows for the purchase of food for the household and fodder for the animals, negating the immediate need to sell the sheep and goats. This further allows for improved income smoothing and less conflict potential in the household. Yet there are questions that still need answering: what will the broader economic impact be if insurance plays a greater role? What will be needed to build and maintain a socially-responsible insurance practice? Who might be excluded from being able to get insurance? Any approach using insurance would also need to be coupled with complementary response mechanisms such as timely destocking to escape worse market conditions brought about by prolonged drought conditions. With supported cattle herds, a knock-on effect might be stabilisation of market systems that act as resilience catalyst.[32]

Insurance products do not usually feature in peacebuilding. Peacebuilders and insurance agents also do not automatically cross paths. Even suggesting to link the two logics is new. Moreover, it is not yet known how it might work to think about peace, livestock, insurance, and the mental landscape for adaption as a package. Yet, addressing resource scarcity through changed safety nets, while considering how this might shape perceptions of one's environment, is a promising path. It allows new actors to enter a space that is radically transformed by climate change, creating the possibility of new cooperation between communities, government, and the private sector—co-operation that might lead to the transformation that is needed.

32 B Irwin and R Campbell, "Market Systems for Resilience: LEO Report #6" (Washington, DC: Leveraging Economic Opportunities (LEO), United States Agency for International Development (USAID, 2015).

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Mareike Schomerus draws on years of conflict research in eastern and central Africa and recently elaborated the concept of the mental landscape in her book *Lives Amid Violence: Transforming Development in the Wake of Conflict* (2023). As vice president at Busara, she supports the organisation in making its voice heard. Contact Mareike via email: www.mareikeschomerus.org or LinkedIn.

HORN OF AFRICA BULLETIN

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Revolutionising Food Waste Management in Ethiopia: The Lem Chaka

Geremew Tigabu

In the bustling city of Addis Ababa, Ethiopia, a forward-thinking food waste management company known as Lem Chaka emerged in May 2021. Lem Chaka is on a mission to transform food waste management. Making significant advances quickly, Lem Chaka's journey has shown an early impact on the local environment, educational initiatives, and changes in perceptions about food waste in Addis Ababa. The story began with a modest start. The company launched its operations by gathering food waste from the Hyatt Regency Hotel in Addis Ababa. An ambitious vision backed this humble beginning.

Food waste management has far-reaching implications for climate change and sustainability. Sehinie Negede, the co-founder and general manager at Lem Chaka, highlights the role of waste management in building resilience against climate change and environmental shocks. A resilient environment reduces internal displacement, conflicts over dwindling resources, and enhances overall security. Lem Chaka started with the goal of transforming food waste into highly nutritious compost. This organic compost is rich in nutrients and has the potential to rejuvenate soil, promoting more sustainable agriculture and food production.

Lem Chaka's food waste management process begins as the collected food waste is mixed with grasses and coffee parchment, which are left to decompose on the ground for fifteen days, followed by re-mixing and turning. This process is repeated, and after a month and a half, the compost is carefully sorted for the final product. The resulting compost is odour-free and packed with soil-benefiting nutrients, ready for use. The compost is available for sale in 10 kg sizes for pick up or delivery.[1]

After partnering with the Hyatt Regency Hotel, Lem Chaka expanded its scope, forging partnerships with renowned establishments such as the Hilton Hotel, Aifa Foods, and local restaurants. The company expanded its efforts to include fruit and vegetable markets within the city, showcasing its commitment to tackling food waste across various sectors. These partnerships expanded the scale of their organic composting.

While rapidly expanding its partnerships, Lem Chaka was encountering resistance from local authorities. When the company began its operations on rented land, local authorities became concerned when they noticed what appeared to be waste being brought to the area. Both the neighbourhood and the authorities were worried that this waste could cause bad smells and lead to the location turning into a trash dumping ground.

