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TECHNICAL REPORT

PATHWAYS TO PEACE: ADDRESSING CONFLICT AND STRENGTHENING STABILITY IN A CHANGING CLIMATE

LESSONS LEARNED FROM RESILIENCE AND PEACEBUILDING PROGRAMS IN THE HORN OF AFRICA



January 2020

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Cover Photo: Kelley Lynch/USAID Ethiopia, 2014. Stakeholders discuss rangeland and natural resource management in Ethiopia.

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Lessons Learned from Resilience and Peacebuilding Programs in the Horn of Africa

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ACRONYMS

ASAL	Arid and Semi-Arid Lands
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
CCA	Climate Change Adaptation
FRMC	Flood Resilience Measurement for Communities
IGAD	Intergovernmental Authority on Development
M&E	Monitoring and Evaluation
NRM	Natural resource management
PCCSR	Peace Centers for Climate and Social Resilience
PMR	Prevention, mitigation and resolution
TEPS	Toward Enduring Peace in Sudan
USAID	United States Agency for International Development

GLOSSARY

Adaptation: The process of adjustment to actual or anticipated climate and its effects, in human or natural systems, in order to lower harm or exploit beneficial opportunities. Adjustments may lower exposure or sensitivity to climatic stimuli, and may incorporate science, technology and innovation (adapted from IPCC, 2012; USAID, 2012; 2014; Rüttinger et al., 2015).

Adaptive capacity: The combination of strengths, attributes and resources available to an individual, community, society or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm or exploit beneficial opportunities (IPCC, 2012). Adaptive capacity includes ensuring that social systems, inclusive governance structures and economic opportunities are in place (USAID, 2012).

Climate variability: Variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate at all spatial and temporal scales beyond that of individual weather events. Internal variability may be due to natural processes within the climate system, and external variability to natural or anthropogenic external forcing (IPCC, 2012).

Compound climate fragility risks: Risks that emerge as climate change interacts with other pressures on states and societies. They include local resource competition, livelihood insecurity and migration, extreme weather events and disasters, volatile food prices and provision, transboundary water management, sea level rise and coastal degradation and unintended effects of climate policies (Rüttinger et al., 2015).

Conflict drivers: Dynamic processes that contribute to the ignition or exacerbation of destructive conflict, particularly violent conflict. Conflict drivers emerge when structural and/or proximate factors of conflict affect stakeholders, triggering some form of response. Frequently, conflict drivers comprise more than one structural and/or proximate factor and involve various stakeholders, given the complex nature of conflicts and the associated undercurrents (UNDG, 2016).

Conflict sensitivity: Policies and programs that are conflict sensitive seek to avoid a relapse into violent conflict or to aggravate an existing conflict. Conflict sensitivity requires the ability of an organization to understand the context in which it is operating and the interactions between its interventions and the context, and subsequently the ability to act upon this understanding to avoid negative impacts. Conflict sensitivity is normally a minimum standard for any intervention in a conflict environment (adapted from Rüttinger et al., 2015; UNGD, 2016).

Fragility: Fragility refers to the inability (whether whole or partial) of a state to fulfil its responsibilities as a sovereign entity, including a lack of legitimacy, authority and capacity to provide basic services and protect its citizens (Rüttinger et al., 2015).

Land degradation: A negative trend in land condition, caused by direct or indirect human-induced processes, including anthropogenic climate change, expressed as long-term reduction and as loss of at least one of the following: biological productivity, ecological integrity or value to humans (IPCC, 2019).

Mitigation: Reducing the amount of greenhouse gases released into the atmosphere and recapturing greenhouse gases currently in the atmosphere and sequestering them in ecosystems. Lowering the accumulation rate of greenhouse gases in the atmosphere lowers the probability that the earth's temperature will rise and result in dangerous climate change impacts (USAID, 2012).

Natural resource management: The direct or indirect control of natural resources through their sourcing, production, consumption and distribution (or lack thereof). Natural resource management is usually undertaken with the aim of ensuring the continued availability and sufficient quality of the managed resources (adapted from USAID, 2013).

Peacebuilding: Measures to consolidate constructive relations and strengthen institutions to handle conflict peacefully while creating and supporting the necessary conditions for sustainable peace. Peacebuilding programs reduce the drivers of violent conflict and contribute to broad, societal-level peace. Peacebuilding programs require a conflict-sensitive lens (UNDG, 2016).

Resilience: The ability of people, households, communities, counties and systems to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth (USAID, 2012).

Shocks: Sudden onset events, either climatic or conflict driven, which severely challenge, impact or prevent the functioning of a system, which may or may not recover from the initial shock. The effects of a shock depend on a system's vulnerability, resilience and adaptive capacity (adapted from USAID, 2012).

Social capital: The features of social organizations, such as networks, norms and trust that facilitate cooperation and coordination for mutual benefit. Social capital is an analogy with notions of physical and human capital in that these networks, like tools and training, enhance individual productivity (Putnam, 1995).

Social cohesion: The reduction of disparities, inequalities and social exclusion within or between societal groups, as well as the strengthening of social relations, interactions and trust. Social cohesion affects the quality and durability of the social contract. Understanding and respecting factors that promote or undermine social cohesion are thus vital in advancing robust social contracts (adapted from UNDP, 2016).

Social contract: A dynamic agreement between state and society on their mutual roles and responsibilities. The agreement builds on social expectations of the state, its capacities to provide state functions and a political process arbitrating between state and society. Legitimacy underlies these factors (adapted from UNDP, 2016).

Stresses: Pressures, either climatic or conflict driven, put on the functioning of a system over a prolonged or limited amount of time. They often have more gradual onsets than shocks. The influence and effect of stresses depends on a system’s vulnerability, resilience and adaptive capacity (adapted from USAID, 2012; 2014).

Theories of change: A theory of change — understood in development parlance as the intervention, organizational or program “logic” — describes the links between context, the intervention inputs, the implementation strategy and the intended outputs and outcomes (UNDG, 2016).

Threat multiplier: Something, such as climate change, that exacerbates existing fragility and conflict risks (European Commission, 2008; CNA, 2014).

Vulnerability: Vulnerability is a function of a system’s exposure, sensitivity and adaptive capacity. The more exposed or sensitive a system is to climate change (or climate variability, including extreme events), the more vulnerable it will be. The greater the adaptive capacity of a system or society (e.g., the wealthier, better organized it is), in general, the less vulnerable it will be (USAID, 2014).

EXECUTIVE SUMMARY

For over a decade, there has been a discourse around climate change and conflict and fragility, framed by climate as a threat multiplier and the prospect of improving peacebuilding and resilience development outcomes by addressing climate change and fragility together. This has led to widespread acknowledgment that if strategies to address these challenges do not consider their interdependent nature, they will fail or, in the worst case, exacerbate fragile situations. Importantly, they will also miss the co-benefits and synergies of including resilience building in climate change adaptation in order to reduce the need for repeated humanitarian assistance and to address chronic vulnerabilities.

Donors and implementing agencies are working to demonstrate the dividends from programming that supports peacebuilding and climate change adaptation (CCA) outcomes, including the approaches that can help achieve them, and the effective ways of monitoring and evaluating the impacts of these approaches. The United States Agency for International Development (USAID) has been at the forefront of these efforts. Recent USAID programs in the Horn of Africa that engaged pastoral and agro-pastoral communities in peacebuilding activities have begun to demonstrate some results in building adaptive capacity and community resilience in the face of adverse climate conditions, such as drought.

However, a comprehensive review of evidence and practice from development projects that have attempted to address compound climate–fragility risks is lacking. This paper aims to address this gap based on lessons learned from a review of USAID programs in the Horn of Africa as well as other relevant programs that included peacebuilding and CCA. These programs are mostly in arid and semi-arid lands (ASALs) where communities typically have a high dependency on natural resources for their livelihoods and experience a certain degree of conflict that could be attributed to a combination of climate, socioeconomic and political stressors.

The analysis of these programs showed that climate change can heighten conflict and fragility by creating food and livelihood insecurity, increasing competition over resources such as water and land, forcing people to migrate and reinforcing patterns of marginalization and exclusion. Marginalized groups, especially unemployed youth, may be attracted to nonstate armed and/or terrorist groups that can threaten national, regional and even global stability. It also showed that interventions aimed at building sustainable livelihoods and reinforcing social cohesion between and within communities were more likely to increase their capacity to cope with both conflict- and climate-related shocks and stresses. In addition, integrated programming included a focus on building inclusive and effective governance structures to manage conflicts as well as ensure a more cooperative and effective use of joint natural resources, especially at community level, but also between communities and government authorities at national and regional levels. Long-term commitment and financing, a focus on capacity building, and a participatory approach to

both program design and implementation were also proven contributors to effective and sustainable interventions.

More generally, five principles were identified to guide integrated peacebuilding and climate resilience programming:

1. **Foster social dialogue and cohesion:** Joint and participatory activities aimed at CCA and natural resource management (NRM) can be an entry point to strengthening intercommunity relationships and social dialogue, especially in contexts with a history of violence and mistrust between groups.
2. **Pursue CCA through multi-sectoral investments:** In order to deliver both peacebuilding and resilience outcomes, it is important to consider CCA holistically and invest in activities across multiple sectors, including non-climate ones such as education, health and trade.
3. **Build the capacity of institutions to create an enabling environment for peace and sustainability:** Integrated programs should include interventions to build and/or reinforce the policy/governance framework and capacities for CCA, NRM and peacebuilding at the national and local level, working with both formal and informal institutions.
4. **Make governance inclusive:** Ensuring that groups that were previously marginalized — for example on the grounds of gender, age, social status, ethnicity or religion — are included in decision-making processes and structures over the allocation and use of natural resources as well as conflict resolution and peacebuilding mechanisms.
5. **Establish intra- and inter-governmental cooperation:** Establishing vertical and horizontal linkages between formal and informal institutions that have a role in promoting sustainable natural resource use can bring about opportunities for broader development and security outcomes. This should include working with government institutions as well as traditional authorities and supporting them in analyzing compound climate change and fragility risks and entry points for collaborative solutions.

This study also proposed two key recommendations for USAID and other donors to more effectively address compound climate–fragility risks in their development programs:

1. **Conduct local analyses of the links between climate, conflict and fragility to identify risks and target interventions operationalized through:**
 - Conflict-sensitive risk assessments that combine locally specific climate, conflict and fragility data based on participatory and inclusive methodologies and frameworks.
 - A robust and clear theory of change that explains how a project or program will improve resilience to both conflict- and climate-related shocks and stresses by fostering social cohesion, inclusive governance and sustainable livelihoods.
 - An integrated monitoring and evaluation (M&E) framework that captures results for all the intended and unintended outcomes and impacts — as per the project’s theory of change — by using multiple qualitative and quantitative methods.
2. **Ensure long-term commitment with a focus on participation and flexibility by:**
 - Adopting a participatory approach to the design and implementation of interventions;

- Giving adequate consideration to financing and timing to ensure that interventions deliver the right incentives for stability;
- Applying USAID's Collaborating, Learning and Adapting framework to support coordinated programming that can adapt to changing circumstances on the ground and ensure coherence and complementarity between the interventions.

I. INTRODUCTION

BACKGROUND

There is increasing evidence and recognition that climate variability and change can exacerbate and interact in multiple ways with social, economic and environmental pressures, such as rapid urbanization, social inequality, economic shocks and environmental degradation. This is especially the case for communities that are highly dependent on natural resources for their livelihoods, and in situations where other stressors — such as socio/ethnic/historic tensions, large-scale land development and population growth — are at play.

These compound climate-fragility risks interact in complex ways and are heavily context-specific. As a consequence, it is important to understand how and to what extent climate change acts as a driver of conflict and fragility, in relation with other factors, and in each specific context.

For over a decade, there has been a discourse around climate change, conflict and fragility, framed by climate as a threat multiplier and the prospect of improving peacebuilding and resilience development outcomes by addressing both risks together. This has led to widespread acknowledgement that if strategies to address these challenges do not take into account their interdependent nature, they will fail or, in the worst case, exacerbate fragile situations. Interdependent challenges need integrated answers.

Yet, there is little understanding of how this can be done in practice. The literature is largely conceptual or based on a limited number of case studies, making it challenging to design programs at scale or across geographies. A comprehensive review of evidence and practice from development projects that have addressed climate–fragility risks is also lacking. Donors and implementing agencies are seeking to fill these gaps to show the possible dividends from peacebuilding and climate change adaptation (CCA) programming, effective approaches and effective monitoring and evaluation (M&E).

USAID has been at the forefront of developing and implementing strategic programming which addresses the likelihood of conflict over natural resources through improved intercommunal relations and supporting broad and inclusive governance structures. Recent USAID programs in the Horn of Africa that engaged pastoral and agro-pastoral communities in peacebuilding activities have begun to demonstrate some results in building adaptive capacity and community resilience in the face of adverse climate conditions, such as drought. These results include 1) the role of peacebuilding efforts in fostering greater freedom of movement and access to natural resources, which in turn support improved coping capacity in the face of climate shocks, and 2) that collective and inclusive action in response to the common threat of climate variability strengthens trust in formal and informal institutions and cultivates greater social cohesion.

Identifying potential linkages between improved governance (local, national, regional) and improved climate adaptation outcomes, and influencing those linkages through targeted interventions, will be important for the success of USAID's development investments affected by climate and conflict risks, and ultimately for consolidating development gains and promoting resilience. This paper synthesizes lessons from evaluations of three USAID programs in the Horn of Africa and offers recommendations for effectively integrating programmatic approaches that consider and address compound risks of climate, conflict and fragility globally.

OBJECTIVES

This paper critically assesses how peacebuilding programming can also produce adaptation benefits (and vice versa), so that interventions simultaneously contribute to reduced intercommunal conflict and strengthened resilience to a range of shocks and stresses, including droughts, floods and rainfall variability.

Drawing on the evaluations of three USAID programs in the Horn of Africa, as well as other relevant programs that included peacebuilding and CCA components, this paper has three objectives:

1. **To synthesize lessons learned** and examine the roles played in avoiding or reducing conflict by livelihood, adaptation, strengthening community engagement, dialogue and decision-making over natural resources;
2. **To develop and test a theory of change** for linking peacebuilding and CCA to foster peace and stability in fragile and conflict-affected contexts;
3. **To offer recommendations** for integrating programmatic approaches that consider and address compound climate–fragility risks.

METHODOLOGY AND STRUCTURE

This paper draws on the conclusions of a literature review of evidence and practice from USAID and other donor organizations on using peacebuilding interventions to support CCA objectives. The literature review looked at cases where peacebuilding programming had a positive impact on climate resilience. It also looked at attempts at using CCA activities to advance peacebuilding goals. The focus was on development assistance rather than humanitarian programming. More specifically, the literature review (see Annex A) covered the following areas:

1. **Evidence** of the linkages between climate variability and change, conflict and fragility;

USAID's programs in the Horn of Africa

Since 2012, USAID has implemented three programs in the Horn of Africa, engaging pastoral and agro-pastoral communities in peacebuilding activities:

- The Peace Centers for Climate and Social Resilience (PCCSR) project;
- The Peace in East and Central Africa (PEACE III) project;
- The Toward Enduring Peace in Sudan (TEPS) project.

Between 2017 and 2018, USAID commissioned three independent evaluations of these projects to identify lessons learned and provide recommendations for future programming (USAID, 2017b; 2018; 2019a).

2. **Approaches by policymakers and practitioners** to guide their peacebuilding programming in fragile and conflict-affected contexts;
3. **M&E frameworks** of peacebuilding and CCA programs;
4. **Lessons learned and recommendations** for further research to inform future climate-sensitive peacebuilding programs.

This paper will first present the results of the literature review, highlighting the key areas of consensus, as well as where further research is needed. It will then review three USAID-funded projects in the Horn of Africa, looking at how climate variability and change have contributed to conflict and fragility, what interventions have been set up to address compound climate–fragility risks, and to what extent and why they have been effective.¹ Based on this analysis, and evidence from other relevant programs, the paper outlines the key factors that need to be in place for more integrated programming that contributes to achieving the goals of peace- and resilience-building simultaneously. The paper concludes by highlighting five principles on which integrated peacebuilding and climate resilience programming should be based, and two main recommendations on designing and operationalizing programming.

¹ This review will be based on the results of the independent assessments of these projects that were conducted in 2017 and 2018 (see: USAID, 2017b; 2018; 2019a).

II. LESSONS AND TRENDS IN PEACEBUILDING ACTIVITIES IN THE HORN OF AFRICA

CLIMATE CHANGE AND FRAGILITY

There is growing evidence that climate change is altering the risk profile for security and peace. Increasing temperatures, drought, sea level rise, and more intense extreme weather events such as cyclones are already directly affecting millions of people across the world. These impacts are also creating more volatile food prices, fueling competition for natural resources and making livelihoods less secure — all factors that are well-established drivers of conflict.

Consequently, climate change has increasingly come to be recognized as a “threat multiplier” — a variable that aggravates simultaneously occurring environmental, social, economic and political pressures and stressors. As a threat multiplier, it can compound existing tensions, which could escalate into violence or disrupt fragile peace processes. In turn, conflict and political instability will leave communities poorer, less resilient and ill equipped to cope with climate change impacts. This is especially the case in fragile contexts where the capacity of states and societies to manage changes, including climate changes, is low.

An independent report commissioned by members of the Group of 7 advanced economies identified seven compound climate–fragility risks that pose serious threats to the stability of states and societies in the decades ahead (Rüttinger et al., 2015):

1. **Local resource competition** from increasing pressure on natural resources due to climate variability and change and population growth can lead to instability and violent conflict.
2. **Livelihood insecurity and migration** will increase, especially for rural populations that depend on natural resources for their livelihoods, which could push them to migrate to urban centers or turn to negative coping mechanisms for income generation.
3. **Extreme weather events and disasters** will exacerbate fragility challenges and can increase people’s vulnerability, grievances and migration, especially in conflict-affected situations.
4. **Volatile food prices and provision** due to the impacts of climate variability and change on food production can heighten the risk of protests, rioting and civil conflict, including with regional-to-global knock-on effects.

5. **Transboundary water management** is frequently a source of intercountry tensions; as demand grows and climate impacts affect availability and quality, competition over water use will likely increase the pressure on governance structures and bilateral relations.
6. **Sea level rise and coastal degradation** will threaten the viability of low-lying areas even before they are submerged, leading to social disruption, displacement and migration; disagreements over maritime boundaries and ocean resources may increase.
7. The risk of **unintended effects of climate policies** will increase, particularly in fragile contexts, as climate adaptation and mitigation policies to rearrange our global system of resource use are more broadly implemented. These compound climate–fragility risks illustrate some of the key mechanisms through which climate change interacts with other pressures and shocks to create or exacerbate situations of fragility. However, it is important to stress that any understanding of how climate change will manifest in specific locations — the ramifications for economic and social development, political stability and peace and security, and how drivers of conflict will affect climate change vulnerability — remain highly context specific.

OVERVIEW OF THE LITERATURE EXAMINING CLIMATE CHANGE AND CONFLICT

There is increasing awareness that climate variability and change can exacerbate or create tensions and conflicts within and between communities, countries and regions. A growing number of studies analyzing the statistical relationship between climate change, conflict and fragility offers a comprehensive and systematic assessment of emerging climate–security risks. The reliance on statistical studies, however, has some limitations, including data (dis)aggregation from local to international levels, the difficulty of including long-term data series on climate and weather patterns, as well as data on a range of social and political conditions that presumably shape climate–conflict interactions (Detges, 2017). Therefore, recent studies have focused more on when, where and how particular climate–fragility risks are likely to emerge and have introduced qualitative methodologies to investigate the relationship in specific contexts (Salehyan et al., 2014).

Five themes emerge from these studies:

1. **Climate change does not drive conflict in a vacuum but, especially in fragile contexts, contributes to conflict in combination with a number of other critical factors, such as food security.** The evidence strongly converges around the impacts of climate change on natural resource-dependent livelihoods as a key conduit for climate–fragility risks (Stark et al., 2009). Changes to the availability of natural resources that are essential for livelihoods and food security, in combination with pre-existing contextual challenges such as a history of conflict or the presence of marginalized groups, were observed to affect the risk of conflict in a range of contexts from the Sahel to South Asia, Central Asia, Latin America and Africa (UNEP, 2011; Vivekananda et al., 2014; Janes, 2010; Stark et al., 2009; Goulden et al., 2011).

