

*A systemic analysis of the role that climate, natural resource and food systems play in conflict and peace is key to design and implement interventions addressing and preventing conflict. This document is one part of the 6- policy note outputs from the CGIAR Climate Security Webinar Series. These notes summarize the key messages made during the webinar panel discussion. Recordings of the webinar sessions can be found [here](#).*

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### **Panellists and short summary**

Joining us in these discussions, we benefited from a distinguished and multi-disciplinary panel:

- **Her Excellency Ambassador Rigmor Elianne Koti**, Norway's Special Representative for the Sahel
- **Dr. Bruno Charbonneau**, Director, Centre FrancoPaix in Conflict Resolution and Peace Mission
- **Dr. Ornella Moderan** Institute for Security Studies (ISS), Head of Sahel Programme
- **Dr. Catherine-Lune Grayson-Courtemanche**, Senior Policy Advisor, International Committee of the Red Cross
- **Dr. Robert Zougmore**, Africa Program Leader, CGIAR Research Program on Climate Change, Agriculture and Food Security

Our previous webinars explored the idea of how climate and food systems science intersect as they shape the security agenda, influencing as well how sustainable livelihoods are affected for those residing in regions prone to or in conflict. Discussions ranged from unveiling how data and new technologies can identify biophysical and social trends allowing for more responsive interventions, to how sustainable finance can be mobilised to catalysed increased resources to support livelihood options for affected populations.

In this webinar, we looked into a case study- the Sahel region in Africa. We focused on bridging several perspectives stemming from both the practice of security, including state, governance, and human security, and from the practice of climate and food systems, aiming at uncovering essential interventions necessary to address the complex cycle of conflict and poverty within the region. Following the key objective of the series, this discussion sought to align different perspectives into a coherent narrative with some common goals. Connecting those working on climate change, food systems and security issues can potentially catalyse new perspectives and innovative solutions pathways.

## The Sahel – A Region of Instability and Conflict

The semi-arid transitional zone between the Sahara Desert and the savannas to the south, known as the Sahel, is one of the most fragile regions in the world, with the OECD characterising all Sahelian countries bar Senegal as either fragile or extremely fragile<sup>1</sup>. Threats to stability include multiple secessionist movements, armed struggles, high incidence of drug-related state penetration, and terrorism. Against this background, Al-Qaeda's rise to prominence in northern Mali in 2012 prompted a counterinsurgency response from the EU and the international community. However, despite this renewed securitisation effort, extremist ideologies remain a chronic threat to even the survival of states, already fragile from different perspectives. It is therefore clear why many of the factors enabling terrorist groups to operate within the region remain unaddressed. Local state structures have not been able to fully control the situation.

Against the backdrop of these acute security threats, there is also a microcosm of localised conflict driven by natural resource scarcity and ethnic identities. As Dr. Moderan noted, an overwhelming majority of conflicts along the semi-arid regions arise locally. Increasingly variable seasonal weather cycles have pushed traditional herders and farmers of different ethnic groups towards the edge of their communal resilience. Dr. Grayson-Courtemanche cited the example of northern Mali, where droughts have forced nomadic herders to travel long distances to find water ponds. There, a lack of institutional presence and localised governance has caused disputes between herders and farmers, the latter heavily dependent on irrigation for their crops. These disputes often escalate into violence along ethnic lines. Dr. Moderan emphasised the need to solve these disputes at the local level to prevent such conditions from becoming fertile ground for further instability as communities in Burkina Faso, Mali, Mauritania, Niger, Chad and other states have become trapped in a mutually reinforcing cycle of conflict, poverty, weak institutions, and lack of social safety nets. Poverty and conflict have impacted access to essentials to the extent that a massive humanitarian crisis has emerged within the region, where mass migration has become prevalent. Dr. Grayson-Courtemanche noted how the ICRC estimates that there are over 2 million nutritionally vulnerable refugees in the area, with over 400,000 malnourished children. Health indicators within the West African region exceed the

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<sup>1</sup> OECD (2018) States of Fragility – 2018, Organization for Economic Cooperation and Development

alert threshold of 10% for Global Acute Malnutrition rates and in many areas regularly exceed the emergency threshold of 15%<sup>2</sup>.

## Climate Change: The Risk Multiplier

Against this backdrop of high-risk factors and tangible instability, the Sahel is also facing an increasingly variable climate. The impact of climate irregularity on basic subsistence conditions first became apparent during the devastating 25-year drought in the Sahel from 1968-1993, which destabilised rural livelihoods and sparked a major humanitarian crisis. Following this trend, contemporary challenges due to increasing droughts have continued to propel these patterns.

