Climate Diplomacy

CLIMATE-FRAGILITY POLICY PAPER:

CLIMATE CHANGE AND SECURITY IN THE HORN OF AFRICA: CAN EUROPE HELP TO REDUCE THE RISKS?

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Climate Change and Security in the Horn of Africa: Can Europe help to reduce the risks?

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SUMMARY

This case study examines the climate-conflict nexus in the Horn of Africa and seeks to contribute:

(a) A summary of the science on the linkages between climate change/environmental degradation and violent conflict in the region; and

(b) An overview of how the EU and European actors are engaging on climate security in the Horn.

The Intergovernmental Panel on Climate Change concludes on the linkages between climate change and violent conflict that while there is little evidence of a direct causal relationship, there is evidence that climate change or climate variability can increase the risk of armed conflict in certain circumstances. This has often been referred to by the EU as the "multiplier effect." Linkages are also evident in the other direction - conflict and displacement can affect the capacities of people and institutions to adapt to climate change, making communities even more vulnerable to the negative effects of climate change.

Further analysis was undertaken by Stockholm University on the most common pathways from climate-related environmental damage to local or intrastate violent conflict in East Africa. They found that climate change or climate variability can have a negative impact on the availability of natural resources and this can contribute to conflict in any of three ways: (1) by worsening livelihood conditions and, for example, pushing people to join extremist groups e.g., Al-Shabaab in Somalia; (2) by increasing migration, thus triggering in-migration tensions with the host communities, as happened in Darfur; or (3) by pushing pastoralists to move beyond their traditional routes, bringing them into conflict with other pastoralists or farmers (van Baalen and Mobjörk 2016).

Climate change pressures are already interacting with conflict dynamics in the Horn of Africa. For example, the already-tense Nile water sharing negotiations between Ethiopia, Sudan and Egypt are being made more difficult by climate impacts that are likely to make the water supply more erratic, exacerbate water shortages, and possibly affect the Nile flow downstream. Another example can be found in the Arabian Peninsula and Somalia, where unseasonably warm weather coupled with the civil war damage to Yemen's locust response system have worsened a locust outbreak that will threaten the food security of 25 million people in the region. Outside the scope of this paper, but also important, are the effects on the Horn of the political and economic responses to climate change in other parts of the world.

European actors are approaching climate security risks in the Horn through a wide range of interventions and projects that are underway across the region:

- **Supporting resilience efforts. Efforts to help to reduce people's vulnerability to livelihood shocks can also help lower the risk of violent conflict by lessening their chances of joining armed groups. Support for resilience projects flows through implementing UN agencies as well as directly to governments.**
- **Supporting improved natural resource management. Interventions that support improved natural resource management and that strengthen dispute resolution**

mechanisms build another kind of resilience and can be helpful in averting violent competition for resources.

- **Enabling mobility and migration**. Pastoralist groups are often at the centre of the region's communal conflicts; policies that help protect their mobility (which is a well-tested strategy to cope with climate variability) can safeguard their resilience and thus help to limit future risk. The Intergovernmental Authority on Development (IGAD)'s protocols on free movement of people and transhumance provide an example.
- **Strengthening relevant peace and security institutions.** The national and regional institutions in the Horn all have a role to play in preventing and resolving conflict, and European support to these institutions (such as the AU, IGAD, the Nile Basin Initiative) and directly to governments, contributes to conflict resolution in the region, including conflicts that are climate-related.
- **Conflict prevention interventions**. Similarly but on a smaller scale, conflict-prevention efforts such as those funded by the Somalia Stability Fund, or the EU's Instrument contributing to Stability and Peace, can support more targeted efforts to reduce conflict, again including conflicts with a climate aspect.
- **Supporting conflict-sensitive climate adaptation efforts.** All efforts to strengthen adaptive capacity in the region can help to reduce conflict risk if they are designed and implemented in a conflict-sensitive manner. European support for climate adaptation projects flows through both the EU's Global Climate Change Alliance Plus (GCCA+) as well as the international climate convention funds, the Global Environment Facility and the Green Climate Fund.

Some concluding considerations on interventions in the climate-conflict space in the Horn of Africa:

(i) Climate-conflict work can provide an opportunity to advance existing statebuilding efforts and interventions as the urgency of dealing with certain environmental issues can bring new momentum;

(ii) It will take a great deal of effort in this region to focus on the longer term and less visible climate change effects on conflict drivers in the region because competing urgent crises absorb all resources and attention in fragile contexts such as the Horn of Africa;

(iii) As climate change increases the likelihood of resource conflicts, a better understanding of how low-intensity communal resource conflicts escalate or are manipulated will be critical, especially given the demographic and political pressures in the region. Similarly, greater expertise in early action to prevent escalation will be important, grounded on effective mapping and monitoring;

(iv) A concerted effort to bridge the gap between the technical and political could prove fruitful so that peacebuilders and analysts are more fluent in their understanding of climate risk profiles and the various agroecological pressures in the region. Climate data has been fed into food security analyses for a long time; there needs to be some thought on how it might be integrated into peacebuilding and political economy analysis; and

(v) As the climate-conflict nexus gets more attention, this should be based on the understanding that political actors and institutions and governance in particular are key in shaping the security implications of climate change, and the responses to these interconnected risks do not lie first and foremost with security actors, but with those who work on stabilisation, prevention and adaptation. Peacebuilders' concerns need to be further understood; these include the risk of the securitisation of the response, and the risk of erasing individual accountability by over-focusing on climate change as a driver.

INTRODUCTION

"The European Union is acutely aware that climate change multiplies threats to international stability and security in particular affecting those in most fragile and vulnerable situations, reinforcing environmental pressures and disaster risk, contributing to the loss of livelihoods and forcing the displacement of people." (EU Council 2020)

The quote above is from a January 2020 EU Council meeting. The climate-conflict link is increasingly integrated into the global policymaking discourse. Beyond the question of whether climate change affects security, thoughts are turning to how exactly security is affected, and what the most effective responses are.