2. **Existing governance structures greatly influence the ways in which the compound climate–conflict risks manifest.** Livelihood vulnerability was in fact found to be linked to many non-climate factors, such as unequal land distribution, insecure land tenure, unsustainable resource management practices, poorly developed markets, existing trade barriers and inadequate infrastructure. Greater risk of political instability or conflict was associated with communities that lack the institutions, effective dispute resolution mechanisms, economic stability, civil voice and social capital to withstand increases in the frequency and severity of climate change (UNEP, 2011). Therefore, it is especially important to understand the role of governance in planning and regulating development, ensuring access to land, providing infrastructure support to mitigate risks from sudden-onset disasters, and promoting livelihood diversification (UNEP, 2011). Despite this, literature exploring the links between climate change, conflict and fragility continues to largely overlook the role of governance and power (e.g., Hsiang et al., 2014).
3. **The inability to address climate change risks can erode the social contract in fragile contexts.** A characteristic of fragility is that the state cannot guarantee core functions, such as law and public order, welfare, participation, and basic public services (e.g., infrastructure, health, education), or the monopoly on the use of force. Case studies increasingly document how climate change undermines the ability of governments to fulfill their role (see, for example, Werrell et al., 2013; Vivekananda et al., 2019). As the risks faced by citizens get more complex, the pressure on governments increases and fault lines in weak governance and social bonds become more apparent. When the state is perceived to be failing to fulfill its duties, the social contract is eroded and the risk of civil unrest increases (Kaplan, 2009). The additional challenge of climate change can increase the risk of instability or conflict (Schilling, 2012).
4. **CCA in support of peace and stability is a new idea gaining traction.** Adaptation or resilience-building interventions which include processes to build the social contract and strengthen social cohesion between groups while sustaining bonding within affected groups, and that work across sectors, have the most impact on peacebuilding (Tänzler et al., 2013, Mitra et al., 2017). This was highlighted in a recent study of resilience projects to upgrade densely populated and flood-prone informal urban settlements in Nairobi. Interventions included addressing tenure insecurity, repairs to current structures and the introduction of new multi-story units, upgrading of roads to improve access to jobs and public services, and reducing localized flooding and health hazards by improving water and sanitation facilities. By targeting youth with employment opportunities in road construction and sanitation for the program, beneficiaries noted an increase in youth engagement and reduced levels of crime and insecurity (Mitra et al., 2017). This study illustrates how these projects can reduce conflict, crime and insecurity as well as vulnerability to flooding by including processes that build social capital and adopt a multi-sectoral design (Mitra et al., 2017). While more evidence is required to better understand how such approaches play out in practice and over time, learning

especially from natural resource management (NRM) programs — including water management — suggests that positive peace outcomes are feasible.

- 5. Gaps in knowledge remain and thus present new research opportunities to improve understanding of, and programming for, compound development challenges.** Emerging areas of research include: 1) the linkages between climate change impacts and the proliferation of terrorism and organized crime (Nett et al., 2016); 2) the relationship between climate change, migration and human displacement (Stapleton et al., 2017); 3) the role that low carbon development plays in generating new security concerns and entrenching existing ones (Mirumachi et al., 2019); and 4) the indirect impacts of climate change on global supply chains (Gregory et al., 2005; Werrell et al., 2013; Evans, 2009). However, some important knowledge gaps remain, including a lack of evidence of conflict sensitivity tools or approaches being systematically applied to resilience and CCA programming. At present, evaluations of adaptation programs assess them on whether they have achieved specific CCA goals for identified beneficiaries and do not capture peacebuilding or other co-benefits or unintended outcomes/impacts. Whether and under which circumstances CCA does “no harm” requires further evaluation.

Overall, the literature shows that there are commonalities between the conditions needed to address climate change impacts, reduce conflict and improve peacebuilding outcomes. Both require effective, inclusive and legitimate governance systems, flexible processes to deal with complex and changeable conditions, and a balance of top-down and bottom-up approaches. Moreover, peacebuilding knowledge, skills and tools are applicable to CCA in general, and in particular in fragile and conflict-affected contexts: for example, understanding the complex multidimensional nature of contexts; connecting short- to long-term conditions; and being cognizant of the way sociocultural, political and economic factors are linked and influence each other, creating dynamic feedback loops.

The literature also highlights opportunities for continued analysis to inform improved programming on climate and conflict risks. Specifically, the linkages between climate and conflict risks in urban areas, through disruptions to supply chains, strains on public services, and/or increased vulnerability to climate risks of marginalized and informal communities, which risk fueling existing tensions and violence.

THEORY OF CHANGE

A clear theory of change articulates how climate change risks, conflict and fragility are interconnected, and hence how responses to them must also be interconnected. The well-established and tested concept of sustainable livelihoods offers a useful framework to develop a theory of change for addressing compound climate–fragility risks and increasing resilience (see Figure 1).

The theory of change proposed to address compound climate–fragility risks and increase resilience is based on two insights from the literature review:

1. Climate–fragility risks emerge when climate change interacts with other political, social, economic and environmental pressures, such as rapid urbanization, inequality, marginalization, economic shocks and environmental degradation.
2. By linking CCA and peacebuilding, it is possible to increase the resilience to climate–fragility risks.

Predicated on these insights are two hypotheses which have been proven and tested:

1. **Sustainable livelihoods** — those that are resilient, not fully dependent on external support, maintain long-term productivity of natural resources, and do not compromise or undermine the livelihoods of others — are the basis for human security and for coping with and recovering from stresses and shocks (DFID, 1999).
2. **Social cohesion** and **governance** underpin key capacities to cope with shocks and stresses, including violent conflict and climate change.

This leads to the following theory of change:

***IF** sustainable livelihoods are the foundation of human security and needed for successfully coping with and recovering from stresses and shocks,*

***THEN** building an enabling environment and capacities that support sustainable livelihoods can build resilience and may also mitigate conflict; and*

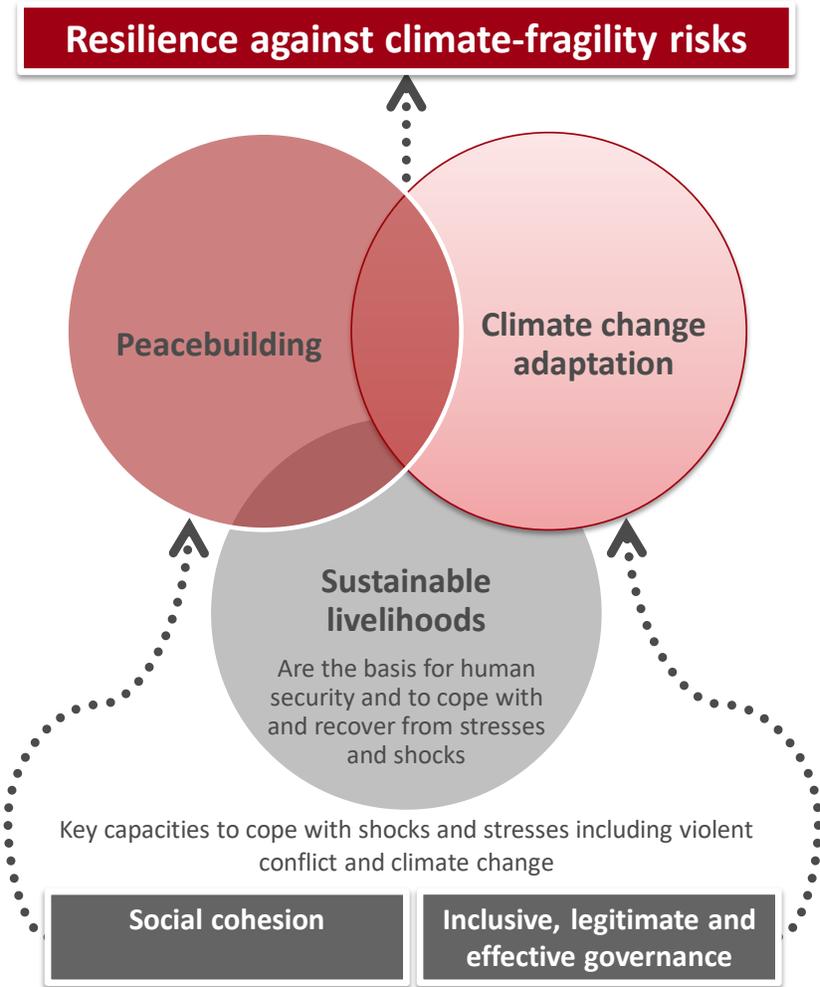
***IF** social cohesion and inclusive, legitimate and effective governance are key to coping with shocks and stresses (including violent conflict and climate change),*

***THEN** strengthening social cohesion within and between groups, as well as developing inclusive, legitimate and effective governance, based on a sustainable livelihoods framework, improves the capacity of communities to manage, adapt to and recover from shocks peacefully and builds resilience against climate, conflict and fragility risks.*

If vulnerability is understood as a lack of agency to reduce the risk of a disaster or violent conflict unfolding, then the essence of addressing compound climate–fragility risks is enabling people to enhance their power and ability to bring about transformational change. Conflict sensitivity is a critical component of the approach to ensure that the changes brought about do not inadvertently increase people’s vulnerabilities and the risk of conflict.

Based on evidence from the three USAID peacebuilding projects in the Horn of Africa, the next section will seek to validate this theory of change and identify the combination/s of social cohesion, governance and CCA interventions that best achieve resilience and peacebuilding goals simultaneously.

Figure 1: Illustration of the concept of sustainable livelihoods (Adapted from: DFID, 1999; UNEP, 2019)



III. USAID PROGRAMMING IN THE HORN OF AFRICA

This section examines the key components of USAID’s peacebuilding programs in the Horn of Africa aimed at reducing climate and conflict risks, and where appropriate, it brings in evidence from other programs to further illustrate some of the mechanisms identified. It then draws conclusions on how and through which mechanisms peacebuilding interventions in fragile and conflict-affected contexts can simultaneously contribute to reducing the risks of intercommunal tensions and building resilience against climate shocks and stresses.

PEACE CENTERS FOR CLIMATE AND SOCIAL RESILIENCE (PCCSR) IN ETHIOPIA

PROJECT SUMMARY

Since 2014, the PCCSR project, funded by USAID and implemented by the College of Law of Haramaya University, has undertaken collaborative activities in pastoral communities (*kebeles*) in three districts (*woredas*) in the Borana Zone of Ethiopia. The project’s goals were to address communities’ vulnerabilities to climate change and improve their capacities for conflict prevention, mitigation and resolution (PMR).

In the first decade of the 2000s, communities in Borana faced periodic outbreaks of violence that resulted in cycles of instability and conflict. These have been largely attributed to communities’ reduced access to natural resources as a consequence of a combination of socioeconomic and climate-related factors such as population growth, land development, administrative boundaries, rangeland degradation and erratic and extreme weather. Especially recurrent droughts and rainfall shortages and unpredictability were said to have depleted the livestock assets of pastoralists and the rainfed crop production of agro-pastoralists. The Borana Zone has also been affected by ethnic tensions along the border between Oromia and Somali National Regional States. Communities in the Borana Zone that were interviewed as part of the project saw conflict, drought and overall rainfall shortage as the greatest threats to their livelihoods.

The project endeavored to reverse these patterns of conflict and change the collective perceptions, attitudes and behaviors underlying them. It built upon the hypothesis that peacebuilding efforts can contribute to conditions that foster greater freedom of movement and enable better access to natural resources (such as pasture and water) that allow pastoralists to better cope with climate shocks.² The project had three main objectives: 1) improving conflict

² Proposed in Mercy Corps (2012).

resilience through collaborative community actions on climate vulnerabilities; 2) enhancing community adaptive capacity to address climate and natural resource challenges; and 3) strengthening the overall capacity of communities in conflict PMR. An important cross-cutting aim was the improvement of communications and linkages between informal and formal institutions (USAID, 2017b).

Activities implemented by the PCCSR project in the Borana Zone

- Revitalizing and strengthening the peace committees to make them more inclusive and connect them to the formal justice system.
- Establishing Women's Peace Networks and Youth Peace and Climate Resilience Clubs across ethnic groups to ensure the inclusion of the most marginalized groups in the community into decision-making over NRM and CCA.
- Conducting intergroup community dialogues at the *kebele* level to overcome grievances and hostile behaviors based on ethnicity, by involving women's groups and traditional leaders, as well as government officials.
- Conducting needs assessments at the *woreda* level on conflict, climate change and resilience, and community dialogues to identify key and contested water and pasture areas.
- Implementing joint intergroup NRM and CCA activities, such as the restoration of water ponds and the construction of soil bunds for water harvesting, defined from consultations and assessments with the communities.
- Organizing trainings/workshops involving all groups to build their knowledge and capacity to deal with peace and conflict issues, as well as the impacts of climate change and adaptation activities.
- Developing community bylaws with the local government on joint use and management of rangeland resources.

KEY OUTCOMES

The assessment of the PCCSR found that the project had created an attitudinal change among its beneficiaries. The project's efforts to build relationships through dialogues, workshops and trainings contributed to reducing the tendency to attribute criminal acts to ethnicity, which fueled resentment and conflict between the different ethnic groups in the region. Since the beginning of the PCCSR project, community stakeholders reported that their *woredas* had fewer episodes of conflict. Violations or crimes were reported almost immediately and, most importantly, were attributed to the individuals who committed them, rather than purely on ethnic grounds.

The PCCSR project increased the awareness and capacity of zonal and local authorities to respond to potential conflict. While, as analysts have sometimes observed, Ethiopia's governance is "brittle," i.e., strong at the surface but subject to fracture, the PCCSR boosted the responsiveness and resilience of local government institutions. In turn, more inclusive governance structures improved connectedness between formal and informal institutions and between civil society and state actors. Women and youth networks came to play an important role in early warning of tensions and avoiding the outbreak of violence within and between the communities (USAID, 2017b).

Practical, joint CCA activities (ponds, bush thinning, soil bunds, etc.) were also conducted. The assessment noted that, over time, these collaborative activities contributed to increasing the sense of mutual understanding and solidarity among the different groups. At the same time,

they delivered practical results, for example, increased agricultural productivity and water security; it was important for the beneficiaries to feel an improvement in living conditions resulting from the project. This increased their buy-in to the project and built trust between the communities and the project staff (USAID, 2017b).

LESSONS LEARNED

The assessment of the PCCSR in the Borana Zone highlighted several lessons learned (USAID, 2017b).

- *CCA can be a useful entry point for peacebuilding.* Because climate change was understood as an “external threat” experienced by all ethnic groups and clans in Borana, it could be used as an organizing principle and center of gravity for the activities of the PCCSR. Community discussions about climate challenges broadened and strengthened the agenda for interethnic and interclan dialogue about conflict issues.
- *Some climate change activities contributed to peacebuilding outcomes more than others.* For example, project activities aimed at rehabilitating water ponds and constructing soil bunds for water harvesting were deemed to have been successful in decreasing tensions between groups by increasing the overall availability of water resources for everyone. The collaborative nature of these activities helped to increase linkages and institutionalize contact between the different groups, thus challenging the traditional narrative of “contested ponds” that had been the basis of interethnic tensions.
- *Long-term commitment and resources were essential.* While not requiring large expenditures, the systematic, sequential, structured and iterative activities of the project needed time to be fully implemented and take hold. The peace committees and women’s and youth groups were enhanced by a constructive collaborative relationship between local government and informal institutions, which could only be established over the long term.
- The involvement of the beneficiaries in planning the activities of the project increased their buy-in and commitment, which in turn augmented the chances that outcomes were “owned” and continued after the project’s end. The PCCSR’s assessment also emphasized the important role of the local implementing partner in increasing communities’ active participation in and ownership of the project. Communities and local authorities trusted the project partly because of the strong reputation that the College of Law of Haramaya University enjoys in Ethiopia. However, the lack of resources to sustain these activities remained a challenge, especially at the local level where budgets and capacities are often scarce as national governments do not budget local dispute resolution mechanisms sufficiently and instead outsource PMR activities to development donors and nongovernmental organizations.

The assessment also noted that some critical issues remained unaddressed, threatening the results of the projects in the long term. For example, unemployed pastoralist dropouts moving to urban settlements can contribute to destabilizing the current context.³ More efforts would be needed to establish clearer and firmly agreed upon systems of pastoralist land use tenure. The

³ Pastoralist dropouts are primarily young men and women who give up pastoralism and leave the community as a consequence of the challenges to resource availability posed by population growth, competing land uses, reduced or depleted natural resources and climate change impacts. They move to urban settlements but remain unemployed because of the lack of education and alternative livelihoods.

PCCSR approach could contribute to or facilitate some of the dialogue and negotiation to find workable solutions as a first step. However, more engagement by the government and donors would be required.

PEACE III IN EAST AFRICA

PROJECT SUMMARY

PEACE III is a US\$20 million USAID cooperative agreement promoting stability in the cross-border areas between Kenya, Ethiopia, Somalia, South Sudan and Uganda. The PEACE III program was implemented by Pact and Mercy Corps between 2014 and 2019, working with 14 community-based organizations, the Intergovernmental Authority on Development (IGAD)—its Conflict Early Warning and Response Mechanism (CEWARN) and National Conflict Early Warning and Early Response Units (CEWERUs)—government officials, security actors, and nongovernmental organizations.

PEACE III's main goal was to improve the management of conflict along the borders between Kenya and its Eastern African neighbors by strengthening the relationship between national and local governments and formal and informal institutions and communities, and improving their ability to respond rapidly and effectively to conflict. PEACE III's interventions were divided into two “clusters” — the Somali cluster (Kenya, Somalia and Southern Ethiopia) and the Karamoja cluster (Kenya, Uganda, southwestern Ethiopia and southeastern South Sudan). Both clusters experienced high levels of intercommunal tensions and livelihood and food insecurity.

Conflict prevention, reconciliation and peacebuilding activities implemented by the PEACE III program

- Organizing and facilitating cross-border dialogues (including with the private sector), intergovernmental meetings, negotiations, peace treaties, sports and cultural events and trauma-healing sessions to help communities prevent or recover from violent acts and support individuals who have been affected by violence.
- Providing resources and capacities to networks of “peace actors” (women, youth, chiefs, elders, security officials and local political leaders) which were given key roles in implementing security and peacebuilding activities in their communities.
- Supporting and cooperating with local governments and authorities to design and implement conflict prevention, response and peacebuilding activities in their communities and across borders (e.g., preparation and validation of the Turkana County Community Safety Policy).
- Facilitating cross-border peace agreements and natural resource agreements, involving communities and government representatives from Kenya, Uganda, South Sudan and Ethiopia, as well as other regional and national organizations (e.g., IGAD).
- Conducting outreach and communication activities to support community engagement with the Security Governance Initiative on border management and build trust between border officials, security forces and communities.
- Supporting the work of the National Platform for Peacebuilding on the drafting of a National Peace Policy for Uganda.

To address the complex interactions between climate-related and socioeconomic and political drivers of conflict in these regions, PEACE III focused on developing and enhancing community-based approaches to cross-border security and peacebuilding. The program was based on the following assumptions: 1) horizontal networks across communities are required to create an

effective, diverse and inclusive collaborative peace system; and 2) the creation of stronger vertical networks with national and regional peace actors improves high-level support for grassroots peace efforts and facilitates macro-level analysis. Both horizontal and vertical networks, working together, were integral to PEACE III's multilevel approach to peacebuilding.

KEY OUTCOMES

The assessment of PEACE III concluded that the project had been largely successful in reducing instances of intercommunal conflict and building resilience in the targeted communities. One of the main outcomes of the project was the establishment of lines of communication across pastoralist and agro-pastoralist communities. Mercy Corps' work with the Turkana County government was essential to rebuilding peace committees in the area and establishing a peace directorate tasked with improving early warning and early response mechanisms. Women's forums were described as having produced "an impressive cultural shift" in the communities, enabling women's participation in decision-making concerning NRM and the sharing of water and pastures, and their election to higher positions in the local government (USAID, 2018).

PEACE III also significantly contributed to supporting the peacebuilding and conflict resolution mechanisms of the CEWERUs in Kenya and Uganda. PEACE III's work with national-level security actors resulted in the drafting of a National Peace Policy for Uganda, and strengthened the capacity of Kenya's National Drought Management Authority to provide county-level early warning bulletins to pastoralist areas. Partly as a result of these efforts, security was deemed to have noticeably improved in the Karamoja region (USAID, 2018).

Finally, community leaders and government officials interviewed for the assessment of PEACE III agreed that the cross-border peace and natural resource agreements facilitated by the project had played an important role in reducing conflict in the region. Interventions to construct water pans (natural or excavated areas to store surface runoff) and dams; establish markets to improve trade; support women's rights, wildlife protection, education, and human and animal health; and build or resource cross-border schools and hospitals were praised for contributing to CCA and broader resilience within and between communities (USAID, 2018).

LESSONS LEARNED

The assessment of the PEACE III project (USAID, 2018) revealed that its model of encouraging and strengthening horizontal and vertical linkages among local, informal, national and regional institutions, partner organizations and communities helped to reduce and mitigate conflict. PEACE III provided important support for an emerging and growing number of agreements to share natural resources, peace agreements and community-based networks. This proved to be an effective way to increase pro-peace public attitudes and institutionalize new forms of dispute resolution. Additional lessons from PEACE III include:

- *Collaborative capacity can help to increase resilience.* Beyond direct contributions to conflict prevention and peacebuilding, institutional relationships and networks created or strengthened by PEACE III contributed to further program activities, such as cross-

border dialogues and trainings aimed at women's empowerment. Through constituent groups in civil society and government, and especially through the work of the peace committees, these linkages also contributed to generating and circulating new norms and practices for managing natural resources and conflict.

