# Understanding the Linkage Between Climate Change and Insecurity: Creating a Peacebuilding Toolkit and Training Curriculum for Local Practitioners

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## I. Introduction

In February 2022, the Intergovernmental Panel for Climate Change (IPCC) issued a clarion call to the international community urging immediate global action to adapt to and mitigate the impacts of climate change.[1] According to the report, human-induced climate change has contributed to an increase in the frequency and intensity of climatic events, creating "irreversible impacts" on human and natural systems.[2] Unless governments and policymakers take action to limit global warming to 1.5 degrees Celsius by 2040, the report warns, climate hazards and the severity of their impacts will continue to multiply, presenting grave risks to biodiversity and human civilization.[3] "The cumulative scientific evidence is unequivocal," warns the report, "Climate change is a threat to human well-being and planetary health."[4]

The global impacts of climate change cannot be overstated and underscore the need for urgent action. According to the IPCC, "Approximately 3.3 to 3.6 billion people live in contexts that are highly vulnerable to climate change."[5] This vulnerability primarily manifests in exposure to severe climatic events such as hurricanes, droughts, and wildfires. Societal instability stemming from sustained environmental degradation, such as forced migration, armed conflict, and rising gender inequality and gender-based violence, is equally threatening. Indeed, "loss of ecosystems and their services has cascading and long-term impacts on people globally," particularly on communities that directly depend on ecosystems to sustain their livelihoods.[6]

At the international level, fora such as the Conference of Parties provide important opportunities to foster multilateral engagement and collective action between nations and international organizations to address the impacts of climate change. But these fora and

[1] Intergovernmental Panel on Climate Change, *Climate Change 2022, Impacts, Adaptation and Vulnerability, Summary for Policymakers*, 35, February 2022, https://www.ipcc.ch/report/ar6/wg2/.
[2] IPCC, 7–8.
[3] IPCC, 12–13.
[4] IPCC, 35.
[5] IPCC, 11.
[6] IPCC, 11.

the broad targets and solutions proposed by them are often inaccessible to local practitioners serving on the frontlines of the fight against climate change. The targets of Goal 13: Climate Action of the Sustainable Development Goals (SDGs), are emblematic of this exclusionary effect. The SDG lays out several broad targets to combat climate change. But these actions are largely proscribed to the national level; local practitioners and communities are subjects of the goals, not recognized as partners necessary for their achievement.

**Figure 1: SDG Goal 13: Climate Action**[7]


| **Sustainable Development Goals**<br>Goal 13: Take urgent action to combat climate change and its impacts |
|---|
| **13.1:** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries |
| **13.2:** Integrate climate change measures into national policies, strategies and planning |
| **13.3:** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning |
| **13.a:** Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible |
| **13.b:** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities |

To achieve and implement meaningful measures to combat climate change, it is essential that local practitioners are not only engaged in the conversation on establishing these goals but also have a means of understanding how their programs act to address the downstream effects of climate change-induced environmental degradation.

The Northwestern Access to Health Project (ATH) is committed to filling this gap. This paper describes a qualitative assessment methodology developed by ATH to help a Somalia-based peacebuilding organization understand the extent to which its programs address insecurity resulting from climate change. Using the "Pathways of Climate Insecurity" framework developed by the Stockholm International Peace Research Institute (SIPRI)[8] as its foundation, the qualitative assessment has three key goals: (1) analyze the core strengths of practitioners' programs as they relate to combatting the effects of climate change; (2) identify opportunities to expand, refine, or refocus current programs to achieve greater results; and (3) catalogue existing programs to empower practitioners and local partners in strategic discussions and collaborations in their countries. Through this assessment, ATH aims to provide local practitioners with a toolkit in their fight against climate change-induced insecurity.