The Horn of Africa is an area of geostrategic significance. As the 2011 EU Horn of Africa strategy pointed out, climate change exacerbates existing pressures in the region, including poverty, food insecurity and population growth, despite the fact that the countries of the Horn have little to no control over global carbon emissions (EU Council 2011).

This case study brings together climate and conflict in the Horn of Africa and seeks to contribute:

(a) A summary of the science on the linkages between climate change/environmental degradation and violent conflict in the region; and

(b) An overview of how the EU and European actors are engaging on climate security in the Horn.

This study is based on desk research and interviews with European diplomatic and development actors, IGAD and UN representatives and think tanks. Section 2 provides context on the Horn of Africa; section 3 reviews the science on climate-conflict linkages; section 4 reviews how the region's climate is projected to change; and section 5 looks at the European interventions in the region. The paper concludes with some considerations for future interventions.

HORN OF AFRICA CONTEXT

The Horn of Africa is defined by the EU as the eight member countries of the Intergovernmental Authority on Development (IGAD) – Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda. This region covers 5.2 million square kilometres (compared to the EU's 4.4 million square kilometres) has a population of 230 million (compared with the EU's 446 million) – with tremendous diversity in ethnicity, language, history, politics and economic development. The Horn of Africa contains one of Africa's largest countries (Sudan) and one of its smallest (Djibouti); the oldest (Ethiopia) and the newest (South Sudan).

Figure 1: The Horn of Africa countries as defined by IGAD | © Rotsee2/Wikimedia Commons CC BY-SA 3.0 (original file was modified)

Approximately 70 per cent of the IGAD region is made up of arid and semi-arid lands, which receive less than 600 mm of rainfall annually; the rest of the region has a great variety of climates and landscapes, including highlands, mountains, valleys, rifts, rivers, ridges and lakes.[1] Agriculture is the backbone of the economy, both livestock and crop production, and employs over 80 per cent of the population.[2] Most of the IGAD countries are among the world's Least Developed Countries (LDC); although GDP per capita is low in most of the countries, there is also high growth. Ethiopia was Africa's fastest-growing economy in 2018 (Giles 2018) and potentially the growth engine for all of Africa (World Economic Forum 2019). As the most populous country in the Horn, Ethiopia is also notable for its rapid urbanisation – 20 per cent of the population currently live in urban areas; by 2028, this is projected to be 30 per cent. By 2034, Ethiopia's urban population will have tripled (Alemayehu 2019).

Despite its strategic geopolitical location and a vibrant diverse population, the Horn of Africa is also a region of poverty, food insecurity and political instability. Over the past half century, the region has experienced a series of devastating famines, all occurring at the nexus of drought and conflict - Ethiopia in the 1980s, Somalia in the 1990s, Darfur in the mid-2000's, and again Somalia in 2011. In 1986, in recognition of this vulnerability, the governments of six countries – Ethiopia, Somalia, Sudan, Kenya, Uganda and Djibouti –

[1] IGAD website: https://igad.int/about-us/the-igad-region
[2] IGAD website: https://igad.int/about-us/the-igad-region

created the predecessor of IGAD, the Inter-Governmental Authority against Drought and Desertification (Healy 2009).

Politically, the Horn of Africa is no stranger to conflict at all levels (Healy 2009, 2011). Violent conflict is a political strategy that has often been used with success – many leaders in the region came to power through force (Museveni in Uganda, Bashir in Sudan, Zenawi and Afewerki in Ethiopia and Eritrea); violence has also been used to depose unpopular leaders (Siad Barre in Somalia). The fragility and violence of South Sudan and Somalia coexist alongside the relatively steady civilian rule of Kenya; Ethiopia's and Sudan's current rocky political transitions stand in contrast to Uganda and Eritrea's overdue transitions.

Cross-border conflicts are common. Countries often intervene in their neighbours' conflicts, either directly by sending troops or indirectly by sponsoring proxies or supporting rebel groups. Sometimes bilateral disputes may even take the form of sponsoring opposing proxies in a third country. Healy calls it a "tradition of mutual interference and subversion that characterises regional relationships in the Horn" (Healy 2011). Some of these conflicts in the Horn have resulted in the redrawing of national boundaries – Eritrea in 1993, South Sudan in 2011, and the ongoing efforts of Somaliland to separate from Somalia. "The implicit (and sometimes explicit) possibilities of new states emerging from conflict meant that essentially domestic conflicts had foreign policy implications" (Healy 2009).

Finally, another common feature in the region is the regularity of ethnic overlaps, affinities and loyalties that transcend national borders (e.g., Somalis in Ethiopia-Kenya-Djibouti; Karamajong in Uganda, Kenya, and South Sudan; Afars in Djibouti-Eritrea-Ethiopia; Borans in Kenya-Ethiopia). On one hand, these overlaps facilitate informal trade and commerce, but on the other they are seen by state authorities as a liability and a potential source of insecurity. In many of these countries, the borderland communities are marginalised economically and politically. Consequently, neighbouring countries can exploit this ethnic overlap as an entry point for the aforementioned cross-border destabilisation (Healy 2011). In most, if not all, cases, these borderlands are populated by pastoralists, key actors in much of the climate-conflict research reviewed below.

Given the socioeconomic fragility and the complex conflict dynamics of this region, could climate change end up being an additional driver of conflict? The next section looks at the science.

REVIEW OF THE SCIENCE ON LINKAGES

On the question of whether climate change has been demonstrated to directly cause large-scale conflict, the science says that this has not been decisively proven. The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5 2014) reviews the studies that have looked into this question, and concludes that "confident statements about the effects of future changes in climate on armed conflict are not possible given the absence of generally supported theories and evidence about causality."

However, while there is an absence of evidence on causality, the IPCC (2014) adds that there is "justifiable common concern that climate change or changes in climate variability increase the risk of armed conflict in certain circumstances" even though it is not clear by what level of magnitude.