- *Improved capacity and greater access to climate information are just as critical as CCA activities themselves.* A unique finding from the assessment of PEACE III was that, although the project had implemented some CCA activities (e.g., small-scale irrigation, new boreholes, soil and water conservation, bans on tree cutting for charcoal, hay growing, cereal banking, energy-efficient stoves and tree planting), it had failed to address the need for more climate change knowledge. Many communities lacked a broader knowledge of the trajectory of climate change and the implications for their livelihoods.
- *Broader security challenges and instability can threaten the project's results.* Conflict remains unpredictable, and peace agreements are vulnerable to political events, the circulation of illicit arms, unequal access to natural resources and climate shocks, which can lead people to abandon new CCA behaviors.
- *Long-term government support is critical to ensuring that interventions are sustainable.* PEACE III made steady progress in nudging national and local governments toward recognizing the need for new institutional arrangements to respond quickly to conflict and provide mechanisms for conflict resolution. However, it was noted that these efforts require new policy frameworks, increased resources from host-country governments and dedicated local government budget lines. Absent these conditions, it was unclear how PEACE III could ensure longer-term support, creating the need for additional support from donors.

IMPROVING COMMUNITY RESILIENCE IN THE FACE OF CONFLICTS AND ENVIRONMENTAL SHOCKS: MELLIT AND UMMKEDDADA LOCALITIES IN NORTH DARFUR STATE PILOT PROJECT

PROJECT SUMMARY

The one-year pilot “Improving Community Resilience in the Face of Conflicts and Environmental Shocks: Mellit and Umm Keddada Localities in North Darfur State” was carried out from July 2017 to July 2018 under the Toward Enduring Peace in Sudan (TEPS) project funded by USAID. With a focus on two village clusters in the Mellit and Umm Keddada localities (Armal and Abu Homeira) in North Darfur, the pilot carried out a variety of CCA interventions designed to increase community resilience, enhance livelihood strategies, reduce local conflicts and improve NRM.

The areas targeted by the project exhibited some of the key mechanisms through which socio-economic and climatic drivers of conflict interact. North Darfur has been severely affected by recurrent drought and land degradation, with substantial adverse impacts on livelihoods and food security. In this part of Darfur, low-intensity, resource-based conflicts — over farm boundaries, water resources, animal thefts and crop damage — are common among farmers, especially at the beginning of the rainy season. Tensions over land tenure also erupt due to an

informal system that privileges local tribes and makes it difficult for outsiders to be granted land rights. Women play a key role in agriculture and are therefore particularly affected by land degradation, drought and food insecurity. Furthermore, the nearly two decades of war have created a generation of unemployed, poor and aggrieved youth, from which rebel and terrorist groups can recruit.

The pilot addressed these climate–fragility risks by 1) strengthening peacebuilding activities at the local level, with a focus on engaging women and youth; 2) improving NRM to reduce tensions between users; and 3) increasing the resilience of the food production system and food security in support of livelihoods and coexistence. The interventions were based on the assumption that if community capacity to manage and maintain natural resources is improved and if resources are managed in a collaborative and inclusive manner, then intercommunal relations are normalized and the likelihood of conflict over natural resources is reduced.

Activities in the Mellit and Umm Keddada localities of North Darfur State in Sudan

- Establishing a “Higher Committee,” an overarching community peace structure with subcommittees for peace, water, rangelands and forest, microfinance, women and youth.
- Organizing exchange visits and intercommunity dialogue sessions between village clusters with mobile theater and drama shows, among other communication means.
- Constructing two youth centers, which were powered by solar units.
- Organizing training events on peacebuilding, CCA, NRM and microfinance for women and youth, local leaders, farmers, pastoralists and the specialized committees.
- Conducting technical interventions to support climate change resilience, such as the distribution of drought-tolerant crop varieties, the rehabilitation of two water points and trainings on climate-smart husbandry practices.

KEY OUTCOMES

Despite the pilot project’s short, one-year duration, and its start midway through the rainy season, both the target communities and partners, including local government authorities, recognized its contribution to improved resilience to climate change and environmental and economic shocks (USAID, 2019a).

The pilot project strengthened community empowerment through improved integration and expanded inclusivity within local power structures. The peace committees played a critical role, and the involvement of women and youth was essential. The inclusion of women and youth in institutions that had historically been the exclusive domain of tribal leaders and the *ajaweed* (elders and traditional leaders), in turn, was noted to have contributed to the modernization and democratization of peace and conflict institutions during the project (USAID, 2019a).

The assessment also concluded that the pilot helped enhance the resilience of communities to climate change and economic shocks through technical interventions, such as the rehabilitation of water sources and the introduction of solar energy to operate water tanks and provide electricity to the youth centers. Women were given additional economic opportunities and training to establish their own revolving fund groups, and investments were made to introduce potable water sources, liquid petroleum gas for cooking, climate resilient seed varieties and

agricultural implements. This was described as making a significant difference in women's lives and contributing to breaking through their historical isolation.

However, the brevity of the pilot raised concerns about the sustainability of the interventions. The pilot's assessment noted that, for example, there were no clear plans for consolidating, sustaining and scaling up the results in gender empowerment. Similarly, some of the governance systems introduced by the pilot, such as the Higher Committees, were likely to be overshadowed by indigenous tribal institutions, as they still did not have the capacity or legitimacy to resolve larger tribal and intragroup conflicts (USAID, 2019a).

In contrast, the long-term outlook for the technical interventions was more positive. The rehabilitated water sources provided recognizable support to communities and were therefore fully owned, well-guarded and cared for, and likely to be maintained beyond the end of the project. Similarly, as the economic and social gains generated by CCA activities (e.g., climate-resilient seed distribution) were considerable, communities felt encouraged to continue them (USAID, 2019a).

LESSONS LEARNED

Despite its short duration, the TEPS pilot project yielded lessons for integrating CCA into peacebuilding programs (USAID, 2019a).

- *CCA and peacebuilding goals need to be pursued in the context of community dynamics.* In rural areas where the majority of the population depends directly on the land, it was essential to design interventions that recognize and explicitly target the links between NRM, livelihood security and peacebuilding. Using interventions to address livelihood challenges, while creating cooperative processes that bring communities together, helped reduce social and political tensions.
- *Target communities can and should be empowered to take the initiative.* Although the “dependency syndrome” is common in parts of Darfur where humanitarian operations have gone on for decades, the communities targeted by the pilot were willing and prepared to contribute to those activities perceived to address their needs. By actively engaging women and youth, the pilot was able to challenge prevailing cultural stereotypes and contribute to increasing the visibility and inclusion of marginalized groups in key decision-making processes, thus also increasing social cohesion.

As in the case of the other two projects, the assessment of the TEPS pilot also found that long-term engagement was critical to ensuring sustainability. A one-year pilot might be realistic for some types of intervention, but those focused on the annual agricultural cycle likely require at least two full cycles (e.g., two years) to demonstrate sustainable solutions that can be scaled. The pilot was also hindered by its late start toward the end of the rainy season and the drought that occurred during its implementation period. Where rainfall is erratic and the rainy season is short, as in North Darfur, weather-sensitive interventions should be planned well ahead of the rainy season (USAID, 2019a).

IV. ANALYSIS OF FINDINGS

Overall, the assessments of USAID’s peacebuilding projects in the Horn of Africa found positive linkages between interethnic collaboration on CCA activities, improved conflict prevention and mitigation and improved livelihoods. They showed that interventions aimed at creating sustainable livelihoods and improving social cohesion need to be conducted simultaneously, and with a focus on developing inclusive, legitimate and effective governance structures. Thus, they confirmed the need for a holistic approach that includes building resilience to reduce the need for repeated humanitarian assistance and to address chronic vulnerabilities (USAID, 2017b; 2018; 2019a).

This section discusses how the interventions in the three projects contributed to addressing the climate–conflict mechanisms identified above (summarized in Annex B).

MECHANISMS LINKING CLIMATE AND CONFLICT RISKS

USAID’s projects in the Horn of Africa targeted arid and semi-arid lands (ASALs) where communities typically have a high dependency on natural resources for their livelihoods. All regions exhibited a certain degree of conflict, which could be attributed to a combination of climate, socioeconomic and political stressors. Although playing out differently in each context, the findings from the USAID projects and the other programs reviewed illustrate some common mechanisms through which these drivers of conflict interacted:

1. **Reduced livelihood security:** The impacts of climate change in terms of, e.g., rising temperatures, recurrent drought, and unpredictable and unreliable rainfall patterns, can threaten communities’ food and livelihood security. In the long-term, this can affect economic growth potential and cause ecological degradation.
2. **Escalation of tensions due to competition over scarce resources:** Climate change can intensify pressure on resources such as water and land and fuel conflicts that can start taking on ethnic dimensions — especially within and between those communities/societies where ethnic and other divisions are already deeply rooted.
3. **Reinforced patterns of marginalization and exclusion:** Competition over resources can be reinforced where there are multiple, parallel and/or poorly coordinated systems for the administration and governance of land and natural resources. Groups that are already marginalized and excluded from decision-making, such as women and youth, are often particularly affected.
4. **Increased migratory movements:** Food and livelihood insecurity can lead to increased migratory movements to: 1) neighboring communities/regions (sometimes across borders), which can heighten conflict between ethnic and clan groups, especially in situations of resource and land scarcity; and/or 2) urban areas, putting increased

pressure on governments to deliver basic services and provide decent housing and job opportunities.

5. **Fueling terrorism and armed groups:** Increased poverty, inequalities and marginalization, especially in densely populated areas where government/state authorities are weak, can be a breeding ground for non-state armed and/or terrorist groups, posing threats to national, regional and even global stability.

Other peacebuilding programs in ASALs identified similar mechanisms that linked climate, conflict and fragility risks. For example, based on evidence from its interventions in the Horn of Africa, Mercy Corps noted that the effects of climate change — rising temperatures, shifting rainfall patterns — can have harmful environmental impacts, including loss of grazing land for cattle, which in turn cause socioeconomic tensions, such as farmers and herders competing for resources. These interactions contribute to an increased risk of conflict, which is heightened in contexts with weak governance, high rates of poverty, income inequality, and existing social tensions (Mercy Corps, 2019).

BUILDING SOCIAL COHESION AND RESILIENCE

USAID's peacebuilding projects in the Horn of Africa were underpinned by the assumption that social cohesion and sustainable livelihoods are key elements in coping with both conflict and climate-related shocks and stresses. Based on this, the large majority of the interventions aimed at strengthening social cohesion within and between groups.

One approach was establishing community-level decision-making and conflict management structures. For example, PEACE III supported an emerging and growing network of peace committees, women's groups, youth groups and traditional leaders across pastoralist and agro-pastoralist communities in the borderlands of Ethiopia, Kenya, South Sudan and Uganda. This network helped to increase pro-peace public attitudes and institutionalize new forms of dispute resolution within and between communities, in some instances overcoming deep-rooted tensions (USAID, 2018). Similarly, the "Higher Committee" and specialized subcommittees in the TEPS project helped manage day-to-day community problems and disputes (USAID, 2019a).

In many cases, the community structures that were created and/or reinforced through the USAID projects used cooperation over NRM to improve social cohesion. The rehabilitation and sharing of water ponds in the Borana Zone is a powerful example of better cooperation and dialogue building trust and changing attitudes between groups, while also contributing to more sustainable livelihoods (USAID, 2017b). The support that PEACE III provided to the Dodoth and Turkana clans to reach a resource-sharing agreement allowed the communities to profit from increased trading and a shared marketplace; the Turkana were also able to access grazing land, water sources, health clinics and veterinary services in Uganda (USAID, 2018).

At the same time, improved social cohesion within and between communities contributed to better NRM results. For example, the involvement of cross-border women's groups in the

negotiation efforts of PEACE III over natural resource sharing agreements contributed to shifting the attention of communities and local authorities to the need for cooperative and more sustainable NRM and tree planting. Women also served as the eyes and ears of communities, playing a key role in conflict early warning and dissuading community members from aggressive action (USAID, 2018). It is important to note that the three projects aimed not only at improving natural resource and conflict management but also at creating a deeper and broader change in attitudes and narratives about resilience and peace. To this end, they used a combination of interventions, rather than individual activities, including intergroup dialogues, joint NRM activities, training and workshops, theatrical performances and counseling.

Creating more cohesive and inclusive governance structures within communities also increased the uptake and successful implementation of CCA interventions. For example, the cooperative processes supported by PEACE III in the Karamoja cluster helped the implementation of a wide array of climate adaptation measures, including small-scale irrigation, new boreholes, soil and water conservation practices, energy-efficient stoves and tree planting (USAID, 2018).

Evidence from the PCCSR project showed that the reverse relationship was also valid; CCA activities were contributing to social cohesion and peacebuilding. In the Borana Zone, the need to respond to climate change motivated communities to pool their labor and technical knowledge of shared rangelands and water resources, which in turn strengthened social cohesion and trust and helped conflict prevention (USAID, 2017b).

These experiences align with the two pillars of the proposed theory of change presented in this paper:

- *“If social cohesion is key to coping with shocks and stresses, then strengthening it within and between groups makes it possible to manage shocks peacefully.”*
- *“If sustainable livelihoods are the foundation of human security and needed for successfully coping with and recovering from stresses and shocks, then building capacities that support sustainable livelihoods can build resilience and may also mitigate conflict.”*

However, the experiences also point to a number of elements that need to underpin effective interventions:

- While working with community structures, it is important to understand patterns of marginalization and exclusion within them and within societies more broadly, as well as the vulnerabilities of specific groups and/or individuals. The TEPS pilot in Sudan, for example, failed to monitor and mitigate the role of elites in the Abu Homeira village, which led to the perception among communities that some of the project’s benefits were unequally distributed (USAID, 2019a). Instead, the PCCSR project team anticipated the potential capture of Peace Committees by government officials, and the team established the Women’s Peace Networks and Youth Peace and Climate Resilience Clubs to strengthen and build the capacity of marginalized groups to balance the role of formal representatives (USAID, 2017b).

- Building more sustainable livelihoods through improved and more collaborative NRM should be based on the needs of the communities, while recognizing that there will likely be differences among and within groups. For example, the PCCSR project conducted participatory needs assessments and consultations with the communities to prioritize and design its interventions. As a result, all the groups developed plans and agreed on responsibilities ensuring the continuous rehabilitation, shared use and maintenance of selected sites (USAID, 2017b).
- Strong dispute resolution mechanisms were especially important in communities with a history of conflict over NRM and sharing. PEACE III contributed to increasing the network of local, national and cross-border dispute resolution mechanisms. However, it now faces the challenge of embedding them into the routines and standard operating procedures of government officials, traditional leaders and community members, and of ensuring they are supported by policy frameworks, dedicated budget lines and increased resources from host-country governments (USAID, 2018).

BUILDING TRUST BETWEEN COMMUNITIES AND THE GOVERNMENT

In addition to a focus on social cohesion and sustainable livelihoods, USAID’s peacebuilding projects looked at building inclusive and effective governance structures. All the projects included interventions aimed at establishing and developing strong community structures to manage conflicts as well as ensure a more cooperative and effective use of joint natural resources (USAID, 2017b; USAID, 2018; USAID, 2019a).

A focus of the three projects was the establishment of more effective and inclusive institutions and mechanisms for conflict management. For example, the PCCSR project included activities aimed at revitalizing and strengthening the peace centers and improving their communication and linkages with other informal and formal institutions. This helped boost the responsiveness and resilience of local formal and informal government institutions to potential conflict- and/or climate-related shocks and stresses (USAID, 2017b). All the projects emphasized the importance of fostering inclusive institutions. To this end, they employed several mechanisms, from the establishment and resourcing of women’s and youth’s groups with a focus on their economic and social empowerment, to capacity-building and awareness-raising activities to facilitate their inclusion in both traditional and formal decision-making structures.

The projects also attempted to institutionalize the new collaborative relationships through a series of peace and natural resource agreements. These contributed to circulating new norms and practices for the management of natural resources and conflict, and included issues and provisions that went beyond the agenda of peace and NRM, such as water pans and dams, the establishment of markets and trading, and women’s rights. For example, in the Karamoja cluster, PEACE III organized, facilitated or supported several important cross-border peace and natural resource agreements involving communities and government representatives from Ethiopia, Kenya, South Sudan and Uganda. These agreements were found to reflect an evolving conflict management network with an important decision-making function over the use and sharing of natural resources, which helped to reduce conflict — and especially large-scale raids — in the region (USAID, 2018).

The PEACE III project developed collaborations and working relationships with government authorities with a mandate over peace and security at county, national and regional levels. PEACE III interventions included facilitating the establishment of conflict prevention and compensations schemes, and supporting a clearer articulation of the interaction between formal and traditional justice systems. For example, the project worked with Kenya’s National Steering Committee on Peacebuilding and Conflict Management to facilitate its network of peace committees from the county level to subcounties and villages; these were found to play an important role in improving relationships in cross-border areas (USAID, 2018). PEACE III also engaged with the private sector to find collaborative solutions to conflicts related to the trade of livestock and mining operations, which were sources of tensions and conflict in some areas of Karamoja (USAID, 2018).

These experiences align with this paper’s proposed long-term goal to guide theory of change development. Specifically:

- *“If inclusive and effective governance are key to coping with shocks and stresses (including violent conflict and climate change), then developing inclusive, legitimate and effective governance processes based on sustainable livelihoods improves the capacity of communities to manage, adapt to and recover from shocks peacefully while building resilience against climate, conflict and fragility risks.”*

Several elements need to be in place for these types of changes to occur.

- **Where possible, government officials need support to understand and address vulnerabilities and conflicts within their communities.** This can help ensure that institutions are owned by the project beneficiaries and, as such, can be sustained in the long term. For example, the PCCSR project facilitated the development of community bylaws for the management of natural resources by bringing together formal and informal institutions through discussions, workshops, assessments and public events (USAID 2017b).
- **At the same time, new institutions can be useful.** For example, they can support the inclusion of marginalized groups, such as women and youth. However, ways should be found to ensure that they can be maintained and resourced beyond the project’s life cycle and are integrated into other governance mechanisms (USAID, 2017b).
- **Community-level interventions aimed at institution-building need to be linked to structures at higher governance levels in order to be effective and sustainable.** Noting that local government units in Uganda were prevented from playing a constructive role on conflict issues due to funding gaps, Mercy Corps worked with the National Platform for Peacebuilding in the Office of the Prime Minister to include provisions to fill the funding gap in the draft National Peace Policy. This vertical integration should stretch up to the regional level when conflicts have cross-boundary dimensions, as in PEACE III’s collaboration with IGAD (USAID, 2018).
- **Aligning the focus and activities with national development and peace priorities helped the projects establish vertical linkages between governance structures at different levels.** This increases the “buy-in” of key stakeholders and enhances the likelihood that activities can be sustained in the long term. For example, the relevance of the TEPS pilot project in Sudan was largely attributed to the interventions being in line

with the development priorities of the Government of Sudan,⁴ and they were focused on areas which were not previously targeted by other projects and which were highly vulnerable to both climate and conflict risks (USAID, 2019a).

- **Interventions must be accompanied by a focus on improving the accountability and inclusiveness of institutions.** Without this focus, projects may legitimize and thus perpetuate exclusionary policies. The TEPS pilot did this by supporting the modernization and democratization of traditional conflict resolution structures, which were accused of being politicized and accountable to the government instead of the communities (USAID, 2019a).

CROSS-CUTTING THEMES

From the assessment of the three USAID projects in the Horn of Africa, the following cross-cutting themes also emerged:

1. **Critically important is building the enabling environment to achieve sustainable livelihood strategies.** Interventions to improve resource management, climate change adaptation and peacebuilding need to be inscribed within broader, multi-sectoral efforts to create the conditions for these interventions to be sustainable and scalable. For example, the beneficiaries of the PEACE III project in the Karamoja cluster noted the importance of creating new market linkages for pastoralists to sell their cattle more easily and securely (USAID, 2018). The TEPS pilot project in North Darfur demonstrated that, in addition to introducing measures for improved water availability in communities, interventions aimed at providing more reliable and accessible forms of energy were also needed, for example solar power to operate the water yards (USAID, 2019a).
2. **Capacity-building activities need to be designed and targeted so that demand does not outstrip program resources.** The assessment of the TEPS pilot project, for example, noted that trainings generated demand on new topics and attracted members of the community and of neighboring communities that had not yet been reached (USAID, 2019a). Without a clear and strategic prioritization of these demands and needs, there is a risk the project can create or amplify resentment and tensions within and between communities.
3. **A participatory approach to both project design and implementation is critical to ensure the right type of interventions and their sustainability.** This is highlighted in the experience of the PCCSR project in Ethiopia that demonstrated the value of conducting integrated and participatory risk and needs assessments to improve the relevance and effectiveness of the interventions and to increase the trust between project beneficiaries and implementers (USAID, 2017b). The TEPS pilot project in Sudan also highlighted the need to engage local communities and institutions in the implementation of the project. Given farmers' and pastoralists' direct contact with the

⁴ As outlined in the 2016 National Adaptation Plan and the 2013-2019 Darfur Development Strategy.

land and natural resources, they can present solutions that address community needs and are thus more sustainable (USAID, 2019a).