## II. Understanding the Linkage Between Climate Change and Insecurity

To understand how climate change contributes to conflict and insecurity, it is important to analyze not only climatic events themselves but also the sociopolitical and cultural context in which they occur. The "Pathways of Climate Insecurity" framework developed by SIPRI

[7] United Nations, Department of Economic and Social Affairs, Sustainable Development, www.sdgs.un.org/goals/goal13.
[8] Malin Mobjörk, Dr Florian Krampe and Kheira Tarif, *Pathways of Climate Insecurity: Guidance for Policymakers*, Stockholm International Peace Research Institute, November 2020, https://www.sipri.org/publications/2020/sipri-policy-briefs/pathways-climate-insecurity-guidance-policymakers.

provides a powerful lens through which to view this connection. Established in 1966, SIPRI is a Sweden-based independent institute dedicated to conducting high-quality research on conflict, arms control, and disarmament in conflict areas across the globe. [9] SIPRI has a broad international reach, making the institute's research an effective entry point to unwinding the overlapping effects of climate change.

SIPRI's "Pathways of Climate Insecurity" framework identifies and isolates individual determinants and drivers of insecurity to analyze how each contributes to existing conflict or increases the likelihood of future conflict.[10] Policymakers and practitioners can then use this understanding to create targeted interventions to improve the efficacy of their policies and programs.[11] The framework identifies four pathways between climate change and conflict: (1) livelihoods; (2) migration and mobility; (3) armed group tactics; and (4) elite exploitation.[12]

**Figure 2: SIPRI Pathways of Climate Insecurity**[13]

**Stockholm Peace Research Institute**

Pathways of Climate Insecurity

| Livelihoods | Migration and Mobility | Armed Group Tactics | Elite Exploitation |
|---|---|---|---|
| Rapid-onset disasters, such as droughts and floods, and long-term environmental degradation, such as soil degradation, deforestation, and desertification, lead to economic hardship among groups that depend on natural resources, accentuating gender inequalities and increasing competition. As a result, communities are stripped of their ability to generate income necessary to sustain their livelihoods, reducing social cohesion and local cooperation. | Climatic events force migration, both internal and cross-border, to areas with better livelihoods, creating conflict between migrants and locals and increasing the strain on local resources. Migration can also lead to violent conflict, particularly when migrants and residents come from different ethnic, social, religious, or political backgrounds. | Armed groups take advantage of instability caused by environmental degradation to expand their control and influence in affected areas. Tactics include extortion and seizure of natural resources as a means of recruitment and population control. In extreme cases, armed groups will actively destroy natural resources, such as wells, riverbanks, or irrigation canals to increase conflict and instability. | Elites monopolize control over natural resources and humanitarian aid to consolidate their political or economic power in the country. For example, private or political entities may coopt processes designed to improve the livelihood of affected populations, such as development projects (e.g., well-digging, sanitation services, vocational services) or the distribution of humanitarian assistance (e.g., water trucking, food delivery, provision of medical supplies) to expand their own influence at the expense of the civilian population. |

According to SIPRI, "These [pathways] illustrate the relationship between short- and long-term environmental changes linked to climate change; their impact on the root causes and dynamics of violent conflict and the critical role of human action, reaction and inaction in mediating violent outcomes."[14] Though it has taken on increased urgency over the past decade, the connection between climate change and conflict is not a modern phenomenon. According to researchers, climate variability or change has influenced an estimated 3–20% of conflict over the past century.[15]

Applying SIPRI's pathways framework to the current situation in Somalia demonstrates its analytic power. Somalia has a population of over 16 million people, more than half of

[9] Stockholm International Peace Research Institute, About Us, https://www.sipri.org/about.
[10] Mobjörk, Krampe, and Tarif, note 8 at 1.
[11] Mobjörk, Krampe, and Tarif, 1.
[12] Mobjörk, Krampe, and Tarif, 3.
[13] Mobjörk, Krampe, and Tarif, 38.
[14] Mobjörk, Krampe, and Tarif.
[15] Katherine J. Mach et. al., *Climate as a risk factor for armed conflict*, Nature Vol. 571 193, 194, July 2019, https://www.nature.com/articles/s41586-019-1300-6.