This has been described as the "threat multiplier" effect, exacerbating existing factors that might lead to conflict. The IPCC (2014) affirms that many of the factors that increase the risk of civil war and other armed conflicts are sensitive to climate change.

Some studies look at the linkages from the other direction – conflict and displacement can result in significant deforestation and increased environmental degradation, thereby aggravating competition over scarce natural resources. Similarly, ongoing or recent armed conflict can have a negative effect on the capacities required to adapt to climate change. This includes damage to livelihoods and increased vulnerability of communities to the impacts of climate change as well as undermining the ability of states to prevent and respond to natural disasters and humanitarian crises (IPCC 2014).

Other studies have shown that efforts to mitigate or adapt to climate change may actually increase the risk of armed conflict, for example where they make abrupt changes to the distribution of access to resources or aggravate inequalities or grievances (IPCC 2014). See Box 1 for an example from the EU in Kenya.

BOX 1: ADAPTATION INTERVENTION LEADING TO TROUBLE

In 2016, the EU funded a project (within a broader €31 million initiative to improve Kenya's ecosystem services) called the WaTER programme focused on protecting the "Water Towers" or high-elevation forests that serve as natural reservoirs. Much of the country draws its water supply from these towers; their conservation is thus vital to the country's resilience to drought and climate change. However, the EU was forced to suspend the programme because of the Kenya Forest Service's forcible evictions of communities of indigenous peoples from one of the Water Towers areas, resulting in one fatality. Human rights organisations subsequently warned that the WaTER program could encourage abuses against indigenous communities. In January 2018, the programme was suspended.

Source: EU Website: https://eeas.europa.eu/delegations/kenya/14465/protecting-and-increasing-forest-cover-kenya_en

Pathways to violence

In a 2016 SIPRI report, van Baalen and Mobjörk sought to better understand the indirect causality by looking at how and under what circumstances climate change influences the risk of violent conflict in East Africa (including all the IGAD countries). They reviewed the existing climate-conflict literature and identified five types of pathways from climate-related environmental damage to local or intrastate violent conflict (inter-state conflict is

excluded from their analysis). The first three pathways they identified related to the negative impact on the availability of natural resources. This can contribute to conflict by (1) worsening livelihood conditions, (2) increasing migration, or (3) changing pastoral mobility patterns. The next two pathways related more to the dynamics of conflict, specifically (4) how climate variability can affect the tactical decisions of armed groups, and when they decide to fight; and (5) how political elites can exploit low-level communal resource conflicts, thereby escalating the conflicts.

The examples provided for the first three pathways – all of which relate to increased competition over scarce natural resources – are helpful to illustrate how violent conflict may actually result or increase. For example, in Somalia, drought and livestock losses (including losses from being forced to sell at depressed prices) were shown by a 2014 study to affect livelihoods and make people more susceptible to recruitment by Al-Shabaab (van Baalen and Mobjörk, 2016).[3]

To illustrate the migration pathway, the example is drawn from a 2015 Sudan study that measured environmental change over two decades. It found that in Darfur, the early phase of the war happened in areas that had experienced increased precipitation and thicker vegetation cover between 1982-2002, because this had led to increased permanent and seasonal in-migration and increased co-habitation between Arab and non-Arab groups. The influx of people increased the risk of local conflicts because "groups from different areas and of differing ethnicity are more likely to lack common conflict mechanisms and are generally better at mobilisation of the necessary resources for violence" (van Baalen and Mobjörk 2016).

The pathway related to changing pastoral mobility patterns is interesting because pastoralism is already an adaptive mechanism. Their custom of moving their herds and families in search of pasture makes them better able to respond to increasing climate variability, when compared for example to sedentary communities. The risk of conflict arises when either the space to move is constricted (e.g., changing land use patterns) or as per the example provided, the changes in climate force pastoralists to move beyond their traditional routes and thus beyond the customary and negotiated corridors. This brings them into conflict with other pastoralists (e.g., in Ethiopia, Karrayus have been pushed to cross further into Afar territory in search of pastoral resources) or with farmers (e.g., in Sudan's South Kordofan nomadic groups have been forced by declining rainfall further southwards into farming communities) (van Baalen and Mobjörk 2016).

The fourth and fifth pathways are related to conflict dynamics – how armed groups may choose to fight at certain times (e.g., when there is greater vegetation and camouflage) and how low-intensity communal conflicts can be manipulated and politicised. For example, the Sudanese government exploited a longstanding grievance between the Rezaigat camel nomads in Darfur and their southern farming Fur and Masalit neighbours. Droughts in the 1970s and 1980s strained relations between the nomads and the farmers, and when southern Sudan rebelled, the Khartoum government coopted the Rezaigat nomads by bringing them into the ranks of the brutal Janjaweed militia and setting them against the rebelling Fur and Masalit communities. The second example is similar. In the early 1990s in Kenya, "the Moi regime sought to discredit the push for democratisation by orchestrating ethnic violence between pastoral groups and farmers" exploiting longstanding land grievances (van Baalen and Mobjörk 2016).

The pathways are a useful lens through which to consider the links between climate change or climate variability and violent conflict, because interventions can be planned and

[3] The same point is made in two adelphi papers: Insurgency, Terrorism and Organised Crime in a Warming Climate - Analysing the Links Between Climate Change and Non-State Armed Groups, October 2016; and Shoring Up Stability: Addressing Climate and Fragility Risks in the Lake Chad Region, May 2019.

implemented along that pathway, to try to avert conflict (discussed further in the interventions section).

At the same time, we have to understand these pathways as highly simplified. Van Baalen and Mobjörk (2016) highlight the complexity of this topic by focusing on three factors (temporal, spatial and socio-political) that complicate the study of these pathways and need to be taken into account when analyzing the links between climate-related environmental change and violent conflict. It can also be helpful to consider these dimensions when thinking about interventions.