1 Lem Chaka's compost can be purchased at Tryst Olympia or Effoi Atlas. Delivery options are available through Zmall.

These challenges created a realisation. Bridging the gap and collaborating with local communities was crucial to creating a more harmonious and sustainable waste management system. Yayehyirad Gezu, co-founder and production manager at the company, emphasises using indigenous knowledge to change perceptions about farming and land use. An example of Lem Chaka's approach was its partnership with Udet NGO and Rotary International to work with the community along the Merkato Shanqila River. Sharing farming techniques and their compost, they worked with the community to produce compost and vegetables on the riverside. Within weeks, the participants could grow vegetables, improving their livelihoods and contributing to a healthier environment.

The public's perspective on waste management was another challenge. Lem Chaka had to use trial and error and employ creative approaches to change mindsets and behaviours. The company expanded its partnerships with schools. They were seeing the importance of taking an active role in educating the youth about sustainable living and waste management. Their educational engagement aims to give young people the knowledge and skills to make informed waste management and environmental conservation decisions. This proactive approach aims for the next generation to be well-prepared to address environmental challenges.

Finally, they knew they needed to bring policymakers along. Lem Chaka acknowledges the importance of supporting policy changes to create a more sustainable waste management ecosystem. They noted a need for more legislation and effective enforcement of existing waste management laws and regulations. By making composting a legal requirement, a significant step can be taken towards a more secure and sustainable future. It's a vision that Lem Chaka is championing in Ethiopia's policy discourse.

Starting as a small composting outfit, Lem Chaka has transformed into a leader in the transition toward food waste recycling in Ethiopia. The company's commitment to turning food waste into nutrient-rich compost, educating the youth, advocating for policy changes, and using creative approaches to engage communities is already showing replicable results on the local environment, education, and the security landscape. With ambitious long-term goals and a dedication to indigenous knowledge, Lem Chaka is well-poised to lead Ethiopia in recycling its food waste and shifting towards sustainable living. Their vision is not just about managing waste; it's about building resilience, healing the land, and contributing to a healthier and more secure future.

Photographer Information & Contact

Geremew Tigabu is an accomplished photographer based in Addis Ababa, Ethiopia. With over nine years of experience in the field, he has built a reputation in documentary photography. Geremew began his career as a freelance photographer before joining the leading newspaper Fortune (circulated in Ethiopia) as a photojournalist. After several years of practicing photojournalism, he co-founded Stops Creative Communication Plc and worked as an Art Director. Today, he continues to work as a freelance photographer, bringing his unique perspective to a wide range of projects. Geremew's work has been recognised both locally and internationally. He exhibited his works at the prestigious Addis Foto Fest in 2016, He was also part of the Young African Photographers exhibition at the Alliance Ethio Francaise in 2018, Capture Addis at the City Hall in 2019, and at Lagos Photo-Home Museum in 2020. In addition to his artistic achievements, Geremew is a member of the African Photojournalism Database (APJD) and was one of the winners of the 'Celebrate Africa Photography Competition' in 2017, organised by PicFair and Canon, He was short-listed for the Ugandan Press Photo 2021 and His project 'Eye of the Storm' was shortlisted for the CAP Prize 2023. His works have been featured in prominent print and online platforms including The Guardian, Wired, CNN, and the World Press Photo. Geremew's passion for photography is evident in his thought-provoking images, which capture the essence of the human experience. Through his lens, he tells stories that are both powerful and poignant, showcasing the beauty and complexity of life in Ethiopia and beyond.

Degfie unloading the collected food w
at the farm.


vaste from Hyatt Regency and Hilton Hotels

Degfie and his friends unloading the
and Hilton Hotels at the farm.