4. **The timeframe and continuity of a project are important considerations.** The assessments of the USAID projects concluded that interventions need to be planned over a multiyear project cycle, as it takes time to get the process right, start the activities, and earn the trust and hence the engagement and commitment of communities. A short timeframe can limit reach and sustainability, as was the case for the one-year TEPS pilot (USAID, 2019a). The timing and sequence of the interventions were also highlighted, especially for activities that are dependent on environmental factors outside of the project's control (e.g., rain or lack thereof). The start of some of TEPS-funded activities late in the rainy season hindered some of the activities and decreased the number of beneficiaries reached (USAID, 2019a).

V. OPPORTUNITIES TO SUPPORT IMPROVED PEACEBUILDING AND CLIMATE ADAPTATION OUTCOMES

There have been limited systematic attempts at measuring integrated peacebuilding and CCA programming objectives (see Annex A). Evidence comes mainly from resilience development projects, for which attempts to monitor and evaluate outcomes in fragile and conflict-affected states have been made. However, these efforts typically do not focus on measuring impacts on peace- and resilience-building as they relate to conflict-related stresses. Similarly, while there is increasing awareness of the impacts that peacebuilding programs can have on communities' ability to withstand climate shocks and stresses, systematic measurement of impacts is limited. This section aims to fill this gap by summarizing findings regarding the elements of program design and evaluation needed to support improved peacebuilding, climate change adaptation and resilience. It proposes a five-phased process for more effective integrated programming.

PHASE 1: UNDERSTAND THE CONTEXT

The three examples of USAID peacebuilding programs in the Horn of Africa showed that context is important and should always be the starting point when examining the climate–conflict linkages and the factors that contribute to fragility. It is essential for practitioners to understand the climate and non-climate drivers of conflict and how they will affect and be affected by the planned interventions. This information can be drawn from climate risk/vulnerability and conflict analysis done at the outset. These assessments should consider the effect of climate change on the fragile or conflictual situation in the future.

USAID guidance on conducting climate-sensitive conflict analysis suggests proceeding in two steps (USAID, 2015). First, it recommends conducting a basic or conflict classic analysis, which describes the context (a range of geographical, political and social factors), the institutional performance (formal and informal rules and institutions in place) and key actors (individuals and organizations that have resources to lead collective action). Second, scenarios should be built based on the analysis of the conflict dynamics to explore how climate change might alter the conflict situation in the future. This scenario-building activity should find hypothetical answers to how climate change might impact context (e.g., water supply, agricultural yields), institutional performance (e.g., basic service delivery, infrastructure), and key actors' interests and attitudes (e.g., exploitation, discrimination). These future impacts need to be tested and refined based on further evidence from the ground.

PHASE 2: CREATE A THEORY OF CHANGE

The hypotheses from the scenario-building exercise can be used to articulate a theory of change. A theory of change can be a useful tool for practitioners to illustrate the relationship between an intervention's components, expected results and assumptions about factors that can enable or inhibit the likelihood of success (PROVIA, 2013). In light of the many uncertainties that surround peacebuilding and CCA interventions in conflict-affected and fragile contexts, a theory of change can thus help spell out how peacebuilding and CCA are linked, for example, how improved NRM contributes to both building resilience against climate shocks and improved relationships between conflict parties.

System-level theories of change are needed to drive holistic programming aimed at simultaneously building social cohesion, inclusive governance structures and sustainable livelihoods. For example, the theory of change underpinning USAID's PEACE III program explicitly acknowledged the linkage between climate change and conflict, opening up the space for interventions that tackled some of the cross-sectoral dimensions of peacebuilding by using CCA as an entry point to improve intercommunal relations. The program also recognized the need for a multilevel approach to peacebuilding at the regional, national and local level, which allowed interventions to tackle, at least partially, the cross-border and multifaceted nature of conflict in the region. More generally, for all three USAID programs in the Horn of Africa, the theory of change proved a helpful tool to spell out the ways in which the different drivers of conflict interacted, set the goals and objectives of the program, and design the strategies and activities to achieve the goals. In the program's evaluation, it provided a reference to identify and correct false assumptions and pinpoint the reasons for achievements and failures, which ideally should occur regularly as part of the M&E process.

PHASE 3: TEST DIFFERENT APPROACHES FOR CONFLICT SENSITIVITY

Once the objectives and goals of the program have been set, the next step is to design the approaches, strategies and interventions. Critically, these should also be tested to ensure they "do no harm," i.e., do not contribute to current conflicts or create new conflict or fragility risks (UNEP, 2019). Therefore, the project's objectives, activities, and intended and unintended results should be continuously monitored and rigorously evaluated. This means checking that certain baseline information has been collected to enable conflict sensitivity measurement (e.g., conflict analysis) as well as to uncover conflict and fragility risks that can affect the project or arise out of the project.

Conflict-sensitive approaches are particularly important for integrated interventions that attempt to build peace and resilience simultaneously, as the interactions among them and with the context are multiple and complex. This dynamic increases the risk of the project "doing harm" through unintended consequences.

Conflict-sensitive monitoring includes reflecting on the interaction between the interventions and the context and adapting strategic and operational plans where necessary. It involves three main elements:

1. Monitoring the conflict context;

2. Monitoring the effects of the conflict context on the intervention;
3. Monitoring the effects of the intervention on the conflict context.

Adopting a conflict-sensitive approach to CCA in fragile contexts is particularly challenging for several reasons. Given limited resources and capacities, adaptation activities might overwhelm institutions, thus unintentionally exacerbating fragility. Adaptation activities might even trigger conflict; as they distribute benefits and resources, they may have an impact on local power dynamics and give rise to tensions, distorted incentives and negative perceptions that may undermine the program. Therefore, adaptation activities require careful attention to the dynamics and drivers underpinning fragility and conflict.

Although conflict-sensitive approaches to CCA are still at the very beginning, substantial work has been done in the peace and conflict community as well as in development cooperation (see, e.g., Conflict Sensitivity Consortium, 2012; USAID, 2015). These provide guidance on approaches to designing and implementing conflict-sensitive programs, as well as the analytical tools that are available to conduct conflict-sensitive monitoring of CCA programs (e.g., conflict analysis, integrated scenario analysis, impact assessment and impact monitoring).

Based on lessons learned from several case studies of CCA programs in fragile and conflict-affected contexts and insights from the peace and development sectors, a recent study by Tänzler et al. (2018) identified principles for their successful implementation. The authors noted that conflict-sensitive CCA programs should be based on a conflict analysis that provides a comprehensive understanding of the fragile situation on the ground. Throughout implementation, the impact of the program on the fragile context (and vice versa) needs to be closely monitored; the program should be able to quickly and smoothly adapt if the situation on the ground changes. The study also highlighted the importance of local ownership, open and transparent communication and a flexible, open-ended program design to support the success of conflict-sensitive approaches.

Existing guidance highlights that the monitoring itself should also be carried out in a conflict-sensitive way. Monitoring processes are typically extractive, where evaluators or interviewers are soliciting information from respondents, and may not be able to immediately address the issues that are emerging. Conflict-sensitive monitoring is being mindful of the way questions are being asked to not exacerbate grievances or tensions or create expectations that will not be met. Special consideration should be given to including vulnerable and/or marginalized groups, such as women and youth, or ethnic/religious minorities, in the process (Conflict Sensitivity Consortium, 2012). As project staff and stakeholders are also part of the system, they might not always be well equipped to conduct objective and conflict-sensitive M&E processes. In these cases, it can be important to bring in an outsider perspective, e.g., through external mid-term reviews.

PHASE 4: MEASURE RESULTS

It is also important to track the impacts of the project — both intended and unintended — to prevent harmful impacts on the context and capture results and lessons learned that can be used to adjust the intervention, as well as inform future programming. The project's M&E

framework thus functions as the “reality check” of a development project; getting it right helps to ensure the project delivers on the expected results and produces the desired changes.

Both peacebuilding and CCA results are often less tangible and more difficult to measure than other development interventions, as they involve changes in the perception of relationships or attitudes. In addition, both kinds of interventions often have long timeframes, so that results might not manifest themselves right away. As a consequence, M&E practice needs to shift from solely monitoring implementation to monitoring results on different levels (output, outcome, impact) and in different ways (qualitative and quantitative indicators) (UNEP, 2019). Moreover, the M&E framework should be able to measure the linkages (and outcomes) that the theory of change targets. Thus, if the activities seek to contribute to peacebuilding through CCA, the M&E framework should be able to pick up the relationship between peacebuilding “inputs” and CCA outcomes (and vice versa), and provide evidence of whether the assumptions of the theory of change were correct or needed to be adapted.

The Flood Resilience Measurement for Communities framework

An example of integrated measurement of the different dimensions of resilience is the Flood Resilience Measurement for Communities (FRMC) framework, which was developed by the Zurich Flood Resilience Alliance to understand community flood resilience before and after a flood happens. The FRMC combined 44 indicators on five complementary “capitals” (human, social, physical, financial and natural) that are assumed to help people on their development path and also provide capacity to withstand and respond to shocks. This systemic approach allowed taking into account the assets, interactions and interconnections at community level and provides consistency when it comes to identifying and testing sources of resilience. Additionally, this is complemented by a post-event review to check whether intended changes have happened and assess the current state of community resilience after a shock/event (Laurien et al., 2019).

To this end, evidence from peacebuilding and CCA programming highlights the importance of:

- **Conducting a thorough and comprehensive baseline study** at the outset of the project. The lack of baseline data hampers the ability of the M&E process to assess the projects’ impacts on local peace and security dynamics, or their implications for non-beneficiaries in the neighboring regions. For example, the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) program added a conflict-sensitive lens to its M&E framework only later, which made it difficult to assess the contribution of its resilience interventions to peace outcomes.
- **Using multiple data collection methods** to understand the different dimensions of peacebuilding and resilience (e.g., Laurien et al., 2019). Quantitative methods such as surveys should be combined with qualitative methods such as key informant interviews and focus groups, with a view to capture changes in attitudes, behaviors and relationships. For example, Mercy Corps’ evaluation of its program in the Horn of Africa included household surveys as well as individual and group interviews. The FRMC developed a practical software application which allowed data to be collected in four ways (household surveys, key informant interviews, focus group discussions, and the use of secondary sources) depending on context and need (Keating et al., 2017).
- **Capturing and measuring unintended outcomes**, e.g., new intragroup grievances if community elites collude in capturing the benefits of the project’s interventions. To this

end, context and interaction indicators can identify significant changes in the context, and whether and how the project may have contributed. These indicators are often measured through qualitative data (e.g., how a community perceives a project or intervention) (UNEP, 2019).⁵

- **Triangulating information** is important for capturing outcomes that are intangible and based on perceptions (e.g., increased well-being or relationships between groups). As these are often people's views and interpretations of the context, and their position within it (rather than "objective" truth), it is important that they are triangulated with information collected through other methods, such as observations, expert interviews or stakeholder consultations.

PHASE 5: LEARN AND ADAPT

Traditional M&E systems that focus on accountability (in particular, reporting to donors and other stakeholders) to measure results can often be seen as having an audit function, especially when funding is dependent on showing particular results and value for money. However, recent research and practice showed that a more flexible approach to learning-by-doing, which includes making errors and adapting the course of action to correct them, might lead to more successful long-term outcomes than a traditional accountability approach (e.g., Bours et al., 2014; Dillon, 2019). For example, USAID's Collaborating, Learning and Adapting Framework provides the tools and resource for the systematic and intentional integration of learning and adaptive program management throughout program cycle (USAID, 2017a; 2019b). The Global Learning for Adaptive Management program is also identifying innovative evidence-based approaches to adaptive management (Wild and Ramalingam, 2018).

This is especially important for integrated peacebuilding and CCA programming, which typically combine different approaches and strategies at multiple levels and take place in highly dynamic and changeable contexts. The M&E of such complex programs is typically difficult, as they tend to be long term. Their impacts may not materialize for years to come and are likely to be affected by circumstances and factors external to the project, which cannot be accounted for. Moreover, many aspects of their interventions are "soft" (e.g., institution building, behavior change), and hence more difficult to capture through formal, quantifiable indicators.

In these cases, M&E processes should be designed to enhance learning in order to adapt the current plan, improve the design of the next project, and allow comparison with other evaluations to generate broader knowledge on the cost-efficiency and impact of interventions (see, e.g., UNEP, 2012). For example, the BRACED program highlighted that the context in which interventions take place is likely to change throughout the course of the project, including as a result of the project itself. As a consequence, its M&E framework focused on capturing and keeping up-to-date the context-specific dynamics affected by and affecting the projects, which allowed for adaptive management and flexibility for "course correction" (Leavy et al., 2018).

Learning needs to be built into the process if it is to be effective. This requires thinking through who needs to learn, what needs to be learned, and how people can provide insight and

⁵ It should be noted that this data can be very sensitive. Therefore, in certain cases, it may be best used internally rather than for external reports, to enable greater openness and better quality responses to monitoring questions.

feedback to ensure learning occurs and feeds into future programming. It is also important to provide opportunities for both short- and long-term learning. In addition to integrating a focus on learning throughout the project's M&E framework, learning across projects is also important — collecting and highlighting good practice examples from the interventions, for example, through case studies or success stories.

VI. CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE PROGRAMMING

USAID's peacebuilding programming in the Horn of Africa clearly illustrated the compound nature of the climate change, conflict and fragility risks, and the potential co-benefits and synergies that can be achieved through integrated programming.

Based on the analysis of USAID's peacebuilding programming in the Horn of Africa, as well as evidence from other programs and literature on addressing compound climate–fragility risks, this section outlines five principles on which integrated peacebuilding and climate resilience programming should be based, and presents recommendations for designing and operationalizing interventions.

FIVE PRINCIPLES OF INTEGRATED PEACEBUILDING AND CLIMATE RESILIENCE PROGRAMMING

Evidence from programs addressing compound climate–fragility risks points to five guiding principles. These largely fall under three areas: building social cohesion and dialogue (principle 1), ensuring that CCA is addressed holistically (principle 2), and fostering effective, legitimate and inclusive governance structures at multiple levels and across sectors (principles 3, 4 and 5).

- 1. Foster social dialogue and cohesion:** Joint and participatory CCA and NRM interventions contribute to strengthening intercommunity relationships and social dialogue. Interventions aimed at improving NRM and CCA can improve livelihoods and livelihood diversification. Especially in climate-fragile contexts, these interventions are preconditions for peacebuilding. Moreover, when framed as responses to external threats to different groups and communities, they offer a strong incentive for interethnic dialogue and collaboration within and between communities, as well as between communities and formal and informal authorities. To this end, they should be complemented by a focus on strengthening dialogue and collaboration, for example, through joint and intercommunal activities such as the rehabilitation of water ponds, or through facilitated negotiations of shared resource agreements.
- 2. Pursue CCA through multi-sectoral investments:** The ability of individuals and communities to cope with climate variability and change is linked to the context and dynamics of their day-to-day lives. In many cases, non-climate solutions, for example focusing on education or the establishment of markets and trade systems, can be the most effective way to enhance individual/household resilience and adaptive capacity.

For example, BRACED projects in Nepal and Sudan combined support for vegetable gardening with nutrition education for pregnant and lactating women, which increased their motivation to grow and eat nutritious food, while at the same time improving their resilience to food security shocks (Leavy et al., 2018). Projects in Chad, Sudan and South Sudan introduced activities aimed at promoting hygiene education (handwashing) and home visits by community facilitators on sanitation to reduce the vulnerability of communities to water-borne diseases such as diarrhea, in turn reducing the losses of productivity due to illnesses and increasing their livelihood security and resilience (Leavy et al., 2018). The USAID-funded Mali Climate Change Adaptation Activity is working to increase the resilience and adaptive capacity of households and communes dependent on rain-fed agriculture through improved production, access and application of timely and localized climate information. When conflict in the region prevents cultivation of larger fields, the project works with individuals and households to apply improved farming techniques on smaller parcels of land close to their homes. While traditional CCA and resilience activities will continue to be important, interventions that target other context-specific sectors can support improved development outcomes broadly.

- 3. Build the capacity of institutions to create an enabling environment for peace and sustainability:** Interventions aimed at CCA, better NRM and peacebuilding require a sustainable and effective enabling environment. Having the right institutions in place is important to ensuring that natural resources are well-managed, access is guaranteed on an equitable basis and conflicts and disputes are prevented or effectively managed. As traditional authorities often play a key role in conflict management at the community level, their involvement and the strengthening of linkages with formal systems is key. Local governments also have a key role to play in ensuring that basic services are effective and accessible, including to the most vulnerable and marginalized groups. Interventions with a capacity-building focus, such as training and workshops on peace and conflict, as well as climate change impacts and adaptation strategies, can be useful but need to be inclusive and contextually appropriate. Therefore, integrated programs should include interventions to build and/or reinforce the policy and governance framework and capacities for CCA, NRM and peacebuilding at the national and local level, working with both formal and informal institutions.
- 4. Make governance inclusive:** Making governance frameworks more inclusive contributes to peace and resilience outcomes, as exclusion and marginalization can be drivers of conflict. Interventions should target governance mechanisms, both formal and informal, enabling them to integrate marginalized groups — and especially women and youth — into their decision-making structures. Supporting the creation of new institutions can also be a useful way to start redressing deep-rooted inequities. However, it is critical that these interventions are supported by adequate and continuous resources and capacities and embedded into formal and informal institutions at different levels. Otherwise, they risk increasing disconnectedness, overlaps and conflicts on resources, roles and responsibilities.

- 5. Establish intra- and inter-governmental cooperation:** Establishing vertical and horizontal linkages between formal and informal institutions that have a role in promoting sustainable natural resource use can bring about opportunities for broader development and security outcomes. Interventions aimed at strengthening governance structures for peace and resilience should target both formal and informal institutions and ensure they build linkages between them (e.g., between local authorities and national governments, as well as at the transboundary and regional level). A focus on increasing the capacity and awareness of local and national government institutions at different levels to respond to potential conflict and the aftermath of conflict can increase their legitimacy and effectiveness, build trust and strengthen relationships with communities. In turn, this can bring about opportunities to establish more effective mechanisms for early warning and early response to conflict and delineate a stronger governance framework to achieve both security and development outcomes.

RECOMMENDATIONS FOR INTEGRATING PEACEBUILDING AND CLIMATE RESILIENCE PROGRAMMING

RECOMMENDATION 1: CONDUCT LOCAL ANALYSES OF THE LINKS BETWEEN CLIMATE, CONFLICT AND FRAGILITY TO IDENTIFY RISKS AND TARGET INTERVENTIONS

To deliver both peacebuilding and resilience results, programming in fragile and conflict-affected states needs to incorporate an understanding of the links between climate, conflict and fragility risks. To this end, peacebuilding programming should include:

Conflict-sensitive risk assessments that combine locally specific climate, conflict and fragility data, based on participatory and inclusive methodologies and frameworks, and that establish baseline conflict, climate and fragility conditions that provide the evidence for future programming. These assessments should identify the mechanisms by which compound climate–fragility risks interact by delineating both vertical and horizontal linkages within and between communities and authorities at different levels. Assessments should be ongoing and kept up-to-date to reflect the dynamic nature of the risks involved. Conflict-relevant baseline analyses should also be conducted to inform M&E plans.

A robust and clear theory of change that explains how a project or program tries to improve resilience to both conflict and climate-related shocks and stresses through interventions that foster social cohesion, inclusive governance and sustainable livelihoods. This implies integrating the goal of building the resilience of communities and institutions to climate-related shocks and stresses as an outcome of the project, which reinforces and is reinforced by peacebuilding activities and results. The theory of change should be updated during the project to determine if the assumptions are still valid or need to be modified.

An integrated M&E framework that captures results for all the intended and unintended outcomes and impacts — as per the project’s theory of change. It should rely on a wide range of

qualitative and quantitative methods for data collection and analysis, including, for example, the combination of locally based, participatory conflict analysis on the ground with satellite climate data. The M&E framework should capture unintended and intangible results through the use of context, interaction and perceptions indicators. Lessons learned from the M&E process should be used to inform future programming and should be shared with other projects and programs.