Temporal: The first is the scale of the environmental change in question – a flood or a cyclone will unfold rapidly while sea level rise or climate change may take decades or centuries. Most studies focus on the former, or on climate variability or unpredictability (i.e., was there more or less rainfall or heat than normal in a given period) rather than long-term climate change. The second temporal dimension to be considered is the time lag between the climate-related environmental change and the outbreak of violence – namely, whether something is an immediate trigger of violence or is a driver of conflict in the long term. The former is easier to see and study.

Spatial: The spatial element introduces the complicating factor that a climate-related environmental change in one area may not cause violent conflict in that same area, but in a different region altogether (for example, when conflict is a result of migration or altered pastoral mobility patterns). This suggests that the geographical scale of a study might affect findings. It also implies that interventions, whether adaptation strategies or conflict prevention attempts, might not need to take place where the negative climate-related change occurred.

Socio-political: This dimension considers that the impacts of climate-related environmental change occur in specific socio-political contexts. Not all resource competitions turn violent, and violence can be averted or exacerbated by politics, social investment, political economies, and the strength of formal or traditional conflict-resolution mechanisms. One of the examples given is the increasing scarcity faced by the Horn of Africa's pastoral groups, not simply because of the worsening environmental conditions, but because of longstanding political and economic marginalisation, including national and sub-national border closures to curb mobility or government attempts to forcibly settle pastoral communities. This socio-political dimension is arguably the most important factor for shaping climate-security risks and thinking about interventions. As van Baalen and Mobjörk (2016) put it: "To disregard the political aspects of resource scarcity is to risk overlooking the political manoeuvrability that exists, even under circumstances of diminished and worsened environmental conditions."

CLIMATE CHANGE IN THE HORN OF AFRICA

Africa's climate is changing and the impacts are already being felt, according to the IPCC's Fifth Assessment Report. The Climate & Development Knowledge Network (2014) summarises:

> *"The Fifth Assessment Report presents strong evidence that warming over land across Africa has increased over the last 50-100 years. Surface temperatures have already increased by 0.5-2°C over the past hundred years. Data from 1950 onwards suggests that climate change has changed the magnitude and frequency of some extreme weather events in Africa already… During this century, temperatures in the African continent are likely to rise more quickly than in other land areas, particularly in more arid regions. Under a high-emissions scenario, average temperatures will rise more than 2°C, the threshold set in current international agreements, over most of the continent by the middle of the 21st century."*

IPCC also reviews observed climate trends and future projections in East Africa – see Annex. Although all projections agree the Horn of Africa will be hotter, there is no consensus on whether the region will be wetter or drier. The IPCC projections suggest the region will become wetter during this century, but other studies suggest that the increase in rainfall in the short rains will be offset by declining rainfall and severe dryness during the long rains season on which most of the region's crops rely (MFA Netherlands 2018). All studies, including the IPCC, agree that there will be more frequent extreme events (droughts and storms). The IPCC (2014) forecasts rising sea levels by 2100 that will threaten coastal settlements in Kenya, Eritrea, Somalia and Djibouti; predicted effects include loss of liveable areas as well as salinisation of freshwater aquifers.

The Horn of Africa is particularly vulnerable to the negative impacts of climate change, as shown in some of the research reviewed above. Below are two current instances of how climate change pressures are interacting with conflict dynamics in and around the Horn of Africa – in one case, how climate change is making a tense situation more difficult and in the other, how climate change and conflict are impacting food security.

Tension over the sharing of the Nile waters among Egypt, Ethiopia and Sudan have been at crisis point since Ethiopia moved ahead in 2011 with the construction of the Grand Ethiopian Renaissance Dam (GERD), Africa's largest dam, on the Blue Nile (ICG 2019). Egypt is worried the dam will drastically reduce the downstream flow of the Nile, the source of around 90 per cent of Egypt's freshwater supply. Egypt argues that tampering with the river's flow would affect millions of farmers and threaten Egypt's food supply; Ethiopia argues that this dam is key to its national development plans. Sudan joins Ethiopia in asserting its right to exploit the Nile waters to further economic development; in particular, Sudan is eager for the promised cheap electricity and expanded agricultural production (ICG 2019).

A failure to agree on the way forward could trigger a race to fill respective dam reservoirs, an ecological disaster, a food security and political crisis in Egypt, and potential conflict between Egypt and Ethiopia. While these negotiations would always have been fraught, they have been made more difficult by the compounding impacts of climate change, which is likely to make the water supply more erratic and to exacerbate water shortages and possibly affect the Nile flow downstream.

Tensions related to transboundary water relations in the Horn are not limited to Egypt/Ethiopia – a March 2020 SIPRI report outlines potential future tensions arising around the Juba and Shabelle rivers, shared by Ethiopia and Somalia and to a marginal extent by Kenya. There has not been a bilateral agreement on international cooperation over the rivers' usage to date (Krampe et al. 2020).

In another instance of the potential deadly confluence of climate change and violence – a desert locust outbreak is sweeping through the Horn of Africa, encouraged by unseasonably warm weather; by a series of cyclones in the Arabian Peninsula and Somalia that have encouraged above average breeding; and by the civil war's damage of Yemen's locust

response system, which would normally have curbed the locusts before they got to the Horn of Africa (Ahmed 2020). In February 2020, the IPC (Integrated Food Security Phase Classification, a multipartner initiative on food security) issued an alert[4] about the potential devastating effect of the locust outbreak (and the ongoing breeding and spreading) on food security in the region. The UN has warned that the food security of 25 million people across the region could be threatened (Beaumont 2020). The Covid-19 pandemic has further hindered efforts to combat the locust plague by disrupting the supply chains for pesticides and other supplies (Kleinfeld 2020).

Outside the scope of this paper, but also important, are the effects on the Horn of the political and economic responses to climate change in other parts of the world. Examples include Gulf state investments in 'bread baskets' in Ethiopia and Sudan driven by concerns for their own food security, or acquisitions of large forests as part of international climate-offsetting schemes which lead to conflicts with local communities relying on access to the forests for their livelihoods.