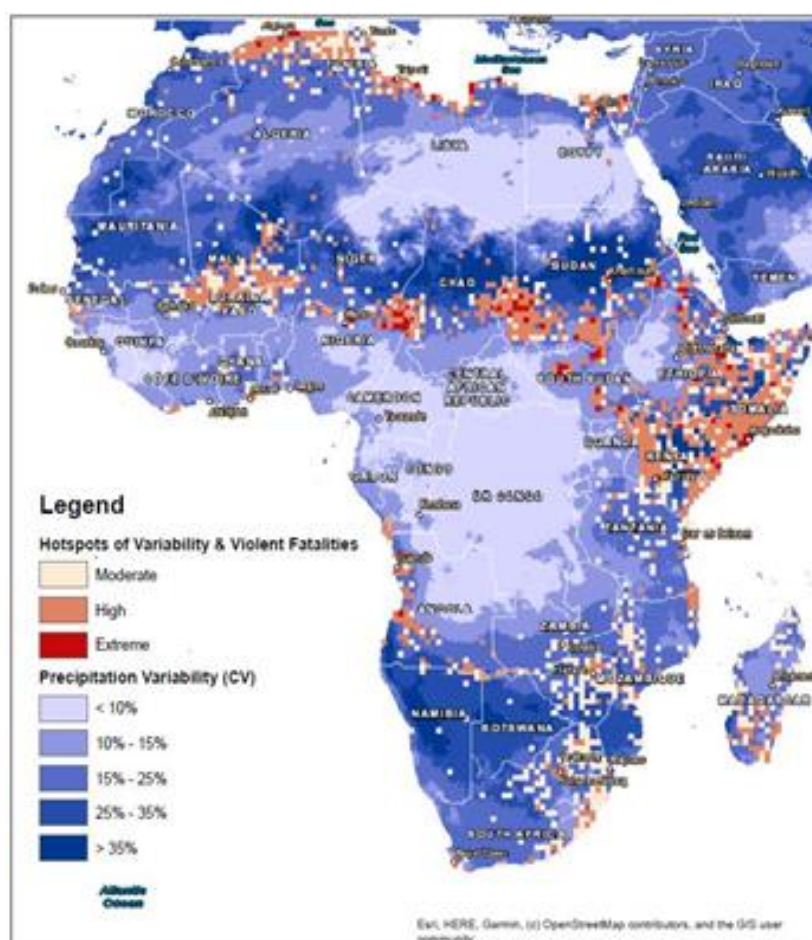
**“ There is a consensus among climate impact models that rainfall will be declining in the region and temperature will be increasing by the end of century, at the worst case by 3-4 degrees Celsius. This translates into an increase in intensity of high rainfalls and into more severe droughts in Sahelian countries. This will cause severe flooding, endangering life of many populations. This translates into major impacts on crops and human health. ”**



**Dr. Robert Zougmore, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)**

The ability of populations to adapt and cope with these changes is essential, making the resilience of communities a key factor. Unfortunately, cyclical crises of environmental challenges, unsuitable basic farming practices, weak institutions and conflict have undermined this. Agriculture, including livestock, remains heavily reliant on adequate precipitation, meaning that variability and climate extremes will contribute to crop failures and livestock deaths, causing economic losses and undermining food security.

<sup>2</sup> West Africa Brief. 2016. Prevalence of stunting (% of children, 0-5 years). Sahel and West Africa Club.



**Figure 1.** Hotspots where extreme climate variability coincides with high violent fatalities in Africa. Analysis conducted by CGIAR.

Climate variability and change pose a direct threat to food security in the region, combined with the demographic pressures arising from population increases, are set to accelerate the competition for natural resources. In the absence of adequate state capacity to mediate and support those in need, and in the presence of war, Dr. Grayson-Courtemanche stresses that the poor will turn ever more destitute. On this, an analysis conducted by CGIAR has found a startling spatial overlap of where violent conflicts occur and high precipitation variability (Figure 1).



## Current Efforts to Address the Interlinkages between Climate and Conflict



**“ A shift in paradigm is needed. The way we are addressing on security is focused on military and counterterrorism. It is not sufficient. There needs to be a shift towards a human-centred approach. We need to work not only on military planning but also on human security to address the multi-dimensional nature of the challenge. ”**

**Dr. Ornella Moderan**  
**Institute for Security Studies (ISS)**

The rising threats of extremist terrorism and widespread conflict in the region described in the above narrative have prompted efforts to place a greater emphasis on development initiatives but have also given rise to securitised approaches which carry the risk of permanent military interventions. Over the past decade, international priorities have shifted towards a heavy military and counter-insurgency focus. Given the complexities in dealing with the cycle of poverty and conflict in the region, the current response lies in stark contrast to the type of approach most desirable. Moving away from a reactive scheme, a more preventive approach, including establishing sustainable livelihoods and addressing the root causes of conflict becomes an imperative.