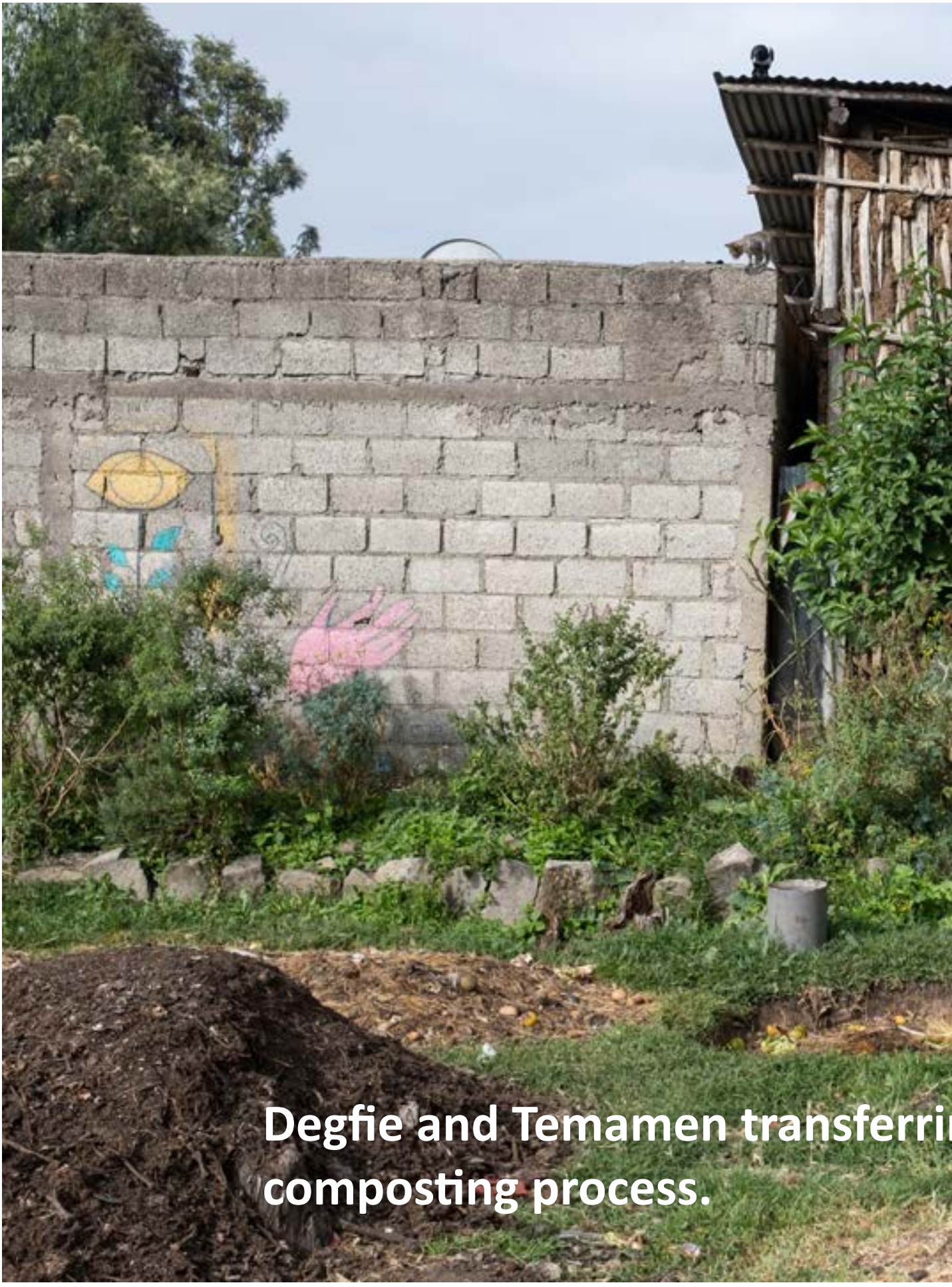

e collected food waste from Hyatt Regency


Degfie, Temamen, and Eskindir b


lending the food waste for composting.