EUROPE'S APPROACH IN THE HORN ON CLIMATE SECURITY RISKS

European actors in the Horn are cognisant of the rising importance of the climate-conflict nexus, and are at the stage of incorporating this issue into the planning stages for future programming (e.g., EU planning for 2021-2027 cycle is currently ongoing). Some actors are commissioning research to better understand the linkages (Denmark), while others are convening learning events and seeking to develop long-term climate scenarios to feed into programming (Netherlands).

That said, existing European interventions are contributing to this area in many ways:

Supporting resilience efforts

If, as the science indicates, worsening livelihoods can make people more vulnerable to recruitment by armed groups, then efforts to reduce people's vulnerability to livelihood shocks could lower the risk of violent conflict. There are numerous examples of resilience interventions that also make specific reference to strengthening livelihoods and food security, and reducing conflict. Below is a list of some illustrative examples:

- Since 2012, the EU has implemented a programme called RESET (RESilience-building in EThiopia), a livelihoods programme focused on areas most affected by food and nutrition insecurity. It works simultaneously over three different time horizons: in the immediate or short term, by providing any needed crisis response through a rapid response fund; in the medium term, by improving basic services and safety nets; and in the long term, by helping communities better deal with pressures related to natural resources, climate change, social protection, demographic growth and disaster risk management. The second phase (with additional funding from the EU Trust Fund and from Dutch and Austrian Cooperation) is coming to an end in 2020.
- Recognising the recurrent drought cycles in Somalia, the UN, EU and World Bank with the Somali federal government in 2017 embarked on a process to create a Resilience and Recovery Framework (RRF) to try to move the country beyond just dealing with the devastating effects of these droughts to addressing some of the underlying issues and strengthening resilience. This included enhancing Somalia's ability to respond to climate change. "The programming and prioritisation process under the RRF will be

[4] http://www.ipcinfo.org/ipcinfo-website/ipc-alerts/issue-18/en/

the first real attempt in Somalia to align all stakeholders— humanitarian, recovery, and development— behind drought-related recovery and resilience building efforts." (Federal Government of Somalia 2018)

- In October 2019, the UN's Food and Agriculture Organization (FAO) launched a four-year $28 million Food and Nutrition Security Resilience Programme, funded by the Netherlands. This is the first programme in the region focusing on the addressing the cause-effect relationship between conflict and food insecurity in Somalia, South Sudan and Sudan, and seeking to set good examples of how to build food system resilience in protracted crises.
- The severe 2010-2011 drought led to the adoption of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI), which promotes innovative sustainable development strategies, policies and programmes at member state and regional levels, aimed at building resilience to future climatic and economic shocks. Of the approximately $1 billion raised since 2013, the EU, Germany and Denmark have contributed approximately $276 million, and the World Bank and UNDP approximately another $200 million, and the African Development Bank close to $400 million.[5]

Supporting improved natural resource management

The negative impact of climate change or variability on access and availability of natural resources can contribute to increased competition which can result in violence in the absence of management mechanisms (Ruttinger et al. 2015). Accordingly, interventions that support improved natural resource management and strengthen dispute resolution mechanisms build another kind of resilience; these can also be helpful in reducing climate-security risks.

- From 2013 in Darfur, the UNEP-implemented Wadi El Ku Catchment Management Project for Livelihoods, Development and Sustainable Peace (€6.8 million for phase 1 and €10 million from the EU Emergency Trust Fund for Africa (EUTF) for phase 2) has contributed to improving livelihoods of conflict-affected populations in Darfur by encouraging water cooperation. The project demonstrates how effective and inclusive natural resource management can improve relationships over natural resources, therefore contributing to peace in a conflict-affected region of Sudan, and improving livelihoods by enabling sustainable increases in agriculture and related value-chain productivity.

The exploitation of natural resources can also fuel conflict, and improved natural resource management efforts can help to mitigate the negative effects of such trade.

- The Programme for Sustainable Charcoal Reduction and Alternative Livelihoods (PROSCAL) is an interagency programme implemented by the Federal Government of Somalia, in collaboration with UNEP, UNDP and FAO and is funded by the EU, Sweden and Italy. PROSCAL was formed with the aim of coordinating international cooperation to support and implement the UN Security Council ban on the export and import of charcoal from Somalia. See Box 2 ahead for further discussion on the charcoal ban as a conflict prevention effort.

Enabling mobility and migration

Van Baalen and Mobjörk (2016) point out that pastoralist groups in the Horn of Africa are often at the centre of the region's communal conflicts, and posit that policies that decrease their vulnerability to climate change may help to limit risk in the future. In particular, they

[5] IGAD website: https://resilience.igad.int/resource-mobilization/

call for measures to protect pastoralists' mobility, proposing international agreements that secure cross-border movement.

Along these lines, in February 2020 the Protocol on the Free Movement of Persons in the IGAD Region was endorsed at the ministerial level (thus concluding a three-year project funded by the EUTF). In March 2020, the Protocol on Transhumance in the IGAD Region was endorsed at ambassador level. The latter project will facilitate formal livestock cross-border mobility in the region, including via demarcated corridors and information sharing between member states about herders' movements. This protocol is intended to facilitate pastoralists' movement across the region, and to encourage interaction among member states, particularly their security apparatuses.

A 2019 German Development Institute discussion paper looked into the influence of EU migration policy on regional free movement in the IGAD region and whether this could represent a contradiction with the EU's current migration policies and priorities, which some have criticised as being too narrowly focused on stemming irregular migration from Africa to Europe. The author finds that both EU and IGAD officials emphasise that the concept of regional free movement actually aligns EU and IGAD interests insofar as regional free movement "fosters growth, development and economic opportunities in the region, enables people to move within the region to take advantage of these opportunities, and therefore makes them less likely to migrate to Europe" (Castillejo 2019).