**“ The ICRC is there to respond to humanitarian needs and our prevention relates to natural disasters. Addressing conflict is not currently put into focus by the ICRC, but we cannot agree more that military security needs to be extended into other securities. ”**

**Dr. Catherine-Lune Grayson-Courtemanche**  
**International Committee of the Red Cross**

The nature of current security engagements in the region has unfortunately not contributed to the emergence of cross-cutting work among actors of the humanitarian and development field.

The situation in the Sahel, however, needs unity of purpose and must be addressed on three separate levels:

- **Biophysical Level:** Dr. Zougmore called for a better understanding of how the changes in environmental factors are influencing livelihoods of farmers and those who reside in vulnerable regions. How do impacts on the food system trickle into other security threats for the region?
- **Livelihoods Level:** How do we design interventions that can allow for the sustainable establishment of livelihoods for affected populations?
- **Institutional Level:** How do we improve government capacity to deal with conflict, mediate grievances and provide strong social safety nets for the populace?

Whereas the international community's focus in the Sahel has been marked by an emphasis on security and to some degree on governance themes, efforts to support vulnerable farmers adapt to climate change have been few and far in between.. Dr. Charbonneau highlighted the fact that there are conceptual challenges when it comes to integrating these priorities with the notion of Climate Security. Incorporating climate change into security planning will require a change of time scales, focusing on decades rather than point interventions. This runs counter to the current paradigm of reactive, short-term UN military interventions. As a result of these conceptual challenges, the Climate Security lens does not seem to have been properly embedded into Sahel security partnerships. On top of that, it is key to highlight that although it is recognised that climate acts as a driver for poverty and conflict, there have not been any mandates specifically addressing this nexus.



“ **The UN Security Council works in the short term, they react. They are not good at working on prevention. This work needs to be tied back to the issue of prevention. The current peace and security architecture has been bad at doing that.** ”

**Dr. Bruno Charbonneau, Centre Franco Paix in Conflict Resolution and Peace Mission**

## Ways Forward

There is room for optimism, however. Amb. Koti has noted that Norway, poised to enter the Security Council this next year, has been prioritising the Climate Security nexus. It is also spearheading multi-disciplinary research and interventions, having recently adopted a climate change strategy that aims to tackle three targets, namely climate change, enhancing resilience, and conflict prevention. Discussions around this topic emerged in a seminar in Dakar focused on how multilateral Climate Security cooperation can occur, using the Sahel as a primary example. Doubling down on these Norwegian initiatives, the webinar agreed that the ubiquitous impact of climate change demands now more than ever a multi-disciplinary, systemic, and long-term approach. Segmented approaches are guaranteed to produce fragmented, as well as potentially contradictory or counterproductive results, and these challenges must therefore be viewed from an integrated perspective, where the role of the biosphere is acknowledged when tackling socio-economic, institutional and security issues.

**“ We expect research institutions to bring clear recommendations to the Security Council. We need to bring this into action. We also need to engage in conversations with the countries and regions in question. ”**

**Ambassador Rigmor Elianne Koti**  
**Norway’s Special Representative for the Sahel**



Recognising this, the panel developed three key action points to move the discussion forward:

- 1. The need to structure an encompassing conception of climate security to address climate, livelihoods, and security in the Sahel**

Panellists called for the effective bridging of the contrast of security versus development interventions in understanding the challenges facing the Sahel. The issue calls for multi-disciplinary thinking given the nature of complex interactions between climate, poverty, and conflict.

- 2. Design and implement solutions based on this encompassing conception**



Action needs to be undertaken to design interventions that are encompassing in nature, addressing the roots of poverty and conflict at the previously mentioned three levels of action (biophysical, livelihoods, and institutional). Underpinning this action lies the key contribution of scientific research in understanding the impact of climate change on food systems, how conflict can undermine resilience and how poverty can feed into further conflict in the Sahel. Operating at the community level is essential to develop case studies for scaling and to discover already existing local knowledge and mechanisms to help effectively manage resources to avoid competition and resolve disputes. International interventions to improve government capacity will also play a crucial role here.

### 3. Partnerships to deliver results

Finally, partnerships will be central in fully integrating this new approach to address challenges in the Sahel. As noted by Dr. Moderan, partnerships need to be established at local, national, and regional levels to fully align this multi-disciplinary understanding of the situation.

## Role of the CGIAR

*What have we been doing in the region?*

CGIAR has been extensively active in developing programming at the multiple scales necessary to adequately counter the destabilising impacts of climate change and variability, as noted by the webinar participants. In line with the noted emphasis on acting at the local level, CGIAR has contributed our extensive experience in promoting climate-smart agriculture (CSA) and developing climate information services and integrated water management initiatives within the region. Several examples can be identified which indicate CGIAR's recognition of how Climate Security solutions need to be scaled from the bottom-up, as well as the top-down.