whom rely on pastoralism to sustain their livelihoods.[16] As such, the country is highly susceptible to the destabilizing impacts of severe climate events such as drought and extreme flooding, each of which is associated with loss of livestock and increased poverty.[17] Severe environmental degradation has also led to substantial migration and displacement. In 2020, the UNHCR reported that cyclones and floods displaced more than 1.3 million Somalis, exceeding the amount displaced by drought or conflict.[18]

Armed groups have taken advantage of the instability caused by climate change to increase their footholds in the country. For example, the extremist group Al-Shabab has used the illegal trade of charcoal, an essential energy source in Somalia,[19] to generate annual income ranging from $38–$56 million USD to power its activities in the country.[20] And while Somalia recently elected its next president, the election was delayed for nearly fifteen months due to security issues and violence, all in the midst of a drought that has placed an estimated 3.5 million Somalis at risk of severe famine.[21]

In climate-vulnerable countries such as Somalia, the climate crisis warned of by the IPCC is here. The question is how the international community can help local practitioners in their efforts to respond to this crisis.

## III. ATH's Qualitative Assessment

SIPRI's "Pathways of Climate Insecurity" framework not only provides a powerful lens through which to view the destabilizing impacts of climate change in countries such as Somalia, but also can provide a basis for local practitioners to assess the extent to which their current programs address these impacts. Because of their size and resource limitations, local and regional non-profits and NGOs often have trouble accessing programmatic resources designed for their larger international counterparts. Additionally, because local practitioners straddle the international and domestic advocacy space, they may face difficulties in designing programs that both appeal to an international grant-funding audience and are accessible to their community partners

ATH's qualitive assessment methodology seeks to bridge this gap by creating a shared language through which local practitioners can communicate with both local and international partners about the impacts of climate change on their communities. The following describes the qualitative assessment's objectives and methodology, concluding with a discussion of the methodology's limitations and guidance for overcoming them.

### A. Objectives and Methodology

As described in **Figure 3**, the qualitative assessment has three core objectives.

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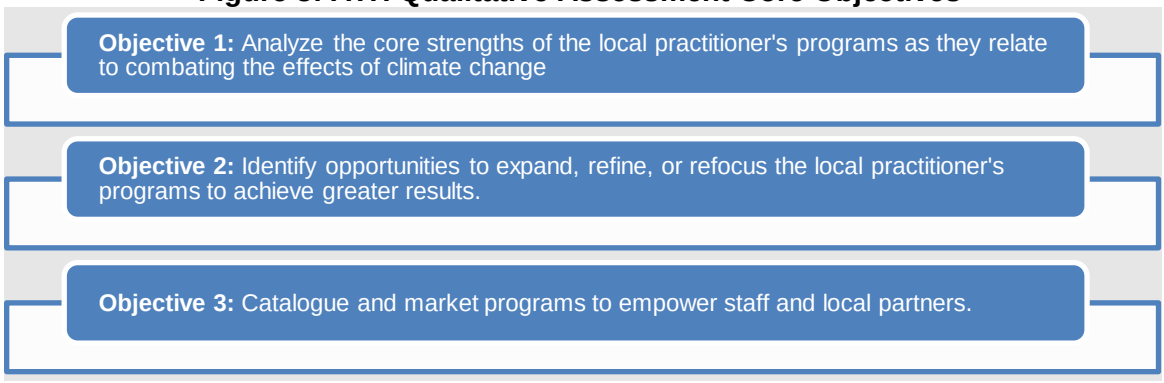
[16] E.L. Nelson et. al., *Modeling pastoralist movement in response to environmental variables and conflict in Somaliland: Combining agent-based modeling and geospatial data* (PloS one, 15(12), e0244185), December 2020, https://doi.org/10.1371/journal.pone.0244185.
[17] Karolina Eklow & Florian Krampe, *Climate-Related Security Risks and Peacebuilding in Somalia*, 10,16, Stockholm International Peace Research Institute, October 2019.
[18] Moulid Hujale, *Displaced Somalis and refugees struggle to recover as climate change brings new threats*, UNHCR, August 17 2021, https://www.unhcr.org/en-us/news/stories/2021/8/611a2bca4/displaced-somalis-refugees-struggle-recover-climate-change-brings-new-threats.html.
[19] United Nations Environment Program, *How Somalia's Charcoal Trade is Fueling the Acacia's Demise*, https://www.unep.org/news-and-stories/story/how-somalias-charcoal-trade-fuelling-acacias-demise.
[20] GRID-Arendal, *The Illegal Charcoal Trade Controlled by Al Shabab*, https://www.grida.no/resources/7489.
[21] Mohamud Ali, *Somalia's new president elected by 327 people*, BBC, May 15 2022, https://www.bbc.com/news/world-africa-61438047.