Strengthen relevant peace and security national and regional institutions

State institutions have a critical role to play in peace and conflict prevention, as do regional organisations including the African Union (AU) and IGAD. EU and European nation support to strengthening conflict-resolution mechanisms in the Horn, and more broadly to governance institutions, is intended to contribute to improved conflict resolution in the region, including conflicts that may be climate-related. Below are some relevant examples.

- The EU provides support to the AU and IGAD peace and security efforts and institutions, and has also supported important regional peace processes including the IGAD process for Somalia 2002-2004, AU High Level Implementation Panel on Sudan/South Sudan separation and the 2012 conflict, and the IGAD mediation in South Sudan leading to the 2015 Comprehensive Peace Agreement (De Waal & Ibreck 2016).
- The EU has funded the AU's African Peace Facility with €3.5 billion since 2004 (European Commission 2020). This facility covers the cost of the African Union Mission in Somalia (AMISOM), the Ceasefire and Transitional Security Arrangements Monitoring Mechanism in South Sudan (CTSAMM), the AU Early Response Mechanism (which has undertaken mediation in Sudan, South Sudan, Somalia and Uganda, and electoral violence prevention in Kenya).[6]
- For many years, the EU has been one of IGAD's biggest donors, providing €80 million from 2014 to 2020 (Castillejo 2019).[7] The EU is also currently the main donor to IGAD's Conflict Early Warning and Response Mechanism (CEWARN). CEWARN is of particular interest because it focuses most of its early warning work in the borderlands and pastoral regions of the Horn, namely, the Karamoja cluster (includes cross-border regions of Ethiopia, Sudan, Kenya, and Uganda), the Somali cluster (encompassing cross-border regions of Ethiopia, Kenya and Somalia), and the Dikhil

[6] https://www.africa-eu-partnership.org/en/financial-support-partnership-programme/african-peace-facility

[7] The breakdown is €40 million for peace and security, €25 million for natural resource management, €5 million for capacity building on resilience, and €10 million for regional integration.

Cluster (cross-border regions of Djibouti and Ethiopia).[8] Many of the situations they assess as potentially leading to violence or conflicts, and that they work to de-escalate or defuse, are caused by the resource competition issues described in the earlier section of this paper. CEWARN has recently started incorporating weather and climate data from a sister agency, the IGAD Climate Prediction & Applications Centre (ICPAC), into their analyses, for example, data around predicted droughts which would indicate potential changes in pastoral movements or increased tensions around water points.

- The Nile Basin Initiative (NBI) is a partnership between the Nile riparian states and has been supported by the World Bank and European actors. In 2017, the EU and Germany made a combined contribution of €13.5 million to a transboundary water management programme to assist in developing mechanisms for cooperative and knowledge-based water management, prevent conflicts and sustain the common resource. Unfortunately, Egypt froze its membership in the NBI in 2010 when tensions over the sharing of the Nile waters started to rise. However, according to the International Crisis Group, the NBI still offers the broadest platform for discussion and could "craft a more forward-looking basin-wide consensus to govern resource use and avert conflict down the road" (as compared with the ongoing trilateral talks involving only Egypt, Ethiopia and Sudan and focused narrowly on the dam) (ICG 2019).
- In some instances, the institution-strengthening intervention is at the national government level, such as in the case of Somalia, where the government is facing challenges from an extremist insurgency, as well as recurring droughts and floods. An EUTF grant of €103 million was made as a direct cash infusion in May 2018 to strengthen the Federal Government of Somalia; the money was also intended to help the country reach the arrears clearance point with international financial institutions and the debt relief decision point of the IMF's Highly Indebted Poor Countries initiative. Somalia did indeed receive debt relief from the international financial institutions in March 2020, and it is hoped this will allow the Somali government to continue to strengthen its capacity to the point of being able to deliver services to the population.

Conflict prevention interventions

On a smaller scale than some of the support described above, there are also shorter-term and more targeted conflict prevention activities that approach the climate-conflict nexus from the conflict-prevention angle.

- The Somalia Stability Fund (SSF) is a multi-donor fund established in 2012 to address "structural drivers of conflict and instability, with a focus on addressing key fault-lines that drive political conflict; fostering community-government relations; increasing popular participation in governance; and reducing vulnerability to conflict in targeted areas."[9] As an example, in 2017-2018, the SSF funded a drought emergency response project in Sool, Sanaag and Bari regions, three of the five regions worst affected by the 2017 drought in Somalia and most at risk for resource-based conflicts triggered by severe water shortages. These are largely pastoral regions, and were also located on a particularly sensitive political fault line with both Somaliland and Puntland claiming ownership of this territory, and thus more vulnerable to political manipulation. At only $2 million, the project focused on building and rehabilitating water facilities and injecting cash into communities through small livelihoods investments in local businesses and job creation for women and youth, and was successful in averting conflict in that particular situation. A

[8] http://www.igadregion.org/cewarn/
[9] SSF contributors are from Denmark, Sweden, Netherlands, Norway, the EU, Germany and the United Kingdom http://stabilityfund.so/about-us/

similar project was funded in the same time period in Bay, Bakool and Gedo regions, also focused on reducing communal conflict caused by water competition fueling tensions within communities, but in this case, the focus was communities that had experienced large scale in-migration of drought displaced IDPs.

- The EU's Instrument contributing to Stability and Peace (IcSP) provides short and mid-term assistance on conflict prevention, crisis response and peace building actions, designed to bridge the "security-development nexus". With projects in over 75 countries, their budget for 2014-2020 was €2.3 billion; about 31 per cent of that total was spent in sub-Saharan Africa (Bergmann 2018). The issue of climate fragility and the linkages with peacebuilding efforts have been on IcSP's radar – they have sought to build on the Darfur water management project described earlier in this case study and to specifically pilot measures to strengthen resilience to climate change fragility risks.