Degfie and Temamen transferrin
composting process.


g the mixed food waste to initiate the



Degfie and Temamen transferri
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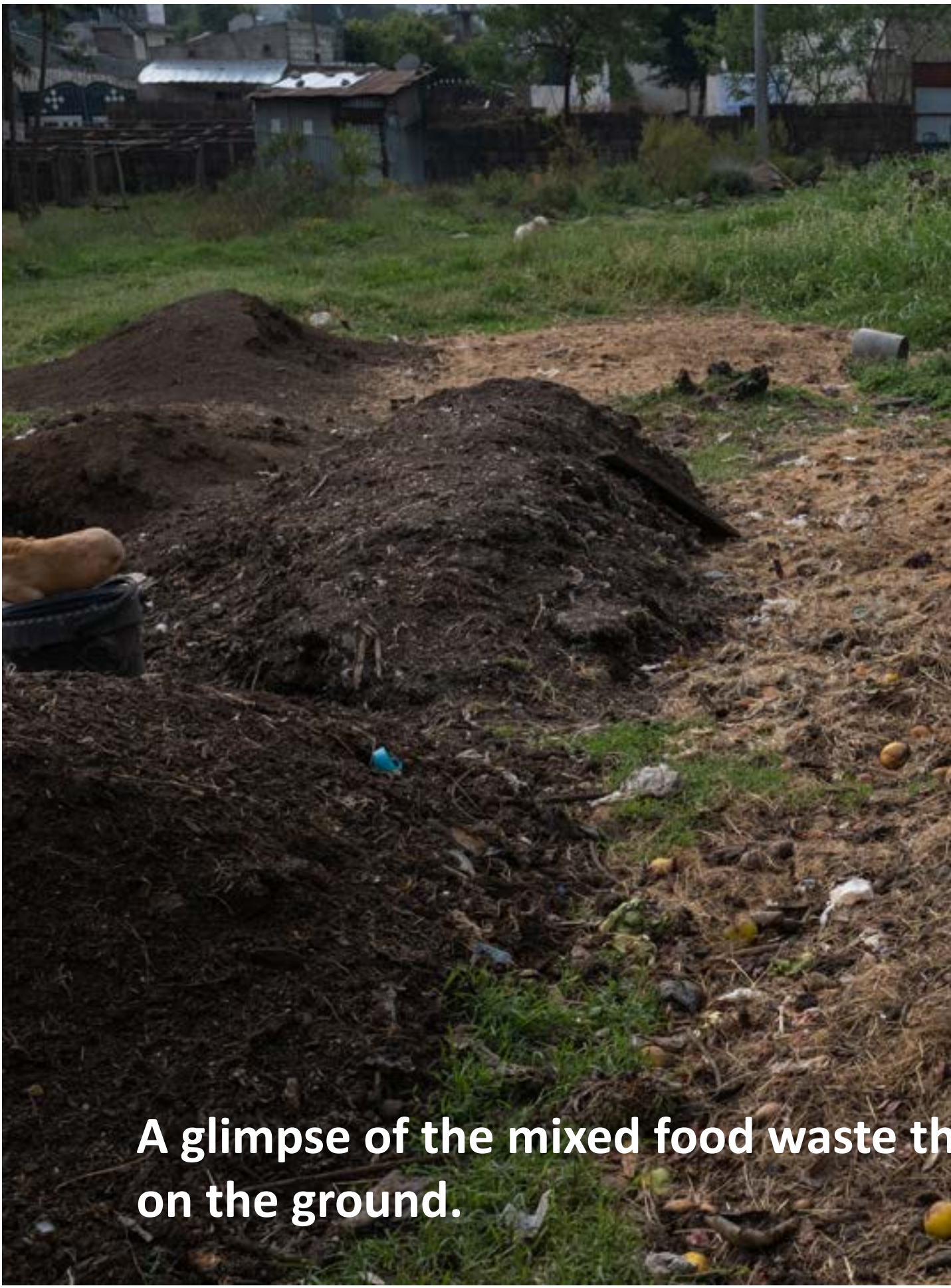
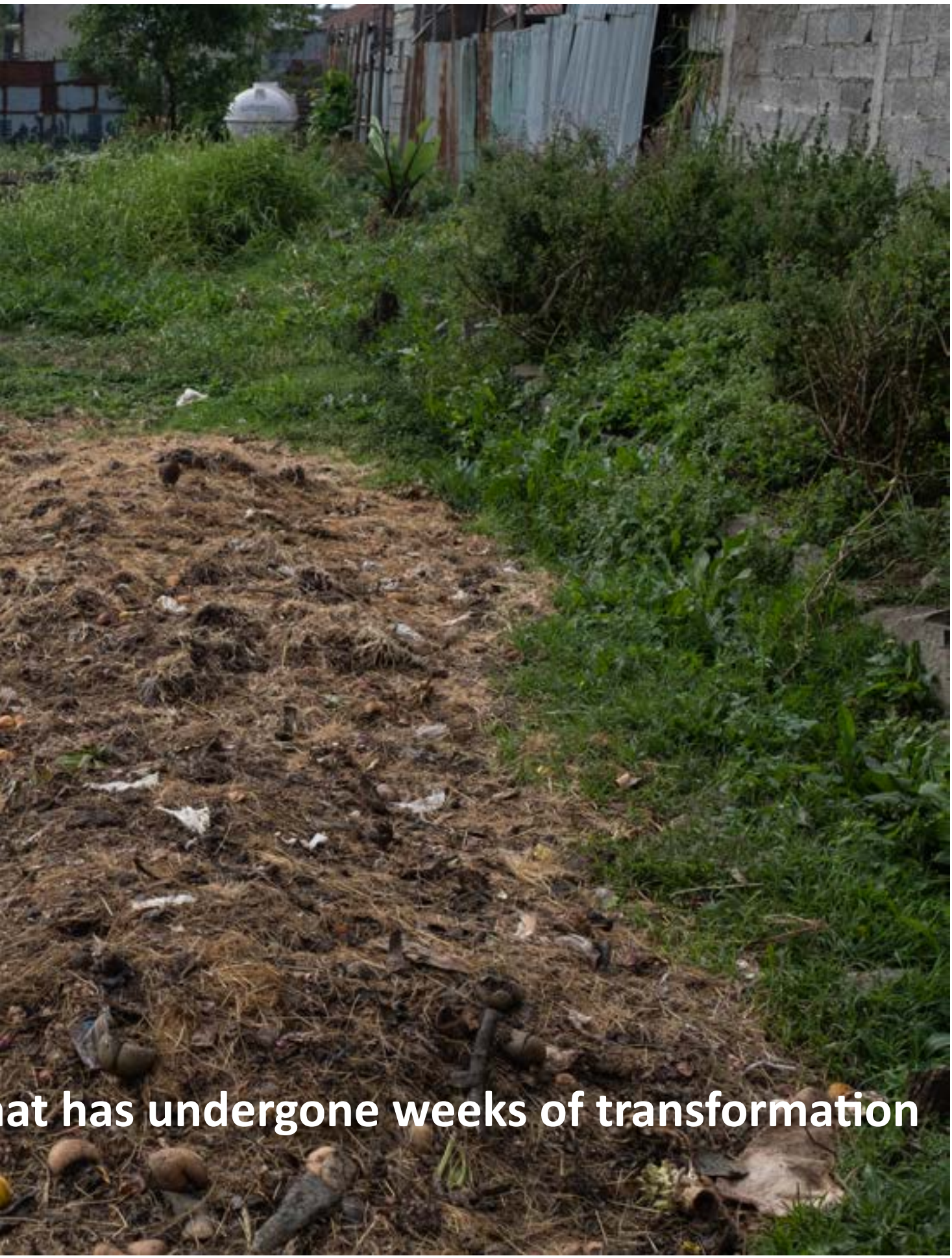
Mixing the blended food waste with