**Figure 3: ATH Qualitative Assessment Core Objectives**




A key part of the success of the qualitative assessment is ensuring that each program is evaluated using a standardized methodology. To create the assessment, ATH first decomposed each of the SIPRI pathways into three core remedial activities that can be deployed by practitioners to address the pathway's destabilizing impacts**. Figure 4: Climate Insecurity Pathways and Remedial Activities**, depicts this breakdown.

**Figure 4: Climate Insecurity Pathways and Remedial Activities**

| SIPRI Climate Security Pathway | Remedial Activities |
|---|---|
| **Worsening Livelihoods** | |
| | Providing income alternatives to participants |
| | Reducing gender inequality and gender-based violence |
| | Strengthening social cohesion and local cooperation |
| **Migration and Mobility** | |
| | Reducing community-based violence between migrants and local groups |
| | Reducing gender-based violence resulting from migration and mobility |
| | Improving the livelihood of migrants |
| **Armed Group Tactics** | |
| | Reducing impact of armed-group capture of natural resources |
| | Countering armed group recruitment |
| | Providing services and relief |
| **Elite Exploitation** | |
| | Empowering local governance |
| | Partnering with state and national government entities |
| | Collaborating with international, national, and local NGOs |

The methodology then scores each program on a 0 to 2 scale based on the extent to which the program incorporates each remedial activity.

**Figure 5: Remedial Activity Scores and Assessment Parameters**

| Remedial Activity Score and Assessment Parameters |
|---|
| **Score of Zero:** The program does not substantively incorporate the remedial activity |
| **Score of 1:** Incorporating the remedial activity is a secondary goal or outcome of the program |
| **Score of 2:** The remedial activity is the primary focus or outcome of the program |

After scoring, each remedial activity will have a score from 0 to 2 that adds up to a maximum score of six, representing the extent to which that program addresses the specific pathway. This score is termed the "Climate Insecurity Pathway Score" ("CIPS"). Summing the CIPS of each individual program provides an "Enterprise Climate Insecurity Pathway Score" ("ECIPS"). This perspective enables the user to understand how their entire suite of programs addresses each climate insecurity pathway and shows the strengths and areas for expansion of the entire enterprise. **Figure 6: Sample Qualitative Assessment Scoring**, provides an example of this scoring.

**Figure 6: Sample Qualitative Assessment Scoring**

| SIPRI Climate Security Pathway | Remedial Activities | Program 1 | Program 2 | ECIPS |
|---|---|---|---|---|
| **Worsening Livelihoods** | | **6** | **2** | **8** |
| | Providing income alternatives | 2 | 0 | 2 |
| | Reducing gender inequality | 2 | 1 | 3 |
| | Strengthening social cohesion and local cooperation | 2 | 1 | 3 |
| **Migration and Mobility** | | **3** | **4** | **7** |
| | Reducing community-based violence between migrants and local groups | 1 | 1 | 2 |
| | Reducing gender-based violence resulting from migration and mobility | 1 | 2 | 3 |
| | Improving the livelihood of migrants | 1 | 1 | 2 |
| **Armed Group Tactics** | | **0** | **3** | **3** |
| | Reducing impact of armed-group capture of natural resources | 0 | 0 | 0 |
| | Countering armed group recruitment | 0 | 2 | 2 |
| | Providing alternative services and relief | 0 | 1 | 1 |
| **Elite Exploitation** | | **1** | **2** | **3** |
| | Empowering local governance | 1 | 1 | |
| | Partnering with state and national government entities | 0 | 1 | 1 |
| | Collaborating with international, national, and local NGOs | 0 | 0 | 0 |