BOX 2: SANCTIONS, TERRORISTS AND THE ENVIRONMENT

In 2013, the UN Security Council incorporated a ban on the charcoal trade into its sanctions list for Somalia because Al-Shabaab had come to dominate the charcoal trade. The estimated total market value of illicit charcoal exports in 2014 was $250 million per year, mostly from lucrative exports to Gulf markets. Al-Shabaab lost control of Kismayo port in 2012, which diminished their role in the charcoal trade, and from around 2015-2016, Gulf States started to actively implement the ban, further reducing Al-Shabaab's revenue from the trade.

Natural resource exploitation can certainly fuel conflict and this ban was an attempt to get that under control. It seems to have worked in one sense, as Al-Shabaab's revenue from the illegal charcoal trade has significantly reduced. On the other hand, this does not seem to have impacted the group's operations or efficacy as their ability to collect revenues from other sources, including taxing lawful business activities, seems to have increased in the same period. Second, the illicit charcoal trade still continues, reduced but still active, and is reported to now be benefiting one of the emerging federal member states, Jubaland State, and used by them to fund their fight against Al-Shabaab. Third, the continuation of an unregulated charcoal trade compounds the environmental degradation that will further contribute to Somalia's vulnerability in the face of climate change. Although the sanctions brought together concerns around terrorist financing and environmental degradation, they also illustrate the challenge of trying to address both issues with the same tool.

Support to conflict-sensitive climate adaptation efforts

This type of intervention might represent the longest-term approach to addressing the climate-conflict nexus, because ultimately any adaptive capacity generated in the system will hopefully reduce any conflict risk that may arise from climate-related change. However, climate change adaptation efforts must be conflict-sensitive; otherwise, they may actually exacerbate conflicts (see Box 1 above).

- The Global Climate Change Alliance Plus (GCCA+) is an EU initiative to help the world's most vulnerable countries to build climate resilience by supporting mitigation and adaptation projects. With a budget of €750 million from 2007-2020, they have funded four projects in the Horn of Africa, all focused on adaptation. In particular, GCCA+ supported a €10 million project in Ethiopia building the national capacity and knowledge on climate change resilient actions; an €11 million project in Uganda building the capacities of communities, commercial farmers and the government to cope with climate change; a €10 million project in Sudan contributing to preventing, combating and reversing desertification through the sustainable

management of natural resources; and €3 million in Djibouti responding to climate change in the energy and water sectors.[10]

- The Global Environment Facility (created in 1991) and the Green Climate Fund (created in 2010) are both funds set up around the international climate conventions and intended to finance the tremendous climate mitigation and adaptation needs around the world. Both are recipients of significant financing from European countries. Both instruments have been criticised for being unwieldy and slow-moving with difficult and overly technical application processes. That said, activities funded include helping IGAD countries prepare National Adaptation Plans of Action (NAPAs), supporting agribusinesses with long term capital, strengthening climate information systems, and strengthening the adaptive capacity and resilience of communities in different parts of the Horn. The Global Environment Facility works across all IGAD countries in partnership with UN agencies, the World Bank and the African Development Bank while the Green Climate Fund has limited its efforts so far to Kenya, Uganda and Ethiopia with a greater focus on financing for renewable energy solutions.

CONCLUDING THOUGHTS

This case study has endeavoured to provide an overview of the linkages, in the literature and in this region, between climate change or variability and violent conflict, and an overview of some of the interventions in the region.

As Europe continues to think about and act on the climate security challenges ahead, here are some considerations on interventions in this space: (i) climate-conflict work can provide an opportunity to advance statebuilding efforts; (ii) it will take a great deal of effort to focus on the longer term and less visible climate change effects on conflict drivers in the region; (iii) further study of how local or communal resource conflicts escalate, inadvertently or through manipulation, to bigger conflicts could be helpful; (iv) a concerted effort to bridge the gap between the technical and political could prove fruitful; and (v) peacebuilders' concerns include the risk of securitising this area and erasing individual accountability.

The opportunity in climate-conflict interventions. As this area starts to gain traction and interventions are planned, it seems obvious that one of the main ways that climate change will be addressed will be through governments' long-term adaptation strategies. In the Horn of Africa, many weak governments will need support on institutional strengthening and governance capacity building. This is not new; international partners and multinational institutions have been supporting this work for a long time. However, the urgency of dealing with certain environmental issues can represent an opportunity or entry point for statebuilding, and resource scarcity can incentivize collaboration. For example, the transboundary river negotiations required between Somalia and Ethiopia related to the Juba-Shabelle basin can be used as a way to support Somali authorities in building their internal institutions and putting aside some of their contentious issues to prepare themselves for this international process. This statebuilding opportunity will need to be balanced against the political dimension of climate conflict, and the potential role of the state as an actor in conflicts related to climate-affected resources.

Focusing on longer time horizons. The effects of climate change or climate variability seem to be omnipresent in the Horn of Africa, and because of the fragility of the region and vulnerability of people and households, the impacts are magnified (for example, a weather

[10] GCCA+ website: Factsheet - https://www.gcca.eu/stories/gcca-factsheet-building-climate-resilience-most-vulnerable-countries; and programme listing by country - https://www.gcca.eu/programmes-countries-0

event does not have to be so extreme to have an extremely negative impact). Significant investments are being made to enable people to respond to these changing conditions, including building resilience of vulnerable communities to try to minimise the risk of conflict. This work is important but different from the longer-term work on understanding and addressing conflict drivers that may be worsened by long term climate change. The time horizons involved in climate change and essential adaptation planning are 20 to 30 years at minimum – this poses a challenge to most planning processes and budget cycles. It is even more challenging when competing urgent crises absorb all resources and attention in fragile contexts such as the Horn of Africa.