n dried teff grasses for optimal composting.



A glimpse of the mixed food waste th
on the ground.


at has undergone weeks of transformation


Degfie takes a moment for a portrait within the farm.

Temamen in a reflective moment within the farm.

The team carefully selecting unwa


nted elements from the dried compost.


The team carefully selecting unwa


nted elements from the dried compost.


The team fills fifty-kilogram b

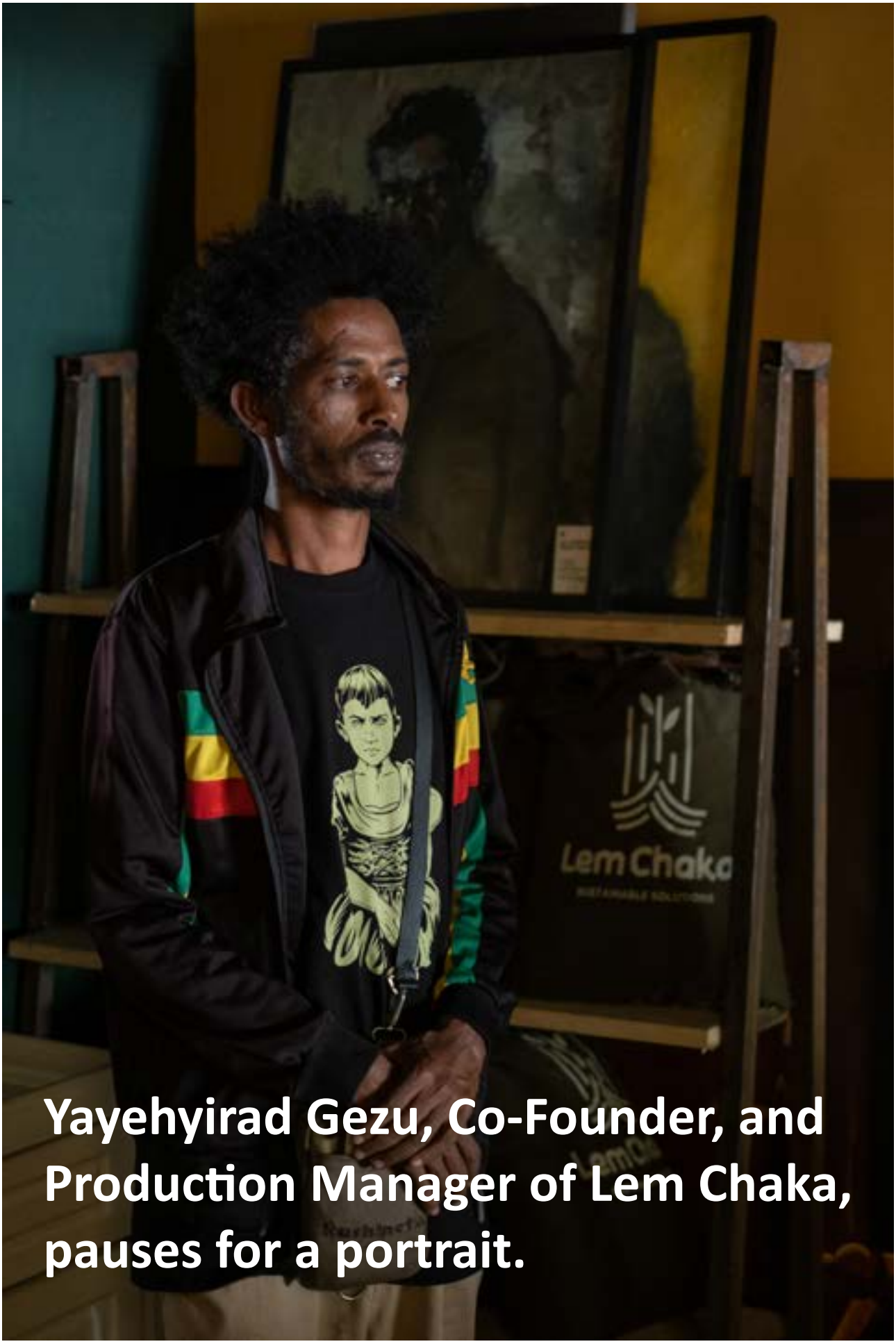

ags with the nutrient-rich compost.
Lem Chaka


The team fills fifty-kilogram b


ags with the nutrient-rich compost.

From left to right; Temamen, Natnael, Deg
for a portrait.