In the above example, Program 1 has a high CIPS in terms of remediating the impact of climate change on livelihood (**6/6**), but low CIPS scores in the other categories. In contrast, Program 2 has an evenly distributed CIPS score across each category. At an enterprise level, the practitioner demonstrates broad capacity in remediating worsening livelihood (**8/12**) and migration and mobility (**7/12**), with less of a focus on combatting armed group tactics (**3/12**) and elite exploitation (**3/12**).

This information presents the practitioner with an array of choices. Regarding Program 1, the practitioner could choose to expand the program's scope to include interventions that aim to combat armed group tactics; conversely, the practitioner could choose to further emphasize the program's strength in combatting worsening livelihoods. At an enterprise level, the practitioner could take steps to further improve its high livelihood and migration and mobility scores, or instead make broad changes to enhance its ability to address armed group tactics and elite exploitation.

The above scenario also demonstrates a key aspect of the qualitative assessment methodology. Neither the CIPS nor ECIPS are measures of the *efficacy* of the program; a program can be highly efficacious in terms of its impact on target populations even though it only has a high score in one pathway. Conversely, a program could score highly across each pathway, but have low efficacy when its results are analyzed. Instead, the CIPS and ECIPS are best understood as measures of *opportunity*, identifying areas where the practitioner is most active in addressing the impacts of climate change and how it can adjust its portfolio to either broaden or further focus its efforts. By understanding its programs' comparative strengths and areas of focus, a local practitioner will be able to communicate down to local partners and up to international organizations on how its entire suite of programs addresses the impacts of climate change.

### B. Limitations

While the qualitative assessment provides an opportunity for practitioners to understand how their enterprise of programs serves to address climate change-induced insecurity, it is important to discuss the limitations of the assessment's methodology. First, there is a level of overlap across each remedial activity that may result in over- or underassessing the extent to which a program incorporates a given remedial activity or set of activities. This level of overlap is not unexpected; after all, a key takeaway from the SIPRI framework is that each pathway is *interrelated.* By addressing armed group recruitment, a program is also likely to provide income alternatives to improve livelihoods. And addressing gender inequality in a community may also reduce gender-based violence in migrant communities. Recognizing the potential for overlap in remedial activities is an important consideration when implementing the qualitative assessment.

Second, the qualitative assessment, in its current form, relies on subjective analysis of each program to generate the CIPS and ECIPS. As such, one assessor may score a program higher or lower than another assessor based on their own experience and understanding of the program. To reduce the impact of this subjectivity, it is important that assessors are familiar with the organization and trained in the assessment process. For example, practitioners could identify and train a cohort of assessors on the assessment methodology, then take the median or appropriate method of aggregation of the assessors' scores to determine the final score for each program.

Lastly, the key to successful implementation of this qualitative assessment is access to detailed and reliable data regarding the objectives, scope, and historical results of each program. When such information is not readily available, it will be difficult for the assessment to generate the level of detail necessary to create an actionable picture of the extent to which each program addresses a pathway or remedial activity. While these limitations do not undermine the methodology, they are important to keep in mind and mitigate when implementing the qualitative assessment.

## IV. Conclusion

Addressing the impacts of climate change, in Somalia or elsewhere, is a challenge no single organization can resolve. This qualitative assessment seeks to harmonize the theoretical frameworks developed by researchers and policymakers with the lived experience of frontline practitioners to address the dire challenge posed by climate change and insecurity. The Northwestern Access to Health Project is honored by the confidence and support of our partners on the ground as they lead the charge in this effort.

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