Conflict escalation dynamics and acting early. There seem to be situations where hyperlocal or low-intensity communal resource conflicts between pastoralists and farmers are successfully defused through traditional conflict resolution mechanisms or using the early warning mechanisms like CEWARN, or even through preventative stabilisation measures; and other situations where they escalate dramatically. The fifth pathway identified by van Baalen and Mobjörk (2016) described how political elites can sometimes exploit communal resource conflicts for political reasons, drawing them into larger national dynamics and thereby intensifying them. As climate change increases the likelihood of resource conflicts, a better understanding of these escalation pathways will be critical, especially given the larger political landscape across the region, i.e., rapidly growing and urbanising young populations, ethnic and identity politics in shaky political transitions, and a culture of mutual interference in a region with a steady incidence of low intensity resource skirmishes along the border regions. Similarly, greater expertise in intervening early and politically with the right parties and in the right manner to prevent escalation will also be important, and possible only with the development of effective mapping and monitoring tools to identify the local issues with the potential to flare up.

Bridging the technical and political. Working at the climate-conflict nexus is inherently political. In the same way that peacebuilders and analysts are conversant with the social and political features of communities and countries, they could also benefit from being more fluent in their understanding of climate risk profiles and agroecological pressures in the region. This calls for climate forecasting and impact information that is more accessible and digestible – perhaps this means climate projection data translated into future scenarios, or cost projections, or political economy analyses – a format that will make it easier to act on. Climate data has been fed into food security analyses for a long time; there needs to be some thought on how it might be integrated into peacebuilding and political economy analysis. See Box 3 for an illustrative example. Similarly, climate change adaptation practitioners could benefit from the understanding and experiences of peacebuilding practitioners in dealing with the political side of adaptation.

BOX 3: LOOKING TO THE FUTURE

Rapid urbanisation is a major feature of the Horn, and fast-growing cities can become a conflict risk if not managed correctly (e.g., overcrowded slums, unsupported IDPs, high levels of unemployed youth, criminality, potential terrorist recruitment, police brutality, etc.). Now let's add climate change: the World Bank's 2018 Groundswell report looks at internal climate change-induced migration, and says that climate change could push around 86 million people in sub-Saharan Africa to migrate within their countries by 2050. These people will be moving to escape the slow-onset impacts of climate change and they will move from less viable areas with lower water availability and crop productivity and from areas affected by rising sea level and storm surges. The data in this report shows that, for example, Nairobi will be a climate "in-migration" hotspot because of better climatic conditions for agriculture as well as better livelihood opportunities, whereas Addis Ababa by 2050 could be an out-migration spot because of declines in water availability and crop productivity. So in Ethiopia, where the population is projected to urbanise heavily through 2050, population will also likely be drawn to secondary cities. This is useful information for urban planners and also those who are working to reduce climate-related conflict risks – planning and early action can help mitigate risks.

Source: World Bank Groundswell Report (Rigaud et al, 2018)

Considering peacebuilding risks: Political actors and institutions and governance in particular are key in shaping the security implications of climate change, and the responses to these interconnected risks lie first and foremost with those who work on stabilisation, prevention and adaptation rather than with security actors. In a region that has seen a security-based approach to numerous issues (extremism, migration), there is a potential risk of the over securitisation of this climate-conflict risk. This would certainly result in greater resources being secured for interventions, but it might have a negative effect in terms of actual responses on the ground, especially with security institutions. Secondly, peacebuilding actors raise a concern about erasing the accountability of conflict actors by overfocusing on climate change as a driver. Both these concerns would be worth exploring further.

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ANNEX: OBSERVED CLIMATE TRENDS AND FUTURE PROJECTIONS IN EAST AFRICA[11]

Observed temperature:

The equatorial and southern parts of eastern Africa have experienced a significant increase in temperature since the early 1980s. Seasonal average temperatures have also risen in many parts of eastern Africa in the last 50 years. Countries bordering the western Indian Ocean experienced warmer temperatures and more frequent heat waves between 1961 and 2008.

Projected temperature:

Projections for medium- to high- emissions scenarios indicate that maximum and minimum temperatures over equatorial East Africa will rise and that there will be more warmer days compared to the baseline by the middle and end of this century. Climate models show warming in all four seasons over Ethiopia, which may result in more frequent heat waves.

Observed rainfall:

Rainfall in eastern Africa is very variable in time and space. Several physical processes, including the El Niño Southern Oscillation, affect rainfall. Some models suggest that rapid warming of the Indian Ocean may be the cause of less rainfall over eastern Africa between March and May-June in the last 30 years. Summer monsoon rainfall declined throughout much of the Horn of Africa over the last 60 years.

Projected rainfall:

In spite of the declining rainfall trend observed (page 11 above), global projections suggest that by the end of the 21st century, the climate in eastern Africa will be wetter, with more intense wet seasons and less severe droughts in October-November-December and March-April-May, a reversal of recent historical trends. Regional models suggest that most parts of Uganda, Kenya and South Sudan will be drier in August and September by the end of the 21st century. Projections indicate shorter spring rains in the mid-21st century for Ethiopia, Somalia, Tanzania and southern Kenya, and longer autumn rains in southern Kenya and Tanzania.

Observed extreme events:

There is a lack of evidence about trends in extreme temperature, extreme rainfall and drought in East Africa (*low con dence*). However, droughts and storms have been more frequent in eastern Africa in the last 30–60 years. Continued warming in the Indian Ocean has been shown to contribute to more frequent East African spring and summer droughts over the past 30 years. It is not clear whether these changes are due to anthropogenic influence or to natural climatic variability.

Projected extreme events:

The IPCC's *Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (SREX, 2012) indicates that there will likely be more heavy rainfall over the region with high certainty and more extremely wet days by the mid-21st century. There will also likely be an increase in the frequency of hot days in the future (*high confidence*), although a decreasing dryness trend over large areas is also projected (*medium confidence*).

[11] Excerpted from the Climate and Knowledge Development Network – The IPCC's Fifth Assessment Report: What's In It For Africa https://cdkn.org/wp-content/uploads/2014/04/AR5_IPCC_Whats_in_it_for_Africa.pdf