RECOMMENDATION 2: ENSURE LONG-TERM COMMITMENT WITH A FOCUS ON PARTICIPATION AND FLEXIBILITY

Building both resilience and peace are long-term processes requiring commitment and flexibility from donors, implementing parties and beneficiaries. Integrated peacebuilding and CCA programs should:

Give adequate consideration to financing and timing: Financing for peacebuilding programs must be flexible to adapt the interventions to reflect the changing circumstances on the ground — due to the impact of the program or to external factors such as unanticipated security, political or climate events (e.g., the election of a new government, or a flood or drought). The right financing tools need to be selected for the projects to deliver the incentives for stability, rather than fueling predatory behavior and competition between project beneficiaries. Overall, financing should respond to local situations and allow for an adequate mix of budget support and project-based funds. The timeframe of the financing should ensure the ability to act quickly but also to stay engaged over a longer time.

Adopt a participatory approach: A participatory approach to the design and implementation of interventions can help ensure the buy-in and commitment of the beneficiaries, so that interventions are sustainable beyond the project's life and negative unintended effects are avoided (e.g., donor dependency, consolidation of patterns of exclusion, worsening tensions, etc.).

Flexible and coordinated programming: Building resilience is a long-term process that requires commitment and flexibility from donors to adapt programming to changed circumstances on the ground. Interventions should be coherent, complementary and supported by other aspects of engagement, including through the foreign, security and trade policies of governments.

RECOMMENDATIONS FOR FURTHER RESEARCH

There is a growing body of literature on the compound risks of climate change and conflict and the integrated approaches to address them. This is an evolving field, and more evidence-based guidance is needed in several areas.

First, more evidence is needed on the links between climate change, governance and peacebuilding, and on what works/does not work in addressing climate-related conflict risks in highly dense and complex urban contexts. Currently, over 4.2 billion people live in urban areas;

this number is projected to rise to 6 billion by 2045, with most of the growth taking place in Asia and Africa (UNDESA, 2016; 2018). As it has become more evident over the past decade that compound climate–fragility risks can also affect cities, many donor agencies have started to urbanize some of their responses. However, most practitioners still lack the practical guidance to capitalize on what cities have to offer and to take the long-term view to help build resilience.

Additional evidence is also needed on the elements and approach to develop and apply an integrated M&E framework that captures peace and resilience results and ensures that learning informs future programming. As USAID’s projects in the Horn of Africa are among the few examples of interventions combining peacebuilding and resilience outcomes, it would be helpful to conduct a full review of the M&E framework and approach employed, in order to identify best practices and gaps.

Finally, current guidance on conflict- and climate-sensitive programming in fragile and conflict-affected contexts should be updated with the evidence that has emerged through the analysis of this review. New methodological developments to identify multiple risks and their interactions, for example, by integrating locally grounded conflict analysis with climate and hydrological information (see Vivekananda et al., 2019), should also be reflected and incorporated into peacebuilding and CCA programming.

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ANNEX A: SUMMARY OF USAID’S INTERVENTIONS IN THE HORN OF AFRICA

Type of intervention	Climate-fragility mechanisms addressed	Results	Limitations and Lessons Learned
Integrated and participatory risk and needs assessment	<ul style="list-style-type: none"> • Livelihood insecurity • Reinforced patterns of marginalization and exclusion 	<ul style="list-style-type: none"> • Improved relevance of interventions and buy-in, and response to community priorities • Increased trust between project staff and local stakeholders • More understanding of climate and conflict risks 	<ul style="list-style-type: none"> • Thoroughness and inclusiveness of the process partially defines success • Local implementing partner is crucial as driver of the process
Joint CCA/NRM interventions (e.g., rehabilitation of water ponds, introduction of drought-resilient crop varieties, renewable energy sources, etc.)	<ul style="list-style-type: none"> • Livelihood insecurity • Escalation of tensions due to competition over scarce resources 	<ul style="list-style-type: none"> • Increased communities’ adaptive capacity to climate stresses through tangible improvements in agricultural yields, water availability, etc. • Created intergroup linkages and favored the exchange of learnings and best practices on NRM and CCA • Improved dialogue and relations within and between communities 	<ul style="list-style-type: none"> • Can reinforce existing patterns of exclusion and marginalization and hence resentment/conflict within and between communities • Time-sensitive and highly vulnerable to environmental and climatic conditions
Capacity-building and training on CCA, diversified livelihoods, etc.	<ul style="list-style-type: none"> • Livelihood insecurity 	<ul style="list-style-type: none"> • Establishment of a knowledge base on adaptation and nonviolent coping mechanisms to climate variability • Improved livelihood security and economic empowerment of marginalized groups 	<ul style="list-style-type: none"> • Demand can outstrip available resources if not well-planned and prioritized
Institutions and mechanisms to include marginalized people/groups (e.g., women and youth)	<ul style="list-style-type: none"> • Reinforced patterns of marginalization and exclusion 	<ul style="list-style-type: none"> • Reduced vulnerability to climate and conflict-related risks • Uptake of important roles in the community structures • Challenged exclusionary conflict narratives and behaviors toward more social cohesion 	<ul style="list-style-type: none"> • Success requires deeper social and institutional changes that are more complex and take longer to achieve • Risk of donor dependency if not continued and adequately resourced
Capacity-building and resourcing of networks of peace actors, including women and youth	<ul style="list-style-type: none"> • Reinforced patterns of marginalization and exclusion 	<ul style="list-style-type: none"> • Broadened the skill base at horizontal and vertical levels for PMR • Supported reflection on conflict narratives and development of less conflict-focused narratives 	<ul style="list-style-type: none"> • Conflict-sensitive capacity-building needs to address power holders and marginalized groups at the same time to avoid resistance and exclusion
Revitalization and strengthening of peace committees to increase inclusivity and	<ul style="list-style-type: none"> • Escalation of tensions due to competition over scarce resources 	<ul style="list-style-type: none"> • Improved conflict resilience through collaborative community actions on climate vulnerabilities • Strengthened capacity of communities in PMR 	<ul style="list-style-type: none"> • Lack of legitimacy of local institutions at national level on security issues • Potential domination of government stakeholders

Type of intervention	Climate-fragility mechanisms addressed	Results	Limitations and Lessons Learned
connection with formal justice system		<ul style="list-style-type: none"> Improved social cohesion and dialogue between communities/groups Increased capacity and responsibility for addressing other community development issues 	<ul style="list-style-type: none"> Requires assessment of whether existing institutions can be used, or how to integrate new ones
Intergroup/cross-border dialogues, negotiations, sports and cultural events	<ul style="list-style-type: none"> Escalation of tensions due to competition over scarce resources 	<ul style="list-style-type: none"> Improved social cohesion and dialogue between cross-border communities and leaders Supported more inclusive narratives Addressed past grievances 	<ul style="list-style-type: none"> Strengthening of conflict resilience is based on a structured, labor-intensive, sequential and iterative approach, which is time- and resource-intensive
Community bylaws and agreements on joint use of NRM	<ul style="list-style-type: none"> Escalation of tensions due to competition over scarce resources 	<ul style="list-style-type: none"> Strengthened informal community structures and established linkages with formal ones Supported the recognition and uptake of a variety of community needs at multiple levels 	<ul style="list-style-type: none"> Elaboration, formalization and implementation of bylaws and agreements needs time and work on enabling environment to be sustainable
Capacity-building and awareness-raising activities on peacebuilding, risk analysis and mitigation	<ul style="list-style-type: none"> Escalation of tensions due to competition over scarce resources 	<ul style="list-style-type: none"> Experimented with different ways to engage project beneficiaries, e.g., through theater plays, discussions, radio, communication material, etc. Enhanced awareness and understanding of climate and conflict compound risks 	<ul style="list-style-type: none"> Demand can outstrip available resources if not well-planned and prioritized Must ensure differentiation between targeted training and broader outreach
Support to peacebuilding and security activities across borders	<ul style="list-style-type: none"> Escalation of tensions due to competition over scarce resources Increased migratory movements 	<ul style="list-style-type: none"> Development of PMR strategies to balance livelihood needs of host and migrant communities and roles and responsibilities of different formal institutions 	<ul style="list-style-type: none"> Needs continuous resourcing Requires alignment with governments' priorities and agendas
Capacity-building/training for unemployed youth and pastoralist dropouts	<ul style="list-style-type: none"> Increased migratory movements Livelihood insecurity 	<ul style="list-style-type: none"> Supporting adoption of new livelihood strategies and complementary education Economic empowerment of youth contributes to reducing potential for tensions/violence in communities 	<ul style="list-style-type: none"> Large-scale migration to urban settlements is outstripping current efforts Governments' lack of resources challenges sustainability of efforts
Collaboration on cross-border security policies/initiatives	<ul style="list-style-type: none"> Fueling terrorism and armed groups 	<ul style="list-style-type: none"> Laying the groundwork for mechanisms for early warning and early response to conflict and delineating a stronger institutional framework 	<ul style="list-style-type: none"> External factors can generate further vulnerability, e.g., circulation of illicit arms, political instability, etc.

Type of intervention	Climate-fragility mechanisms addressed	Results	Limitations and Lessons Learned
Outreach to support community engagement and trust-building with border and security forces	<ul style="list-style-type: none"> Fueling terrorism and armed groups 	<ul style="list-style-type: none"> Established regular exchange and communication between communities and security actors Strengthened role and capacity of informal structures to liaise with formal government ones 	<ul style="list-style-type: none"> High level of conflict sensitivity and close monitoring needed to not further aggravate conflict, tensions and grievances
Reintegration of former combatants	<ul style="list-style-type: none"> Fueling terrorism and armed groups 	<ul style="list-style-type: none"> Demobilization of armed groups and integration into NRM or disaster risk reduction structures Trauma healing to support reintegration 	<ul style="list-style-type: none"> High level of conflict sensitivity and close monitoring needed to not further aggravate conflict, tensions and grievances

**ANNEX B: APPROACHES TO INTEGRATING CLIMATE
CHANGE ADAPTATION IN PEACEBUILDING
PROGRAMMING: A LITERATURE REVIEW**



USAID
FROM THE AMERICAN PEOPLE

LITERATURE REVIEW

**PATHWAYS TO PEACE: ADDRESSING CONFLICT AND
STRENGTHENING STABILITY IN A CHANGING CLIMATE**
**APPROACHES TO INTEGRATING CLIMATE CHANGE ADAPTATION IN
PEACEBUILDING PROGRAMMING: A LITERATURE REVIEW**



January 2020

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APPROACHES TO INTEGRATING CLIMATE CHANGE ADAPTATION IN PEACEBUILDING PROGRAMMING: A LITERATURE REVIEW

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Table 2. Key indicators of a conflict-sensitive M&E framework. Source: Conflict Sensitivity Consortium (2012).22

ACRONYMS

BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
CCA	Climate change adaptation
CLA	Collaborating, Learning and Adapting program
M&E	Monitoring and Evaluation
NSAG	Nonstate armed groups
ODI	Overseas Development Institute
OECD	Organization for Economic Cooperation and Development
PCCSR	Peace Centers for Climate and Social Resilience
UBA	German Environment Agency
UNEP	United Nations Environment Program
USAID	United States Agency for International Development

I. INTRODUCTION

BACKGROUND

There is increasing recognition that, by threatening livelihoods and reducing economic growth potential, climate variability and change can fuel ongoing conflicts and/or contribute to the emergence of new ones. This is especially the case for communities that are highly dependent on natural resources for their livelihoods, and in situations where other stressors are at play, such as socio/ethnic/historical tensions, large-scale land development and population growth.

In recent years, a growing number of studies analyzing the relationship between climate change and violent conflict, both quantitatively and qualitatively, have appeared. While the research offers a comprehensive and systematic assessment of emerging climate–security risks, the literature remains largely conceptual or case-study based and thus presents challenges for drawing conclusions at scale or across geographies. Additionally, there is still a lack of understanding of the extent of the connection and how to quantify it in specific contexts.

In those regions where communities are highly dependent on natural resources for their livelihoods, climate change can be a strong driver of conflict, for example, by increasing the frequency and severity of drought events or flooding which can increase competition for viable pasture and water resources. Climate change often combines with, and can exacerbate, social and economic factors, such as deeply rooted ethnic tensions, lack or unequal access to basic services and large-scale land development. This underscores the importance of context in examining how and to what extent climate change acts as a driver of conflict.

Policymakers and practitioners, as well as affected communities, are already facing these challenges on the ground. Therefore, new approaches are needed to conflict prevention, mitigation and resolution that simultaneously build resilience and address climate-related risks which directly and/or indirectly contribute to tensions, likely over land or natural resources.

The United States Agency for International Development (USAID) has been at the forefront of efforts aimed at developing and implementing strategic programming which addresses the likelihood of conflict over natural resources through improved intercommunal relations and broad and inclusive governance structures (i.e., structures which allow all stakeholders to effectively engage in peacebuilding processes and management of shared natural resources). USAID (2015) outlined a set of principles to be considered from planning to implementation for its engagement in conflict contexts (see text box). These have been designed to complement USAID's Climate-Resilient Development Framework, which outlines an approach for helping USAID and its partners achieve development objectives in the face of climate variability and change.

USAID's GENERAL PRINCIPLES FOR CLIMATE CHANGE PROGRAMMING IN FRAGILE AND CONFLICT-AFFECTED STATES

The following principles provide guidance for programming that incorporates climate change in fragile and conflict-affected states:

- Take context as a starting point
- Ensure all activities are conflict sensitive
- Focus on bolstering institutions and good governance
- State a clear, credible theory of change
- Address state and societal dimensions of the challenge
- Approach adaptation holistically
- Remain flexible

METHODOLOGY

This literature review documents evidence and practice from USAID and other donor organizations on using climate change adaptation (CCA) interventions to support peacebuilding objectives. It identifies what has been attempted in this field in order to inform new approaches to development assistance that simultaneously build resilience and address those climate-related risks.

The literature review will inform a technical paper that discusses lessons learned about peacebuilding strategies and recommends interventions which (1) promote adaptive practices to improve resilience to climate variability and change and (2) strengthen local institutions and governance structures relevant to climate resilience and peace building to further enable social cohesion and community resilience.

It is important to highlight that the literature review looks at occasions where peacebuilding programming has had an impact on climate resilience. It also looks at attempts to use CCA activities to advance peacebuilding goals. The focus is thus on development assistance, rather than humanitarian programming. The review assesses the scope for integrating CCA and peacebuilding programming, as well as possible modes of engagement.

With the above purposes in mind, this review is structured as follows:

- **Context setting:** Reviews the existing evidence of the linkages between climate variability and change, conflict and fragility;
- **Principles:** Analyzes the approaches that policymakers and practitioners have developed to guide their programming in fragile and conflict-affected contexts;
- **Evaluation:** Looks at monitoring and evaluation (M&E) frameworks for peacebuilding and CCA programming;
- **Conclusion:** Presents lessons learned and recommendations for further research to inform future climate-sensitive peacebuilding programs.

II. CONTEXT SETTING: EXAMINING THE EVIDENCE BASE CONNECTING CLIMATE, CONFLICT AND FRAGILITY

EVIDENCE FROM THE RESEARCH

In recent years, a growing number of studies analyzing the relationships between climate change, fragility and conflict risks have appeared. This section provides a review of the research with a view to better understanding the debate and analyzes the evidence base supporting the design and implementation of peacebuilding programs that attempt to address these linkages.

CLIMATE CHANGE AS A THREAT TO SECURITY

Much of the literature focuses on the role of climate change in exacerbating resource scarcities and generating new conflicts and security challenges. A resurgence of Homer-Dixon's (1994) "resource wars" thesis and an oversimplification of his arguments by others throughout the 2000s frames climate change as instigating or escalating violent conflict from reduced crop yields, scarce water resources, and drought and disasters related to climate extremes (CNA, 2007; Parry et al., 2007; Brauch et al., 2009; Evans, 2010). Interpretations of his approach are often overly deterministic, reductionist and less useful for practitioners looking to undertake programming that deals with the links between climate change and conflict in complex environments.

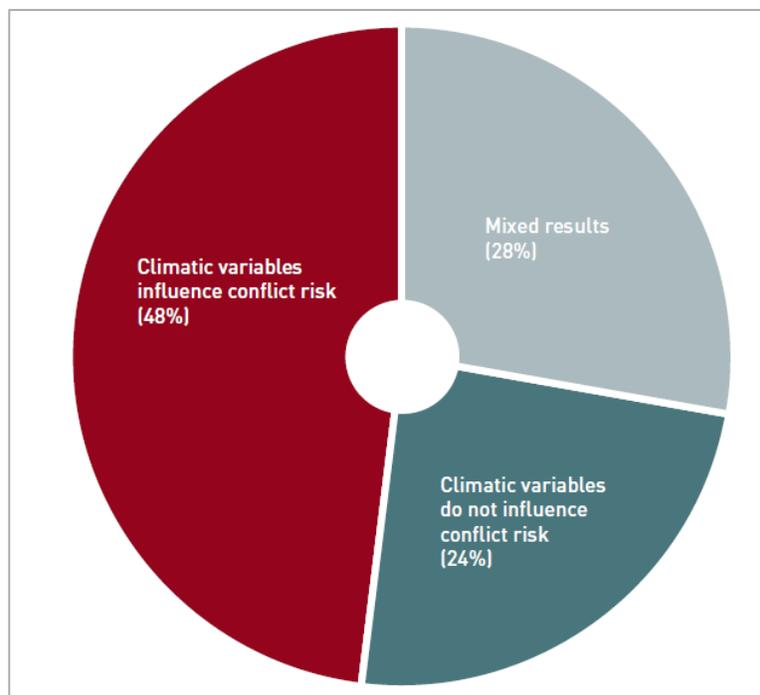
A second school of literature suggests that the effectiveness of governance and institutions in responding to climate variability and change will determine the likelihood of violent conflict and/or collaboration around natural resources. This line of enquiry argues that understanding the likely impact of climate change on peace and security requires focusing on institutional structures, governance mechanisms and natural resource management, which mediate these relationships (Lind et al., 2010; Schoch, 2011). Proponents of this perspective do not deny the impact a changing climate may have on natural resource availability and the potential to add strain to existing conflict dynamics (or create new ones). However, they stress that "... *climate change factors do not cause violent conflict, but rather affect the parameters that are sometimes important in generating violent conflict*" (Barnett and Adger, 2007). In other words, climate change and resource scarcity are "threat multipliers" with the potential to increase the risk of conflict, but are not necessarily their direct cause (Evans, 2010).

QUANTITATIVE APPROACHES TO CLIMATE CONFLICT RESEARCH

In recent years, a growing number of studies analyzing the statistical relationship between climate change, conflict and fragility have appeared. This research offers a comprehensive and systematic assessment of emerging climate–fragility risks. However, it also shows that indicators of climate and conflict do not interact in a uniform and unambiguous way (Detges, 2017). For example, while some studies find a systematic link between higher levels of climatic stress and insecurity (e.g., Burke et al., 2015), other analyses conclude that higher temperatures, excessive rainfall variability and similar variables do not influence the risk of armed conflicts and political instability (e.g., Buhaug, 2010; Buhaug et al., 2014), or produce mixed evidence (e.g., O’Loughlin et al., 2012). There is even some evidence that countries that are affected by climate-related natural disasters face a lower risk of civil war (Slettebak, 2012).

The failure of the subject literature to converge toward a single robust finding becomes particularly apparent when looking at the record of studies investigating the effect of climate variables on the risk of violent conflict and political instability (see Figure 1).

Figure 1. Results of large-N analyses that study the relationship between climate and violent conflict or political instability (Source: Detges, 2017, p. 2)



Although this does not imply that the link is absent overall, it clearly highlights some limitations of quantitative methodologies to study the linkages between climate, conflict and fragility risks. A 2017 study by adelphi identified several factors that make it difficult to prove the climate-fragility link quantitatively (Detges, 2017).

First, there are no single agreed-upon metrics for calculating climate and conflict outcomes. The statistical analyses in this domain use measures as diverse as monthly changes in temperatures, or yearly deviations from historical precipitation averages as the independent variables. Likewise, commonly used dependent variables include a wide range of phenomena, from civil war to local clashes between ethnic groups. There is also important heterogeneity in spatial and temporal scales from the local to the international level, as well as from weekly and monthly observations over the course of a few years to decadal observations over the course of centuries (Scheffran et al., 2012; Tir and Stinnett, 2012; Linke et al., 2015). These differences not only account for important deviations in the results of statistical analysis, but also make it difficult to compare findings across studies and draw more general conclusions about the relationship between climate and conflict (Detges, 2017).

Second, the connection between climate and conflict is often indirect and mediated by social and economic effects, which translate adverse environmental changes into tangible challenges to human livelihoods and political institutions. This makes it difficult to describe it through large-N quantitative studies (see, e.g., Carleton et al., 2016). Some more sophisticated statistical models have recently allowed for rudimentary tests of causal linkages suggested in the case study literature on climate and conflict. However, this research is still in an early stage, mostly because comprehensive data on a range of possible intermediary variables does not yet exist, and a number of concepts that are supposedly relevant for understanding the climate–conflict nexus, such as identity politics or grievances, are inherently difficult to quantify (Detges, 2017).