**Climate-smart Value Chains:** Several projects within CGIAR's West Africa activities are aimed at the identification, expansion, and sustainability of climate-smart value chains, with the overall goal to enhance value chains' contribution to income and food security in West Africa.



**Adaptation:** CGIAR has also undertaken several initiatives to directly facilitate local adaptation to changing climatic conditions, such as the development of climate-smart agrosylvio pastoral models in Mali; the Climate-Resilient Agri-business for Tomorrow (CRAFT) project in East Africa, which aims to facilitate the adoption of climate-smart and ecologically sustainable production methods; and by improving the sustainability of certain food and income sources for smallholder producers and their communities by reducing production costs, enhancing crop utilisation, and promoting dietary nutritional value. Other initiatives are related to the provision of climate information services for increased resilience and productivity. Within each of these tracts, a large emphasis was placed on the scalability of climate-smart technologies, innovations, and practices. Several projects in East and West Africa aim to facilitate the aggregation and diffusion of demand-driven practices and technologies through participatory processes, alongside developing accessible financial pathways, strategies, and partnerships to enable community-based adaptation.

**Innovative Finance:** As the institutional and financial support frameworks available to communities across the region are a key driver of adaptive capacity, this has been a factor CGIAR has explicitly focused on. The CASCAID-II project, for example, aims to reduce agricultural investment risk from smallholder farms to whole value chains to improve agricultural productivity and food security together with the profitability of agricultural enterprises by rooting the development of climate advisories and agricultural insurance in a value chain approach. Other projects look at how tailored financial products and services in combination with competence building can support smallholder farmers and small and medium-sized enterprises (SMEs) to invest in CSA practices and businesses; rolling out micro-financing pathways and opportunities for business training; and designing a conducive financial environment- alongside identifying additional value chain partners- that enables upscaling and adaptation.

**Gender and Social Inclusion:** Where possible, CGIAR has included a significant gender-dimension to the types of programming discusses above, with an emphasis on social equity and inclusion. We have also, however, launched several projects specifically targeting these issues. The Inclusive Climate Change Adaptation for a Sustainable Africa (ICCASA) project, for instance, is geared towards promoting the importance of gender mainstreaming in climate policies, practices, and negotiations, thereby contributing to ensuring gender balance in access

to policymaking and negotiation spaces so the needs and perspectives of both women and men are equally addressed. CGIAR research has also enabled the co-development of a set of tools to support gender-sensitive and socially inclusive research in the context of climate change and agriculture. The tools were designed, tested, and later published in the [Gender and Social Inclusion Toolbox in 2014](#).

CGIAR's programming also, however, consciously targets the national and regional levels at which change is required by supporting the improvement of **policies** and **institutions**.

- The '[Enabling Institutions and Policies for Sustainable Climate Change Governance in Agriculture](#)' in West Africa, for example, intends to meet major development needs and strategically contribute to emerging policy initiatives such as the National Agricultural Investment Plans (NAIPs), Nationally Determined Contributions (NDCs), and the development of climate-smart agricultural investment plans. In addition, climate science, policy and environmental research, and agricultural modelling will be linked with food systems research and socio-economic scenarios to integrate climate concerns into food security and nutrition planning. Finally, the project focuses on determining what kind of enabling environment is needed to promote inclusive, gender-equitable and responsible agricultural investments. To achieve these objectives, already existing district and national multi-stakeholder policy dialogue platforms established by CCAFS shall be improved and technically assisted to lead the science-policy interfaces on climate change and climate-smart agriculture.
- The '[Generating Policy Support for Biologically Diverse and Climate-Resilient Agriculture](#)' project aims to generate support for the development and implementation of international policies and laws affecting the availability and use of genetic resources for climate-smart agriculture, as well as researching how to best implement international agreements in national and sub-national contexts.

*What further capacities can we offer?*

CGIAR identifies itself to play a key role in supporting development and security practitioners in research to identify interventions that both address the root cause of poverty and conflict. Equipped with our extensive technical expertise on climate projections, climate risk profiles,

and vulnerability studies, we can identify adaptive options that can be considered for national adaptation planning. As solutions for Climate Security needs to be scaled from top-down and bottom-up, our experience with working with communities to create scalable, climate-smart technologies and strategies can inform context-specific technologies to valorise sustainable livelihood in a difficult environment. Furthermore, our work at the institutional, national, regional, and international levels can contribute to creating an enabling financial, policy and institutional environment for sustainable, accessible, and peaceful adaptation.