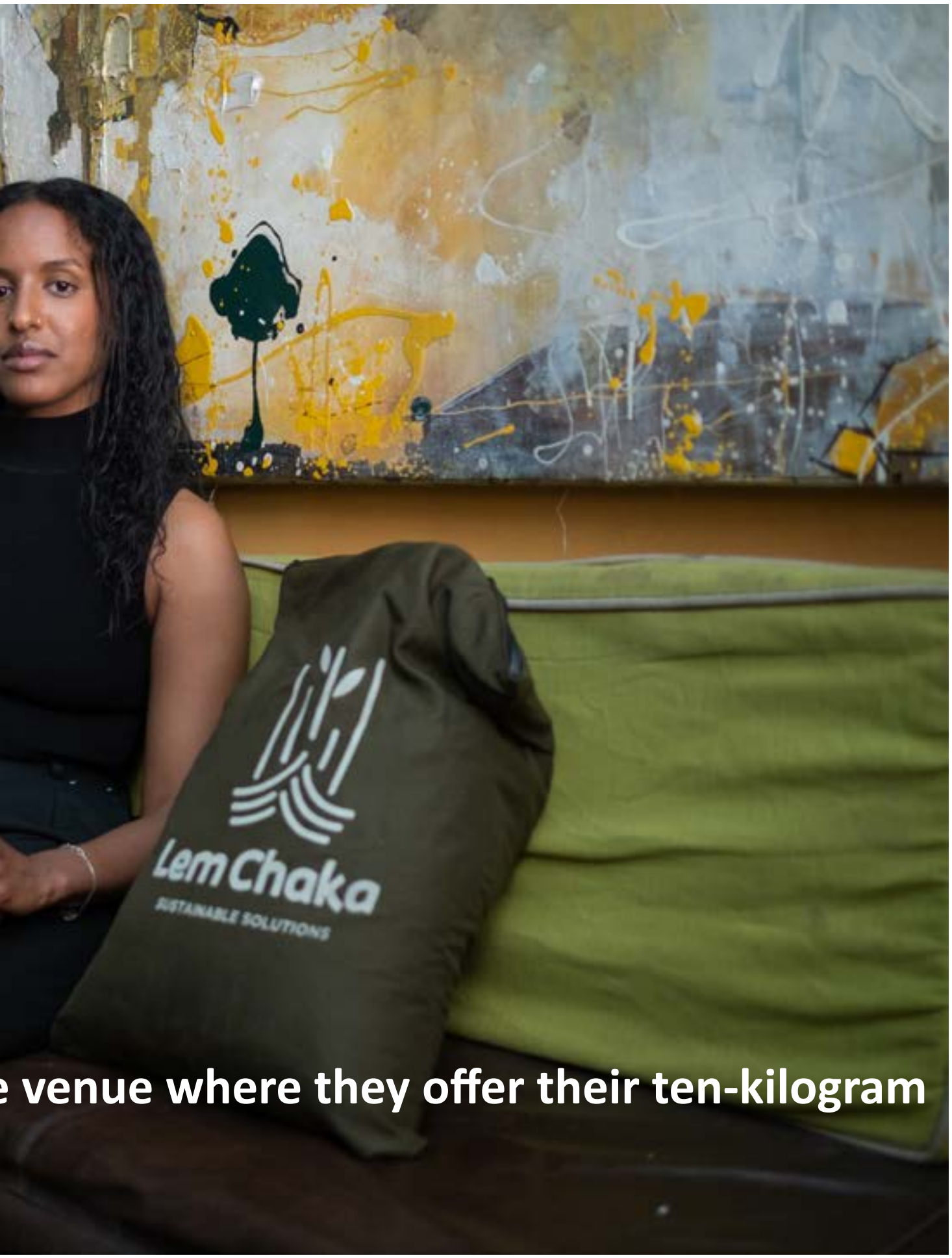
gfie, Eskindir, and Mengistu take a moment



Yayehyirad Gezu, Co-Founder, and Production Manager of Lem Chaka, pauses for a portrait.

Sihine Negede, Co-Founder, and General Manager of Lem Chaka takes a moment for a portrait.

Yayehyirad and Sihine at Tryst Addis, the
compost for sale.



e venue where they offer their ten-kilogram

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