More generally, more research is needed conducting spatial and temporal disaggregation, with a focus on political violence beyond civil war and examining indirect mechanisms and intervening factors (Buhaug et al., 2014). Other areas left uncovered by these studies included understanding the mechanisms linking climate to conflict, the ability of societies to adapt to climate change and the possible impacts of future global warming (Burke et al., 2015; Carleton et al., 2016).

QUALITATIVE APPROACHES TO UNDERSTANDING CLIMATE–FRAGILITY RISKS

The impact of climate change on conflict and fragility depends on political and social factors, which are crucial to take into account in order to make precise projections about the possible future occurrence of conflict (Salehyan, 2014). A deterministic view that climate change and related resource scarcity will directly impact conflict may not be possible. Therefore, it has been suggested that empirical research should focus on developing better measures of political institutions and of environmental stress, and look for interactive contingent effects between environmental conditions and political variables (Salehyan, 2008; Salehyan and Hendrix, 2014).

Along these lines, recent studies have focused more specifically on when, where and how particular compound climate–fragility risks are likely to emerge, and have introduced qualitative methodologies to investigate the relationship in specific contexts. Five key findings emerge from these studies.

1. Livelihoods and food security

Climate change does not drive conflict in a vacuum but contributes to conflict in already fragile contexts and in combination with a number of other critical factors. Several critical factors are particularly influential for conflict risk, including low socioeconomic development, low capabilities of the state, intergroup inequality and a history of violence (Nett and Rüttinger, 2016). A 2015 study by adelphi (Rüttinger et al., 2015) proposed seven compound climate–fragility risks (see Figure 2). In its 2015 report, “Promoting Climate-Resilient Peacebuilding in Fragile States,” the International Institute for Sustainable Development reiterated that climate change is a “threat multiplier” with the potential to exacerbate existing challenges through increasing competition over natural resources, displacement and migration, and the burden on state institutions (Crawford et al., 2015). Where it emerges, the relationship between climate and conflict is mediated by social and economic factors. The Intergovernmental Panel on Climate Change (IPCC) AR5 acknowledges that “... material aspects of life and livelihood, such as food, water and shelter are closely coupled to weather and climate but also to multiple factors in the economy and society” (IPCC, 2014).

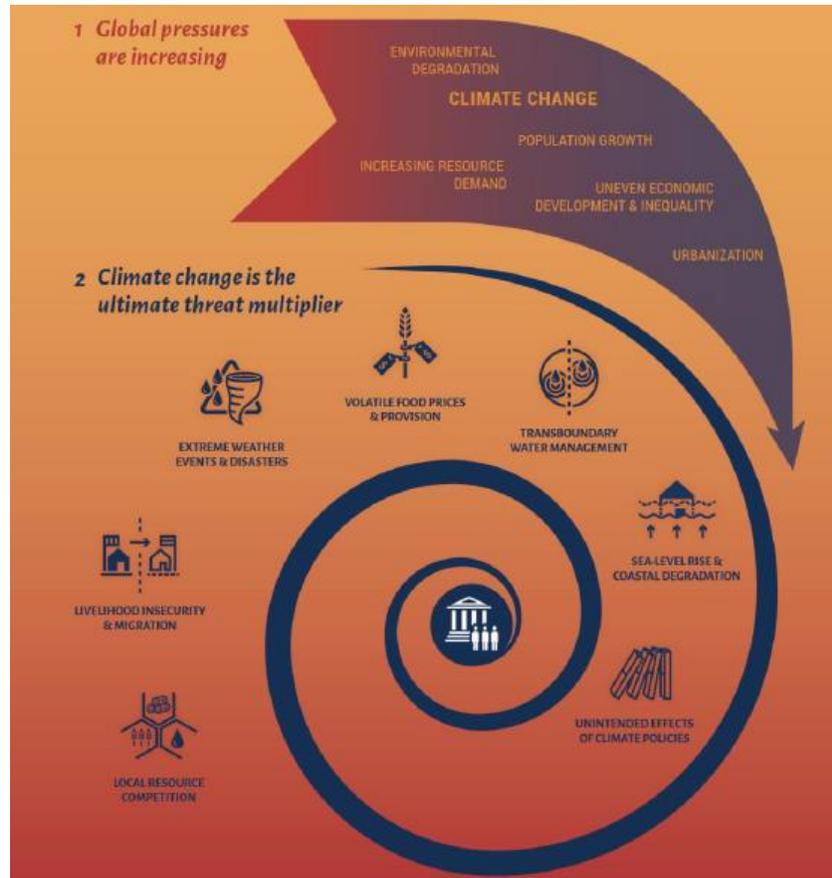
The evidence strongly converges around the impacts of climate change on natural resource-dependent livelihoods as a key conduit for climate–fragility-risks (Stark et al., 2009). For example, climate change was found to impact natural resource-dependent livelihoods most directly through a decrease in agricultural yields, the gradual unsuitability of traditional grazing grounds or reduced water availability (Stark et al., 2009). A climate-related security risk assessment of the Fergana Valley in Central Asia concluded that reduced access to natural resources due to the impacts of climate change had led to the intensification of border conflicts (Mirimanova et al., 2018). Declining rural incomes have been shown to play an especially key role in connecting climatic shocks and conflict risk in some countries (Detges, 2017). In a recent study published in *Nature*, the authors noted that economic shocks and dependency on natural resources were the most likely climate–conflict linkages across experiences to date. However, there is still low confidence in the exact mechanisms through which climate affects the risk of conflict (Mach et al., 2019).

There is also growing evidence of the indirect impacts of climate change on global supply chains. While increased hunger or unemployment is most clearly evidenced at the local level, research has also focused on the global nature of food production and value chains, and corresponding evidence that local or national declines in food production may have implications for many other parts of the world (Gregory et al., 2005). Urban areas are heavily reliant on food supplies from both rural domestic and international markets. In some contexts characterized by regional instability, such as Egypt, dependence on climate-sensitive food imports (e.g., wheat from China) has been shown to contribute to instability in the face of widespread crop failure owing to drought (Werrell and Femia, 2013).

Many markets for food imports have arisen through improved transportation networks and are affected by oil supplies and prices, which also will be subject to policy decisions regarding climate change. A study by Chatham House analyzing the so-called “food riots” in Bangladesh, Haiti, Pakistan, Burkina Faso and Mexico in 2008 found that the problem was not due to food prices alone. Rather, “*the combination of food and fuel inflation emerged as a highly contentious political issue,*” which, along with other political grievances and dissatisfaction with existing

governance mechanisms, “*led to violence or civil unrest*” (Evans, 2009). While most incidences of food-related instability are documented in cities, there is a notable bias in the literature to focus on rural (rather than urban) livelihoods, food security and conflict.

Figure 2. Seven compound climate-fragility risks (Source: Rüttinger et al., 2015, p. 73)



2. Governance

Changes to the availability of natural resources that are essential for livelihoods and food security were observed to affect the risk of conflict in combination with pre-existing contextual challenges such as a history of conflict or the presence of marginalized groups. Livelihood vulnerability was also associated with non-climate factors, such as unequal land distribution, insecure land tenure, unsustainable resource management practices, poorly developed markets, existing trade barriers and inadequate infrastructure. In other words, resource availability must be seen in the context of the overall political economy (Evans, 2010).

This implies that understanding the risk of conflict linked to climate would require grasping the role of governance in planning and regulating development, ensuring access to land, providing infrastructure support to mitigate risks from sudden-onset disasters, and promoting livelihood diversification (UNEP, 2011). Despite this, the literature exploring the links between climate change and security still largely fails to include the role of governance and power (see, for example, Hsiang and Burke, 2014).

The role of governance in mediating climate change, fragility and conflict was observed in a range of different contexts from the Sahel to South Asia, Central Asia, Latin America and Africa (UNEP, 2011; Vivekananda et al., 2014; Janes, 2010; Stark et al., 2009; Goulden and Few, 2011). More generally, several studies have homed in on geographical areas that are more vulnerable to climate-related security risks. For example, USAID has found that people living in high-exposure areas are mostly located in sub-Saharan Africa, followed by the Middle East and North Africa and South and Southeast Asia (USAID, 2018b). In a study exploring the potential impacts of climate change on migration and conflict dynamics in the Sahel, UNEP found that greater risk lies with communities that lack the institutions, economic stability, civil voice and social capital to withstand increases in the frequency and severity of climate change will be most at risk of political instability of conflict (UNEP, 2011). Good governance, rule of law, education and economic development are all key factors that determine a state's ability to adapt and hence withstand the security risks posed by climate change (Mazo, 2010).

3. Governance and social contract

Most of the conflict and peacebuilding literature stresses the importance of government legitimacy and effectiveness, measured by public perceptions, as factors in the outbreak of violence. A key characteristic of fragility is failure of the state to guarantee core functions, such as law and public order, welfare, participation and basic public services (e.g., infrastructure, health and education), or the monopoly on the use of force. As the risks faced by citizens get more complex, the pressure on governments increases and fault lines in weak governance and social bonds become more apparent. When the state is perceived to be failing to fulfil its duties, the social contract is eroded and the risk of civil unrest increases (Kaplan, 2009). In turn, unmet expectations can lead to frustration and aggression against a society's ruling authorities. Tremblay et al. (2003) argue that when parties engage in violence, *"it is frequently due to the lack of residual support or political legitimacy that the state experiences and to the breakdown of the normative ordering."*

There is an increasing number of case studies documenting how climate change undermines the ability of governments to fulfil their role (see, for example, Werrell and Femia, 2013; Vivekananda et al., 2019). Several studies confirmed that violence in connection with climatic extremes is more likely to occur in places where institutions are less effective, people are excluded from power and essential services are difficult to obtain (see, e.g., Detges, 2017). Thus, it is not the magnitude of climate change that threatens stability, but the difference between the rate of climate change and a society's ability to adapt (Mazo, 2010). Along these lines, recent research suggested that state actions responding to climate vulnerabilities can simultaneously reduce climate risks and the legitimacy deficits that often contribute most heavily to fragility in these states (USAID, 2018b).

The negative impacts of climate change on livelihoods in many countries and regions (e.g., through food insecurity or water/land scarcities) have also been linked to the proliferation of terrorism and organized crime. A 2016 study by adelphi has investigated this relationship using Lake Chad, Syria, Afghanistan and Guatemala as case studies (Nett and Rüttinger, 2016). The authors found that large-scale environmental and climatic changes resulted in increased

national and household level fragility and fostered an economic, social and political environment in which nonstate armed groups (NSAG) can thrive. In these contexts, NSAG can more easily recruit new members by offering alternative livelihoods and economic incentives, and often use natural resources as a weapon of warfare, further exacerbating climate–fragility risks (Nett and Rüttinger, 2016).

4. Peace-positive climate change adaptation

Climate change adaptation in support of peace and stability is a new idea gaining traction. The proposition is that CCA can have a stabilizing influence on weak or fragile states (Tänzler et al., 2013). For example, Tänzler et al. (2013) suggested that—providing conflict-sensitive approaches are adopted—CCA measures have the potential to help reduce the security risks posed by climate change, thus making a positive contribution toward peace and security. Others have observed that climate change mitigation and adaptation measures can achieve stability and peace outcomes if implemented together with interventions aimed at poverty alleviation and improved education, especially in the global south (Hegre et al., 2016).

A recent study of resilience projects in flood-prone informal urban settlements found that these interventions can reduce conflict, crime and insecurity as well as vulnerability to flood risks. To do so, they need to include processes that build social capital between ethnic groups (e.g., meaningful consultations with residents and social accountability mechanisms) and adopt a multisectoral design that address different risks simultaneously (Mitra et al., 2017). While more evidence (and time) is required to better understand how such ideas may play out in practice, learning from natural resource management—including specifically water management—suggests that positive outcomes are feasible.

5. New research and knowledge gaps

As an evolving field, there are both areas where more research and evidence are needed to continue addressing gaps in knowledge, and new opportunities for research. An emerging area of research is looking at the relationship between climate change, migration and human displacement (Bhavnnani and Lacina, 2015). A recent review of the literature on climate change, migration and conflict risk concluded that climate change has the potential to lead to increased migration and risk of conflict (Burrows and Kinney, 2016). Research also found that climatic conditions, by affecting drought severity and the likelihood of armed conflict, played a significant role as an explanatory factor for asylum seeking in specific time periods and contexts (Abel et al., 2019).

A study by the Overseas Development Institute (ODI) and UN Development Program (UNDP) provided more nuanced insights into how these risks are linked, observing that slow-onset hazards are more likely to allow people to stay and adapt (though not guaranteed as in the context of small island states); while sudden-onset hazards are more likely to cause migration on a long-term basis. Sudden medium-onset hazards can also lead to migration, although on a cyclical or temporary basis. Therefore, the study calls for the inclusion of human mobility into a holistic National Adaptation Planning for migrant and host communities (Stapleton et al., 2017).

New research has also explored the role of low-carbon development in generating new security concerns and entrenching existing ones. A recent Climate and Development paper discussed evidence on the unintended security implication of low-carbon development strategies, which can result in: i) uneven development outcomes; ii) violent imaginaries and ungoverned spaces; iii) instances of nonviolent and covert conflict; iv) marginalization and dispossession; and v) depoliticizing the effects of resilience (Mirumachi et al., 2019).

However, several important knowledge gaps remain. A key one is the lack of evidence of conflict sensitivity tools or approaches being systematically applied to CCA programming. Possible reasons include the failure to consider conflict dynamics as relevant within technical climate change programs, limited familiarity with conflict sensitivity concepts and tools in the climate change teams of implementing agencies, and lack of an imperative from the donor to include conflict sensitivity. Whether climate aid does no harm requires further evaluation. At present, evaluations for adaptation programs assess projects based on whether they have achieved specific climate adaptation project goals for identified beneficiaries. As such they do not always adequately identify potential unintended harm, such as entrenching inequitable power dynamics or ethnic relations between project beneficiaries and non-beneficiaries, or reducing medium- to long-term access to water or land. Nor do they capture any unplanned positive co-benefits of the intervention on peace and stability.

EVIDENCE FROM THE GROUND

Policymakers and practitioners have increasingly come to recognize the potential interactions between conflict-affected situations and climate variability and change, and to proactively design approaches to minimize negative impacts and maximize positive development outcomes. This section reviews experiences of bilateral donors, UN agencies and international nongovernmental organizations to link broader environmental and climate change and peace building in their programming.

In recent years, USAID's programming in the Horn of Africa has focused on targeting compound climate–conflict risks. One example is the PEACE III project, which was implemented in Kenya and relevant border regions to tackle increasing livelihood insecurity. PEACE III focused on developing and enhancing community-based approaches to cross-border security and peace building. The program was based on the following assumptions: i) horizontal networks across communities are required to create an effective, diverse and inclusive collaborative peace system; ii) the creation of stronger vertical networks with national and regional peace actors improves high-level support for grassroots peace efforts and facilitates macro-level analysis. Both horizontal and vertical networks, working together, were integral to PEACE III's multilevel approach to peace building (USAID, 2017b).

Another example of targeting compound climate–conflict risks is USAID's Peace Centers for Climate and Social Resilience (PCCSR) project, which responded to periodic outbreaks of violence and cycles of instability and conflict in Ethiopia's Borana Zone. The project endeavored to reverse these patterns of conflict and change the collective perceptions, attitudes and behaviors underlying them. It had three main objectives: i) improving conflict resilience through collaborative community action on climate vulnerabilities; ii) enhancing community adaptive

capacity to address climate and natural resource challenges; and iii) strengthening the overall capacity of communities in conflict prevention, mediation and resolution. An important crosscutting objective was the improvement of communications and linkages between customary and formal institutions (USAID, 2018a).

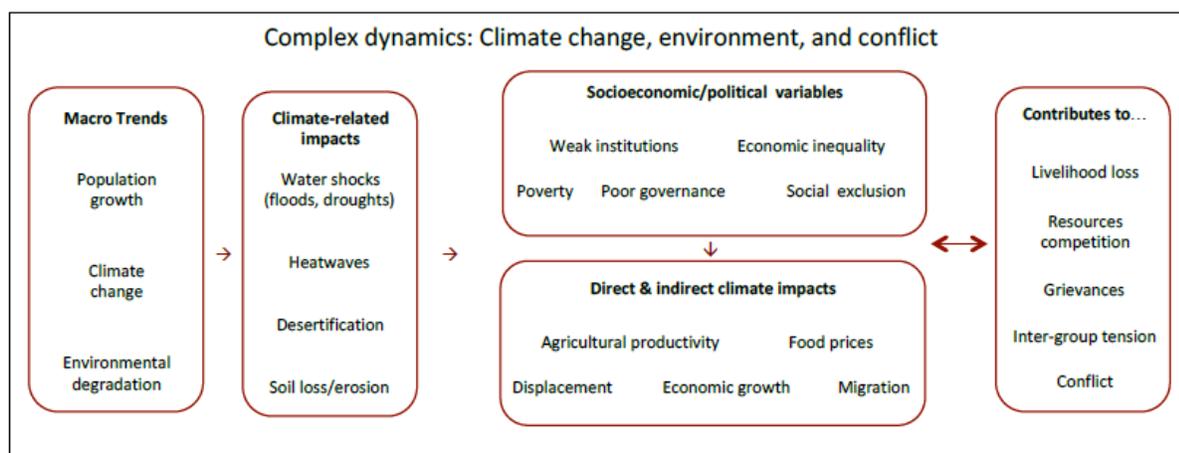
USAID's Improving Community Resilience in the Face of Conflicts and Environmental Shocks, pilot project under the Towards Enduring Freedom in Sudan (TEPS) project, also aimed at addressing the relationship between climate and conflict risks in the Mellit and Umm Keddada Localities in North Darfur State. Specifically, the pilot sought to: i) strengthen peacebuilding activities at the local level, with a focus on engaging women and youth; ii) improve natural resource management to reduce tensions between users; and iii) increase the resilience of the food security system and food security in support of livelihoods and coexistence (USAID, 2019).

Assessments of these projects, conducted between 2018 and 2019, highlighted that compound climate–conflict risks can be best addressed through a combination of interventions aimed at building social cohesion, creating more effective and inclusive institutions for natural resource management, and supporting technical interventions for CCA. The projects were largely described as having been successful at reducing instances of intercommunal conflict and building resilience in the target communities. However, the assessments also illustrated the difficulties of this type of approach, and, in particular, the need to ensure the sustainability of the interventions after the end of the project, and to understand and address existing power relationships and patterns of exclusion within and between communities (USAID, 2017b, 2018a, 2018b, 2019).

Using evidence from programs in fragile arid and semiarid lands, Mercy Corps provided some useful insights into the mechanisms through which climate change and conflict are linked. Accordingly, the effects of climate change (e.g., in terms of rising temperatures, shifting rainfall patterns, etc.) can have negative environmental impacts (e.g., loss of grazing land for cattle), which in turn cause socioeconomic tensions (e.g., farmers and herders competing for resources). This causal chain contributes to an increased risk of conflict, which is heightened in contexts of weak governance, high rates of poverty, income inequality and social tensions (see Figure 3). However, the way in which those variables interact remains highly context specific (Mercy Corps, 2019).

An assessment by Mercy Corps of their conflict management programs in the Horn of Africa highlighted that to address these compound risks, natural resource management should form a key pillar of governance interventions to adapt and prepare for conflict, climate and economic shocks. Mercy Corps' interventions in northern Uganda to address the issue of livestock-related theft and consequent conflict between communities in the area showed that cooperation over natural resource management can bring greater interethnic social cohesion (Mercy Corps, 2015). These relationships better enable communities to collectively develop and employ adaptive strategies in preparation for shocks and stresses. For example, Mercy Corps' research on the determinants of resilience in Somalia found that households with greater social and economic interactions across clan lines remained food secure or recovered faster during the 2010/11 famine (Mercy Corps, 2013).

Figure 3. Relationship between climate change, environment and conflict (Source: Mercy Corps, 2019, p. 2)



UNEP also attempted to integrate natural resource considerations into UN peacekeeping operations. In a 2012 report, it collected examples of the innovations occurring in peacekeeping programming in different regions in response to environmental and natural resource-related issues (UNEP, 2012a). One key lesson highlighted in the review was that environmental peace building (like climate adaptation) is not just a technical, legal or administrative challenge, but also a political one. Changes in natural resource management often go hand-in-hand with redistributing power, resources and opportunities (Jensen and Lonergan, 2012). Alongside the collection of best practices in this field, UNEP established an Expert Advisory Group on Conflict and Peacebuilding to develop tools and policy inputs that contribute to peacebuilding and prevent conflict relapse, and developed training programs on natural resources and conflict for peacekeeping troops, UN Country Teams and EU staff.

It is also worth mentioning the “Good Water Neighbors” initiative, launched in 2001 by Friends of the Earth Middle East, which aimed to improve water cooperation among Jordanians, Palestinians and Israelis, with a view to increase environmental sustainability while creating economic co-benefits and building peace. Despite the challenges of dealing with deep-seated grievances on all sides and operating in an active war zone, the project has been widely recognized as an example of best practices in the field of environmental peace building. The project worked at the local level with community members to improve their water situation (both access and management) through education and awareness activities. At the same time, it encouraged sustainable water management through information sharing, dialogue and cooperative ventures at the regional level. Some of its results have included a series of agreements between neighboring communities regarding the need for cooperation on environmental issues, and a dramatic enhancement of public awareness and commitment to preserving water resources across borders and political divides (Harari and Roseman, 2008). However, it is important to note that future climate change impacts and actual peace building interventions have not been an explicit focus of the project.

Overall, the responses to climate–fragility risks described above demonstrate both strengths in program design and gaps which prevent them from adding up to an effective whole. First, assessments still often ignore certain dimensions of the climate change and fragility

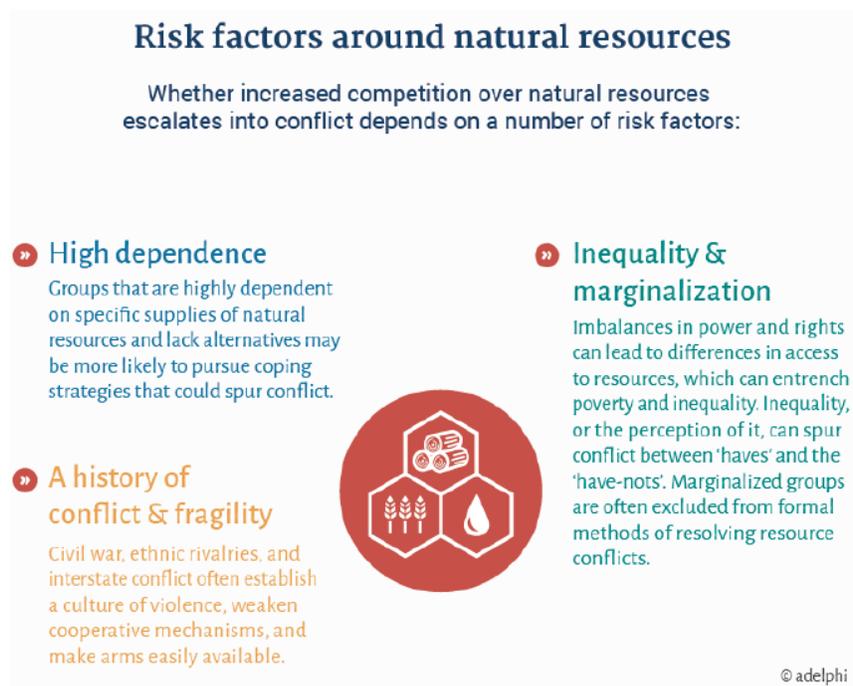
connections. For example, fragility, peace and conflict assessments may not consider climate change impacts or the co-benefits of CCA. Second, there tends to be little integration between plans and interventions for CCA, development and peace building and institutional capacity for addressing these compound challenges together. Third, financial support for states experiencing situations of fragility remains insufficient and can be exacerbated by a lack of donor coordination, weak institutions and siloed agendas. Finally, although there are many pilot programs that address climate–fragility risks with lessons learned and best practices to help strengthen program design and implementation, guidance toward long-term approaches remains limited.

III. SHARED PRINCIPLES FOR CLIMATE ADAPTATION AND PEACEBUILDING PROGRAMMING

BEST PRACTICES FROM PROGRAMS

The interventions to tackle the compound challenges of climate and conflict risks described in the previous section show that there are synergies to be found in linking peacebuilding measures with CCA. The need for this integrated approach is underpinned by the results of several risk assessments conducted where climate change and conflict risks manifest together. For example, a study by adelphi Rüttinger et al., 2011) noted that competition over natural resources is likely to escalate into conflict when there is high dependence on specific supplies of natural resources, imbalances in power and rights, and a history of conflict and fragility (see Figure 4).

Figure 4. Risk factors around natural resources (Source: Rüttinger et al., 2011)



As policymakers have become more aware of the role that climate change can play in both conflict and peace building, strategies to respond have also begun to evolve. There is increasing recognition of the need for a broader approach integrating efforts across CCA, development, humanitarian aid and peacebuilding sectors to mitigate the interconnected risks and realize the co-benefits (Rüttinger et al., 2011; Rüttinger et al., 2015). This has been grounded in evidence from a number of fragile contexts, including the Lake Chad region (Vivekananda and Born, 2018), Iraq (Hassan et al., 2018), Central Asia (Mirimanova et al., 2018) and Somalia (Middleton et al., 2018).¹ However, there remains little guidance on how to do this. This section identifies some of the principles and best practices, in addition to those already defined by USAID.

CONTEXTUALIZING CLIMATE–CONFLICT–FRAGILITY RISKS

The three examples of USAID’s peacebuilding programs in the Horn of Africa showed that context is important and should always be the starting point when examining the climate–conflict linkage to support improved programming. Experience from the United Kingdom-funded Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) program also highlighted that the context in which interventions take place is likely to change throughout the course of the project, including as a result of the project itself. Therefore, programs and strategies need to allow for adaptive management and flexibility for “course correction.” They should also be kept up-to-date and take account of the context-specific dynamics in which climate and conflict risks interact, and of how they change (Leavy et al., 2018).

This requires national, top-down assessments as well as local approaches to understand how changes in one place or variable might affect other places or variables (Vivekananda et al., 2019). During both processes, participatory, inclusive and community-based methodologies need to be applied to respond to local/community needs, engage in trust building and get the buy-in of the local population (UNEP, 2019). In an earlier paper, UNEP also highlighted the importance of a three-step approach that comprises integrated risk assessments, integrated early warning systems to allow for early action and preventive measures, and integrated scenario analyses to identify hotspots (UNEP, 2012b).

ADDRESSING GOVERNANCE ISSUES

The increasing understanding that conflict often has roots in governance deficits, persistent structural inequality and a lack of capacity across government has further underscored the need to address governance issues in peacebuilding interventions (Mach et al., 2019). Any response must be conflict sensitive to avoid perpetuating inequities and conflict risks (Vivekananda et al., 2019).

USAID has been at the forefront of applying conflict-sensitive programming principles. Its approach to conflict prevention, mitigation and resolution in climate–fragile contexts such as the Horn of Africa has largely consisted of programs aimed at improving intercommunal relations and fostering broad and inclusive governance structures. If communities are able to manage

¹ These have been produced by the Expert Working Group on Climate-Related Security Risks, which sits within the United Nations and aims to produce high-quality and policy-relevant assessments of climate-related security risks.

their natural resources in a collaborative and inclusive way, the capacities to cope with the impacts of climate change are strengthened, and the likelihood of conflict reduced. Typical interventions of USAID projects in this area have included strengthening the capacities of local peace committees, founding new committees including women's and youth forums, organizing cultural events, holding trauma-healing sessions, and developing natural-resource-sharing agreements and formal peace treaties (USAID, 2017b, 2018a, 2018b, 2019).

Some of the projects in the BRACED program used innovative mechanisms to address governance issues. For example, BRACED's project in South Sudan addressed community resilience through a combination of community-based activities, including the establishment of Village Savings and Loan Associations, following a model set up by the communities themselves (Mc Donnell et al., 2017). The evaluation of the BRACED program concluded that these governance-focused initiatives had contributed to strengthening resilience and adaptation outcomes and improving the well-being of women and men in the target countries in spite of shocks and stresses. Success was attributed in part to a focus on addressing any disconnectedness between different institutional levels and on building and strengthening capacity at community, local and national levels to achieve resilient change (Leavy et al., 2018).

Under the USAID Growth, Health and Governance program in Northern Karamoja in Uganda, Mercy Corps' approach was based on the assumption that improving interactions among community groups (social cohesion) and improving working relationships between conflict management actors (enabling institutional environment) are essential to achieving both peace and resilience outcomes. Therefore, the project's interventions in the Manderu Triangle and northern Karamoja in Uganda focused on: i) increasing the capacity of traditional authorities, elders and women's groups to reduce conflict; ii) improving linkages between informal systems and formal governance structures through meetings and dialogues; iii) raising awareness of conflict issues and harmful cultural practices through drama, song and dance; and iv) enhancing youth capacity to engage in peace and development activities through training, exchange visits and facilitated participation.

The commonality between these programs is they all started from the assumption that local governance structures, both formal and informal, play a key role in achieving peace and resilience. They also recognized the need for these structures to be inclusive—by guaranteeing the representation and participation of women, youth, ethnic minorities and other marginalized groups—and interconnected both horizontally and vertically to relevant structures at the regional and national level. Still, dedicated resources from national to local governance structures are often inadequate to support ongoing activities following program implementation. UNEP highlighted the importance of strengthening the capacity of civil society actors to meaningfully engage in governance processes and to consider strengthening or establishing institutions and agreements for transboundary resource management to address potential disconnectedness between different national systems (UNEP, 2012b).

FOCUSING ON AVAILABILITY, RESTORATION AND ACCESS TO NATURAL RESOURCES

Understanding the impacts of climate change on availability and access to natural resources has been a priority for several programs in the peace and security field. UNEP has long

recognized the link between natural resources and conflict (UNEP, 2012a). Its 2012 Toolkit and Guidance on Renewable Resources and Conflict explicitly recommended the integration of approaches to reducing vulnerability to resource scarcity and stopping the degradation of scarce renewable resources into peacekeeping and peacebuilding missions (UNEP, 2012b). The Consultative Group of the Global Facility for Disaster Reduction and Recovery (GFDRR) also argued for the need to link all stages of post-conflict recovery (including, for example, demobilization of armed groups and security sector reform) to sustainable natural resource management and disaster risk management to reduce vulnerability (GFDRR, 2016). Similarly, a recent study by ODI documented that the contexts that are typically classified as conflict-affected, post-conflict or fragile are also the least likely to have disaster risk reduction strategies in place (Peters et al., 2019)

Evidence from Mercy Corps' programs indicates that improving natural resource management mechanisms as the first entry point to conflict and disaster risk reduction approaches can both strengthen the commitment and buy-in of communities and their social cohesion. In turn, this creates the enabling institutional environment for promoting the goals of resilience building and peace building simultaneously and shows immediate positive impacts on livelihoods and income generation (Mercy Corps, 2015, 2019).

SUPPORTING SUSTAINABLE LIVELIHOODS, LIVELIHOOD DIVERSIFICATION AND MARKET LINKAGES

To achieve the double goal of peace building and CCA, Mercy Corps emphasizes the importance of supporting sustainable and diversified livelihoods to improve food security (Mercy Corps, 2019). This is because climate change acts as a risk multiplier to livelihood security, especially if livelihoods are heavily dependent on natural resources; in turn, this can amplify violence and conflict. Violence and conflict even serve as negative coping strategies in some regions in the Horn of Africa (Mercy Corps, 2015). Other coping/adaptation strategies are illustrated in Table 1.

USAID's projects in the Horn of Africa implemented several technical interventions designed to reduce or eliminate the adverse impacts of climate risks and contribute to improving livelihood security. These included, for example, the rehabilitation of water sources and rangelands, the introduction of alternative household energy options such as liquefied petroleum gas and solar cookers, and the promotion of climate-smart technologies and water harvesting to improve crop production. Importantly, these activities were designed and implemented with the participation of the beneficiary communities (USAID, 2017b, 2018a, 2019).

The focus on sustainable livelihoods as a mechanism for CCA, conflict prevention and peace building also constituted a key pillar of the BRACED program. The implementation of the "3A approach" (anticipate, adapt, absorb) across projects in different contexts has generated some useful lessons learned, including the following (Leavy et al., 2018):

- Hands-on, practical and context-relevant interventions with immediate benefits can be helpful entry points into a community to establish trust and increase interest in and ownership of the program;

- Practical demonstrations and ongoing involvement and follow-up with communities are needed to sustain efforts and increase uptake of newly introduced livelihood strategies;
- Sustainable livelihood strategies can only be achieved if an enabling environment is supported, e.g., by creating market linkages and employment opportunities;
- Once the interventions are demonstrated to be beneficial, targeted community members are generally willing to take on more risks; this establishes a positive feedback loop.

Table 1. Common climate change adaptation strategies in response to livelihood risks in Borana Zone, Ethiopia (Source: USAID, 2017b, p. 20)

Livelihood strategy	Main Climate Adaptation Strategies
Pastoralism	Migration, increased mobility
	Herd diversification (drought-tolerant browsers, e.g., camels, goats)
	Private enclosure for fodder protection
	Mutual assistance and sharing of livestock assets
Agropastoralism	Erosion control
	Crop diversity
	Hybrid seeds
	New crop plots
	Change in family labor roles or adding labor to graze livestock
Income diversification	Off-farm job
	Start trade or business
	Making charcoal and/or selling fuelwood
	Casual labor
	Beekeeping
	Artisanal mining

COMMITTING TO LONG-TERM ENGAGEMENT AT DIFFERENT LEVELS

The USAID-funded PCCSR project in Ethiopia highlighted the value of long-term engagement and diverse entry points across policy- and decision-making levels to improve understanding of the linkages between conflict and climate (USAID, 2017b). Research on linkages between climate risks and the role of NSAGs supported the principle that long-term engagement must be climate- and conflict-sensitive, while accounting for specific age and gender needs, vulnerabilities and capacities (Nett and Rüttinger, 2016). Long-term engagement was also found to be essential for ensuring that lessons learned are shared across different sectors and

countries, thus contributing to the broader policy agenda and to informing ongoing program activities (Vivekananda et al., 2019).

Additionally, the evaluation of the BRACED program found that interventions should aim to provide the right kinds of incentives to create commitment, ownership and sustainability of the project among the target beneficiaries. Interventions that succeed in creating/improving an enabling environment also generate confidence and motivation to try new approaches (Leavy et al., 2018). The assessment of the PCCSR project in Ethiopia concluded that the involvement of beneficiaries in defining the core activities of the project had increased buy-in and contributed to its good results in improving resilience and community relations (USAID, 2017b).

Evidence from several programs in this area also points to the importance of long-term engagement to achieve peacebuilding and CCA objectives and transformative change (Leavy et al., 2018; USAID, 2017b; USAID, 2018a; USAID, 2019). Along these lines, Mercy Corps' approach to conflict resolution focuses on changing social norms, behaviors and attitudes in order not to fall back into previous conflict patterns during shocks and stresses (Mercy Corps, 2019). The synthesis report of BRACED highlighted that a three-year project cycle or less is only sufficient to demonstrate the potential for sustainability and transformational change, rather than any concrete impacts in this direction (Villanueva et al., 2018). The introduction of new institutions or livelihood strategies without an appropriate follow-up and continuity in terms of capacity building and resourcing could even have unintended negative consequences by increasing disconnectedness, overlaps and conflicts about resources, roles and responsibilities (OECD, 2007; OECD, 2012).

INTEGRATING DIFFERENT METHODS

Evidence from existing programs emphasizes the importance of mixed-method approaches to identify and understand compound climate–conflict risks. For example, a recent report on the Lake Chad region took a unique approach to assessing climate-related security risks by combining participatory conflict analysis, which consisted of over 200 targeted interviews led by a local research team across four countries, with satellite climate data (Vivekananda et al., 2019).

Other work has included household surveys as well as individual and group interviews. Mercy Corps' approach to risk assessment importantly collected and analyzed qualitative and quantitative data at two points in time so that conclusions could be drawn based on an analysis of trends over time, correlational relationships between variables of interest, and qualitative contribution analysis (Mercy Corps, 2015). This is in line with UNEP's recommendations to prioritize and design CCA interventions based on different scenarios, as programming under uncertain climate conditions should assess the robustness of the interventions and finally aim for “no regret measures” (UNEP, 2019).

DESIGNING FINANCING SCHEMES CAREFULLY

Several studies document the importance of “smarter” financing to ensure that projects achieve peace and resilience goals. Specifically, finance schemes need to get four things right:

- i. **Value:** The right amount of financing is critical. Often, too much funding in a short timeframe is as harmful as too little; financing should respond to local situations and allow for a better mix of budget support and project-based funds (UBA, 2018);
- ii. **Tools:** A recent study of post-conflict recovery and reconstruction in Syria found that international funds are co-opted by government policies; the study recommended pool-funding foreign aid to be able to influence spending in line with international standards (HRW, 2019);
- iii. **Timing:** The timeframe of financing, implying the ability to act quickly but to stay engaged over a longer time (OECD, 2012); and
- iv. **Incentives:** Ensuring that the right incentive structure is delivered by financing (OECD, 2018), which means, for example, ensuring that the disbursement of funds is conflict sensitive, equally accessible (not disproportionately benefiting one group) and in accordance with international human rights law (HRW, 2019; UBA, 2018; USAID, 2015).

It is also important to ensure more coherence and complementarity between the interventions, and that the financing is supported by other aspects of engagement, including through foreign, security and trade policies (Batmanglich, 2019). In fragile contexts, financing should be flexible to be redirected to different activities if needs change and to correct potential maladaptation/unintended negative consequences (Vivekananda et al., 2019).

MEASURING PEACEBUILDING AND ADAPTATION RESULTS

The increasing use in development discourse and practice of the concept of “climate resilience,” which encompasses the many factors impacting the ability of a person/community/system to survive, recover and thrive in certain contexts or in the face of shocks, has led to an explosion of resilience-focused M&E frameworks. Increasingly, these frameworks have broadened the M&E approach to capture impacts in terms of peace building, especially in fragile and conflict-affected contexts. However, there is little guidance on how to do this in practice (UNEP, 2012b).

There have also been limited systematic attempts at assessing whether and how peacebuilding programming that integrates CCA components has been effective in simultaneously achieving adaptation and peacebuilding goals in conflict contexts. Specific analytical gaps include the lack of baseline monitoring of instability and its links to structural factors, especially at the subnational level. This makes the impacts of interventions hard to measure, especially in fragile states.

SUMMARY OF M&E FRAMEWORKS ON PEACEBUILDING AND CLIMATE CHANGE ADAPTATION

Based on existing M&E frameworks on peacebuilding and CCA programming, it is possible to extract the following guiding principles on M&E systems that integrate frameworks for both types of programming:

- Take context as a starting point
- Adopt methodological approaches which reflect best practices in M&E for peacebuilding and resilience building;
- Assess the influence of the context on the interventions, and vice versa;
- Capture unintended impacts to be able to adapt the project accordingly;
- Collect a variety of quantitative and qualitative data from different sources;
- Measure at different points in time to capture the process character of the intended outcomes and establish a baseline;
- Ensure that learning takes place as M&E systems move beyond measuring accountability and validate approaches and track impact.

However, there is an increasing recognition among researchers and practitioners of the need to monitor and evaluate the effectiveness of policies and interventions addressing the underlying relationships between climatic stressors and conflict, in addition to producing evidence and testing theories. The difficulties of doing this in practice are linked in part to the fact that both peacebuilding and adaptation projects tend to be long term. Therefore, their impacts may not materialize for years to come, although validated proxy indicators could be used to capture interim results that can at least indicate whether project objectives are likely to be met. Moreover, outcomes such as changes in perceptions, attitudes and behaviors are more difficult to capture through formal quantifiable indicators and require the inclusion of process indicators in M&E systems and theories of change.

For all these reasons, identifying indicators that measure results of both peacebuilding and CCA programming and produce evidence of what constitutes an effective peacebuilding and CCA intervention has been a major challenge. However, some general principles for an integrated M&E framework can be drawn from practice in both climate resilience and peacebuilding programming.

Conflict-sensitive monitoring

Conflict-sensitive monitoring is critical for ensuring that a strategy, policy, program or project does no harm, i.e., does not contribute to conflict or fragility risks or create new ones (UNEP, 2019). There are several guidance documents and tools outlining the principles for conflict-sensitive monitoring (see, e.g., Conflict Sensitivity Consortium, 2012).

Typically, conflict-sensitive monitoring should seek to measure the impact of the intervention on the changing context and vice versa (see Figure 5) and to enable programming to be adjusted, if necessary, to ensure optimum conflict sensitivity (Saferworld, 2004). Therefore, conflict-sensitive M&E frameworks should involve the following key elements (Conflict Sensitivity Consortium, 2012):

- i. monitoring the conflict context;
- ii. monitoring the effects of the conflict context on the intervention; and
- iii. monitoring the effects of the intervention on the conflict context.

Conflict-sensitive M&E should include a combination of intervention, conflict context, and interaction indicators. Critically, it should also capture the unintended impacts of the intervention on the conflict context (see Table 2).

Figure 5. Dynamics in conflict sensitive monitoring (Source: Saferworld, 2004).

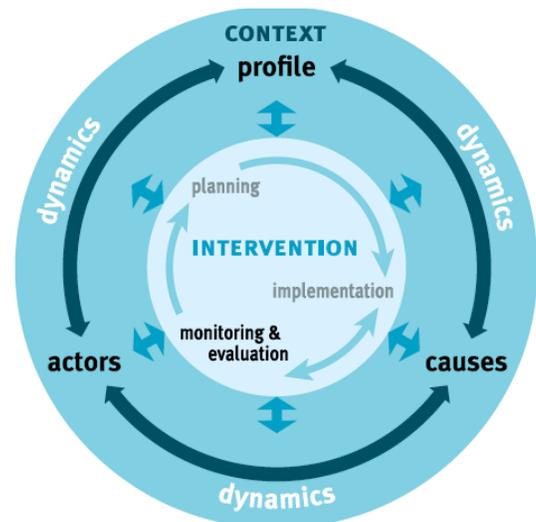


Table 2. Key indicators of a conflict-sensitive M&E framework. (Source: Conflict Sensitivity Consortium, 2012).

Type of Indicator	Description	Key Questions	Example
Intervention indicators	Standard indicators that any project M&E system (e.g., the logframe) would normally include; they can provide relevant information for conflict sensitivity	To what extent is the intervention moving toward achieving its objectives?	(For a livelihood project) Proportion of households reporting year-round access to sufficient food; disaggregation to provide information pertinent to conflict sensitivity based on the conflict analysis that revealed tensions between communities A and B
Conflict/context indicators	Indicators helping the project team to keep the conflict analysis updated; they take into account evolution in the context	Are there key changes in the context? How are tensions and conflict issues in the target areas evolving?	Frequency of incidents of violence between communities A and B in a designated area in a three-month period
Interaction indicators	Indicators providing information on the direct interaction between the project and its context; typically qualitative, but can be sensitive to collect and use	Is the intervention having effects on the context/conflict and how? Is the intervention affected by particular tensions, conflict issues or evolution in the context?	Difference in perception of x target communities on the intervention (incl. disaggregated data on gender, age, marginalized groups)
Unintended impacts	It is important to allow space to capture information and data on unintended effects of the intervention on the conflict context	Are there any unintended/unforeseen (positive or negative) impacts of the project?	Which unexpected changes did you encounter during the last reporting cycle? How are you planning to adapt to these changes during the next reporting cycle?

Monitoring and Evaluating Conflict Sensitivity Guideline by the UK Department for International Development (DFID) identifies several characteristics of “good enough” conflict analysis at several levels (Goldwyn and Chigas, 2013):

- **At the country operational plan level:** Conflict sensitivity involves an assessment of the interaction between strategic decisions and the conflict factors identified.
- **At the sector level:** Conflict sensitivity requires an understanding of how the key issues and driving factors of conflict play out in that sector.
- **At the project /program level:** Conflict sensitivity requires a more nuanced understanding of the conflict at a micro level, including through applying the “do no harm” framework, which identifies what divides and what connects people in a given context.

Conducting conflict-sensitive monitoring also means that the monitoring itself is carried out in a conflict-sensitive way. M&E processes are typically extractive processes, where evaluators or interviewers are soliciting information from respondents and may not be able to immediately address the issues that are emerging. Conflict-sensitive monitoring is being mindful that the way questions are asked does not exacerbate any grievances or tensions or create expectations that will not be met (UNEP, 2019).

Measuring resilience

A key challenge of M&E frameworks in the CCA and resilience space has been measuring interventions and progress towards resilience. While there are clear-cut indicators for climate change itself (e.g., average global temperature or CO₂ levels), adaptation and resilience must be grounded in the context, scale, interrelated dimensions and the type of intervention, all of which vary widely. Moreover, many aspects of these interventions are “soft” (e.g., institutional capacity, behavior change), and for some key dimensions qualitative assessments are more appropriate or feasible. It is also difficult to aggregate individual or household-level indicators to higher scales or, conversely, for national- or international-level indicators to capture the effectiveness of community-level CCA interventions (Bours et al., 2014).

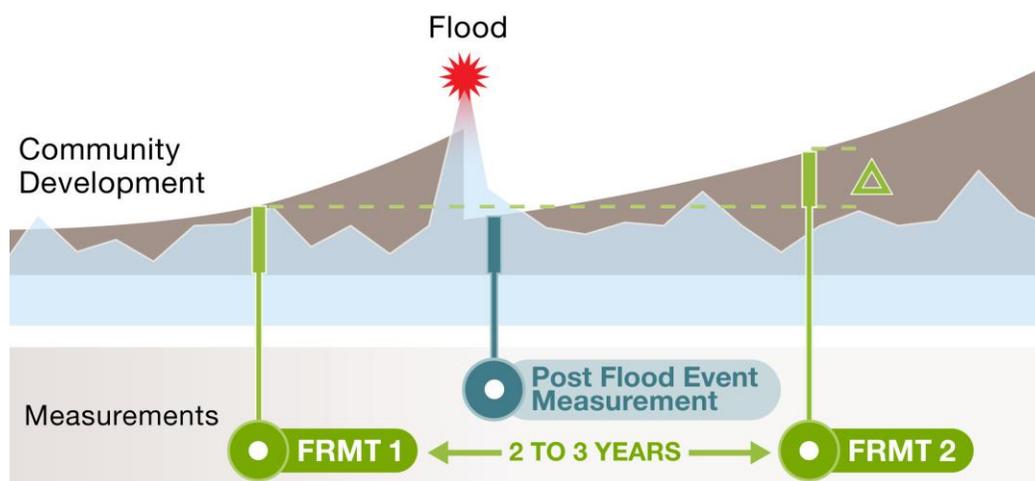
A 2015 paper by the ODI makes a good attempt at synthesizing existing approaches to measuring resilience. Based on an analysis of 17 sets of resilience indicators found in internationally recognized frameworks, the authors identified three criteria (learning, options and flexibility) that are commonly used to describe the key dimensions of resilience. However, they also noted that each framework is strongly influenced by the way in which resilience is defined, making comparisons only partially possible (Schipper and Langston, 2015).

The Flood Resilience Measurement for Communities (FRMC) is a framework developed by researchers, risk engineers and practitioners of the Zurich Flood Resilience Alliance. Community flood resilience is measured before a flood happens, as well as in its short- and long-term aftermath. The FRMC uses 44 validated indicators on five complementary “capitals”² as well as properties derived from resilient system thinking, that can help people on their development path and also provide capacity to withstand and respond to shocks (see Figure 6). In this way, the framework is taking into account the assets, interactions and interconnections at community level as well as the linkages to higher-level governance systems and provides consistency when it comes to identifying and testing sources of resilience (Keating et al., 2016; Laurien et al., 2019).³

² The five complementary “capitals” comprise human, social, physical, financial and natural capital. Their definition is based on Robert Chambers’ Sustainable Livelihoods Approach (SLA), which was adopted by the UK’s DFID.

³ The FRMC measurement was tested in 118 communities across nine countries in the first phase. A second phase is currently under way (and expected to be completed in 2023), during which the framework and tool will be complemented by an overall (global) theory of change and program-specific (national) theories of change to track the outcomes achieved by each national program. The evidence thus gathered will be used to produce an improved version of the tool (Keating et al., 2016; Laurien et al., 2019).

Figure 6. FRMC measurement cycle (Source: Laurien et al., 2019, p. 3)



A mixed-method approach

A guidance note produced by adelphi and UNEP (UNEP, 2019) made the argument that the M&E framework for this type of intervention has to be flexible enough to capture results on different levels (output, outcome and impact) and in different ways (qualitative and quantitative indicators). It also needs to be based on and reflect a robust theory of change and capture the interlinkages that are identified and addressed in it. USAID's Collaborating, Learning and Adapting (CLA) program aligns with this view by recommending that M&E systems include different methodologies (e.g., household surveys, focus groups, outcome mapping, etc.), as well as learning activities such as context indicators, evaluations, formative research and reflective sessions with stakeholders (USAID, 2017a).

A practical example is provided by Mercy Corps' evaluation of its conflict management programs in the greater Horn of Africa, which was described as a "first of its kind" for its mixed methodology. Mercy Corps used household surveys as well as individual and group interviews. Importantly, qualitative and quantitative data were collected and analyzed at two points in time, so that conclusions were drawn based on an analysis of trends over time, correlational relationships between variables of interest and qualitative contribution analysis (Mercy Corps, 2015).

BRACED's M&E framework also included both quantitative and qualitative indicators under three components: i) areas of change, to monitor and evaluate the causal pathways and processes by which resilience is built; ii) 3As (anticipate, adapt, absorb) to better understand project-level outcomes in relation to building resilience to climate extremes and disasters; and iii) evaluative monitoring to better monitor and evaluate the contextual factors that enable or constrain change (BRACED, 2015).

For its monitoring, evaluation and learning processes, the Zurich Flood Resilience Alliance developed a practical software application based on the FRMC framework which allowed data

to be collected in four different ways (household surveys, key informant interviews, focus group discussions and the use of secondary sources) depending on context and need. The FRMC app can be used online or offline for data collection in the field. The data are then used to analyze the resilience of a specific community with the 44 framework indicators, and to produce an overall assessment of communities' resilience before flood events—on which the selection and design of interventions are based—and after flood events, which allows for monitoring the impact of the interventions (Keating et al., 2016). These multiple data collection methods were essential to understanding the different dimensions of resilience. However, it was also noted that they are resource intensive and require the project team to establish a deep and trusted relationship with the communities (Laurien et al., 2019).

Capturing unintended impacts

Existing guidance for integrated M&E that captures the results of complex development and humanitarian programming highlights the importance of looking at both intended and unintended impacts (see, e.g., UNEP, 2019). In line with the principles of conflict-sensitive monitoring and a mixed-method approach, it is advisable that M&E frameworks include context, interaction and perception indicators (UNEP, 2019).⁴ This is also important for adaptation interventions, as they tend to trigger complex change processes with the potential of maladaptation or of aggravating existing conflict structures and local grievances (Bours et al., 2014).

USAID's Conflict Assessment Framework (CAF 2.0) is an example of how conflict dynamics can be understood. It uses five concepts of conflict dynamics to assess the impact of a project or interventions on the context: identities, grievances, societal patterns, institutional performance, and key actors (USAID, 2012b). The assessments of USAID's projects in the Horn of Africa and East Africa adopted these categories as a conceptual basis to analyze the interaction of conflict and climate risks in the project areas, and collected information using both qualitative and quantitative methodologies (USAID, 2017b, 2018a, 2018b). In this way, the assessments were able to observe both negative and positive unintended impacts of the projects and make recommendations for how these could be addressed or leveraged in the subsequent phases of the work.

Taking context and change into account

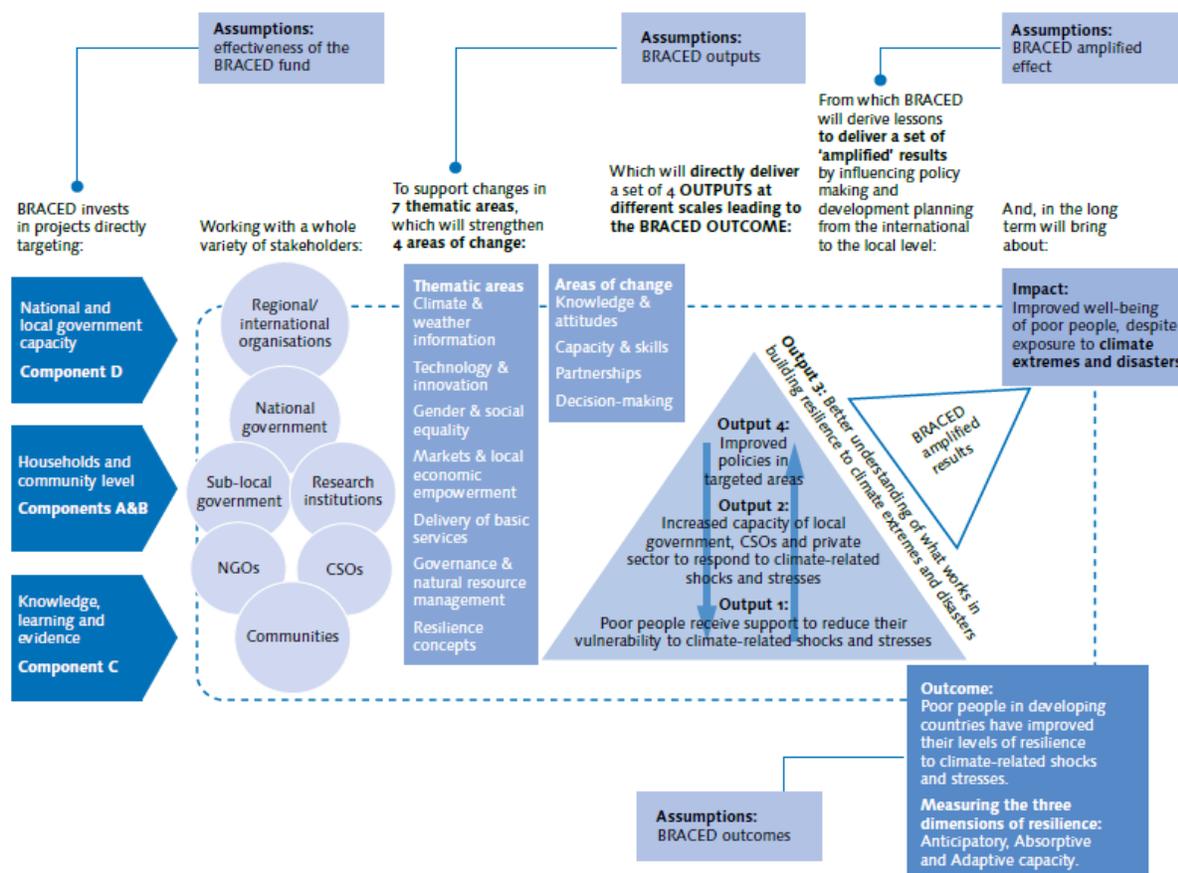
There is an increasing recognition that CCA and resilience projects in fragile and conflict-affected contexts need to regularly review the context in which they operate and how the context affects and is affected by the interventions. The M&E system of the Conflict Sensitive Resource and Asset Management project, implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in the Philippines, tracked changes in the frequency and intensity of violent conflicts in the program's environment. The system was also essential for both detecting and avoiding unintended negative consequences and measuring program success (Tänzler and Scherer, 2018).

⁴ It should be noted that this data can be very sensitive. Therefore, in certain cases, it may be best used internally rather than for external reports to enable greater openness and better quality responses to monitoring questions.

Similarly, the BRACED program⁵ developed a new and complex methodology to monitor and evaluate the results of its climate resilience interventions in fragile and conflict-affected contexts. The BRACED’s M&E methodology is based upon a “hierarchy” of theories from an overall “Common Theory of Change” (see Figure 7) to project-level theories of change developed for each activity package and intervention. It focuses on understanding the effect of context on the ways in which project activities lead to behavioral and institutional changes, which, in turn, produce the envisaged outcomes (Leavy et al., 2018). This highly contextualized evaluative monitoring process adopted by the BRACED program was helpful in highlighting the importance of looking at change processes in programming, rather than specific resilience elements, which supported the adaptive management of the program.

However, crucially, these experiences revealed that failure to include baseline data can hamper the ability of the M&E process to identify the projects’ impacts on local peace and security dynamics, or their implications for nonbeneficiaries in the neighboring regions. This was a limit of BRACED’s M&E methodology and made it difficult to assess whether and how the program’s resilience interventions were truly contributing to peace outcomes in fragile contexts.

Figure 7. BRACED Global Theory of Change, March 2015 (Source: Leavy et al., 2018, p. 111)



⁵ The BRACED program included 15 projects, spanning over 13 countries and 120 partner organizations, with the primary aim of creating resilience change pathways through the different interventions they implemented, taking context as a starting point and through a dynamic and flexible model.

Getting the right balance between simplicity and complexity

Another difficulty of M&E frameworks for CCA and resilience programs has appeared to be finding the right balance between capturing the different dimensions that resilience-building activities against climate-fragility risks entail, while remaining simple enough not to overburden the project's team with data collection and reporting requirements. The complexity of CCA and related interventions, characterized by being multisectoral and cross-thematic focus, and having long timeframes, requires a modified approach to M&E. Implementers instead need to demonstrate the contribution of their policy or program to an overall adaptation process that is largely shaped by external factors. This may require more emphasis on process and proxy indicators (Bours et al., 2014). At the same time, it is important not to produce over-complicated systems, which can be burdensome and impractical (UNEP, 2019).

Ensuring that learning takes place

M&E systems have traditionally stressed accountability to identify results and to report to donors and stakeholders. When focusing on accountability, M&E can often be seen as having an audit function, especially when funding is dependent on showing particular results and value for money. However, recent research and practice showed that a more flexible approach to learning-by-doing, which includes making errors and even failing, might support long-term success more effectively than a traditional accountability approach (see, e.g., Bours et al., 2014; Dillon, 2019).

Therefore, an increasing number of development donors and implementing agencies have come to include a learning component in their M&E frameworks. For example, USAID has published work on complexity-aware M&E as part of its CLA program approach (USAID, 2017a). USAID's CLA program approach recommends that M&E data and information are used as evidence for accountability and informing decision-making for management purposes, course adjustments, and future designs. Thus, M&E should not be the end goal but rather the means by which development outcomes are achieved more effectively (USAID, 2017a). The Global Learning for Adaptive Management program is also currently identifying innovative evidence-based approaches to adaptive management (Wild and Ramalingam, 2018).

IV. CONCLUSION

LESSONS LEARNED

There is a growing body of literature providing evidence on the compound risks created by climate change and conflict and calling for interventions and metrics that address and evaluate them simultaneously. Yet, the literature reveals knowledge gaps on the policy options that are necessary to address the climate–conflict interrelationship, as well as a lack of documented examples, at scale, on how to achieve “multiple wins” to support resilience building.

Research and practice highlight the importance of taking context as a starting point for addressing the national, societal, environmental and economic dimensions of the challenge and being aware of the donor–recipient relationship and the design of financing schemes. Research and practice confirm that building capacities and an enabling environment that support sustainable livelihoods and natural resource management should be key pillars of interventions in conflict- and climate-vulnerable contexts. This includes careful and conflict-sensitive work on formal and informal governance structures at different levels to address any disconnectedness in the system. Furthermore, recent studies have captured linkages between climate change impacts and terrorism and organized crime, which demonstrate the need for holistic and comprehensive approaches that simultaneously contribute to goals related to prevention, reduction and management of conflict, and climate change adaptation.

These conclusions align with USAID’s general principles for climate-sensitive programming in fragile and conflict-affected states, which also stress the importance of context-specific, conflict-sensitive, holistic and flexible interventions based on a clear and credible theory of change. USAID’s approach to conflict prevention was tailored to local circumstances but could be extended to other ethnically diverse regions and climate-vulnerable communities. Assessments of USAID-funded projects demonstrated that by engaging conflict-prone, marginalized communities, natural resource management and climate adaptation interventions can help address the perceived lack of participation and representation that is a main source of instability in fragile situations.

Still missing is an understanding of development activities and approaches in fragile contexts that will deliver on peacebuilding and resilience goals simultaneously while ensuring their sustainability. Partly, this gap results from the few experiences from which to extract evidence and lessons learned because international aid projects are often siloed along the conflict *or* climate areas of intervention. It is also due to the lack of guidance on methodologies and indicators for assessing the effectiveness of programs at addressing compound risks. The review of M&E approaches revealed that they are often based on frameworks for peacebuilding *or* climate change adaptation and resilience interventions; attempts at bringing them together have so far been insufficient.

OPPORTUNITIES FOR IMPROVED PROGRAMMING AND RESEARCH

As documented in this literature review, there are opportunities to contribute to improved research and programming at the conflict and climate nexus. Recommendations to this effect will be presented in the accompanying technical report; however, there are a few preliminary observations from the research:

- In current conflict and fragility assessments, climate and environmental risks tend to be considered primarily in reference to natural disasters rather than in terms of the impacts that climatic variability and change are likely to have on people's vulnerability and ability to cope. Instead, it is important to consider both slow- and sudden-onset events in order to understand the challenges and opportunities for successful peacebuilding interventions.
- Research and programs have largely focused on rural areas. More evidence is needed on the links between climate variability and change, governance and peace building, and of what works/does not work in addressing climate-related conflict risks in urban areas.
- An increased understanding is needed of the institutions and capacities that can integrate plans and interventions for climate change adaptation, development and peace building, along with dedicated resources and efforts to build and/or strengthen these institutions and capacities. This should apply to different governance levels, formal and informal, from local, to national, to regional. In addition to the institutions of the aid recipient countries, these considerations should also apply to the institutions of the donor countries, as they are often the origin of uncoordinated actions and inflexible funding streams that hamper cross-sectoral outcomes.
- Finally, there is a clear need for innovative approaches to M&E that can simultaneously measure the project impacts of building peace and resilience based on a theory of change and adaptive programming. These M&E approaches would need to balance capturing the complexity of change along multiple dimensions and generating learning for adaptive and flexible programming, and the need to make the M&E approaches applicable in multiple contexts, including under time and resource constraints.

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