



# Preparing for the Coming Storm

The Security Sector and the Environment





# ■ Preparing for the Coming Storm

## The Security Sector and the Environment

### ■ Background

Climate change and environmental degradation are impacting human security – whether through natural disasters of increasing frequency and severity, the potential of resource scarcity to exacerbate existing tensions and create new conflict dynamics, or long-term effects such as forced migration. A key question for governments and communities alike is: what might actually make us more secure in an era shaped by climate change? And what role can the security and justice sectors play, not only in responding to climate-induced crises but also in tackling the factors driving climate change to begin with? These are the questions which guided DCAF’s conversation with a panel of environmental and security experts on September 22, 2021.<sup>1</sup>



Figure 1: Security and justice sector roles in responding to environmental risks

## What are the risks?

The **risks posed by environmental degradation and a changing climate** are *multidimensional, inter-dependent and cascading* – as experienced across a range of contexts, from countries which have struggled to respond to the COVID-19 pandemic and severe natural disasters at the same time, to contexts where human destruction of marine ecosystems impacts food security, livelihoods, and crime levels. Some risks, such as disasters, are acute and produce immediate effects. Others are longer-term, but their consequences are no less serious. For example, humanity’s use of biological resources including croplands, pastures, fishing grounds and forests currently exceeds by more than 70% what our planet can regenerate.<sup>2</sup> The effects of this ecological overshoot can be seen not only in climate change, but also in groundwater depletion, soil erosion, fisheries collapse, and deforestation.

There is also an increasing focus on *links between environmental degradation, violence, and conflict*. The relationship between nature and conflict is bidirectional – armed conflict has an overwhelmingly negative impact on nature, and environmental degradation is strongly associated with an increasing risk of conflict. When protective ecosystem services decline, this leaves communities more vulnerable to the impact of shocks and disasters. Rising food insecurity and conflict over resources can be observed particularly in areas with less productive agricultural land and where the dependence on natural resources is greater.<sup>3</sup>

Finally, as with most security risks, those posed by *environmental degradation and climate change do not affect everyone equally*. Already vulnerable communities are becoming even more affected – many of the most fragile and conflict-affected countries are also facing severe environmental risks. Women and girls, for example, face specific risks: environmental degradation and extractive practices have been documented as leading to increased incidents of gender-based violence in affected communities.<sup>4</sup> Globally, environmental defenders are also facing serious risks, with killings, intimidation, and other forms of violence against environmental activists on the rise.

## Where are the sources of resilience?

The risks themselves also point to **sources of resilience**, and with them opportunities for security and justice actors to play a more proactive and impactful role at the intersection of human and environmental security.

*Healthy ecosystems matter for human security and the prevention of conflict*; their conservation and regeneration should be prioritized, as should the security of those who protect them.

*Reducing pressure on biological resources* is key to long-term stability and security, and as such should be reflected in national security strategies and planning. Focusing on the conservation and regeneration of ecosystems helps to address the “supply side” of this equation. Four additional factors are particularly important on the demand side: urban systems management and planning; production and consumption of energy; production, distribution, and processing of food; and population size.<sup>5</sup>

*Risk-informed planning and responses* (e.g. to disasters) can help to avoid large-scale human suffering. It is critical to take into account the multi-dimensional nature of risks and fragility in order to avoid responses which lead to greater risks in the future. In this regard, cross-sectoral and cross-border partnerships are essential. The effects of climate change do not confine themselves to national borders or individual government sectors; the same can be said of its causes. As our understanding of the far-reaching consequences of environmental risks grows, it is increasingly important that those with expertise in environmental sciences and conservation be given a voice in security. International

partnerships are also needed to improve governance of shared natural resources and tackle cross-border crimes including poaching and illegal trafficking of natural resources (which are often linked with other forms of criminality, including financing of terrorist activities).

**Reliable data** can help to better understand the needs and vulnerabilities of different communities, which is a particular challenge in fragile and conflict-affected areas. Better data can also help to ensure that risk mitigation and response strategies use scarce resources effectively and focus on the factors which matter most in improving both human and environmental security.

It is time to think differently about the **security-development nexus**. Development which relies on the unsustainable depletion of natural resources is making humanity less secure. However, development which is risk-informed can avoid further jeopardizing already sensitive ecosystems and the communities which depend on these systems for their survival.

## Where are the opportunities for engagement?

There are certainly risks to militarizing or securitizing responses to climate change. However, the reality is that security institutions are likely to play an increasingly active role in responding to disasters and humanitarian emergencies – and in already fragile and conflict-affected contexts, they may be one of the few government representatives with which local populations have contact. Their ability to **respond to the needs of communities and to respect human rights** will be influential in determining whether they strengthen or undermine social cohesion and the legitimacy of government institutions.

There are a number of immediate and concrete **implications for security and justice institutions**:

- **Risk analysis and strategic planning** must change in order to meet the changing environment. Security institutions will need to increase their capacity to analyze the implications of environmental risks on security at the local, national, and regional levels – and to partner with institutions with expertise in the environmental domain. Environmental indicators should inform strategic analysis and foresight from a conflict- and crime prevention perspective. Particular attention should be paid to ex-ante risk management and a comprehensive approach to disaster risk reduction. This means leveraging security sector assets, existing structures, and access to communities (e. g. through local police) before a disaster strikes, sharing information and engaging in joint planning with other relevant stakeholders.
- Numerous opportunities exist to **mainstream climate and environmental concerns across all aspects of security management and operations (including peace operations)**, from ensuring human resource management practices recruit, develop and retain a climate-engaged workforce to incentivizing innovation at the intersection of climate, security, and sustainability. A focus on sustainability can include not only the reduction of greenhouse gas emissions, but also the modernization of procurement and logistics processes to ensure sustainable, responsible supply chains. This can represent a significant contribution when considering the purchasing power of militaries and other security institutions.<sup>6</sup>
- Protecting ecosystems is not the sole responsibility of security and justice institutions, however, these institutions can play a key role **in enforcing environmental legislation and tackling environmental crime** such as illicit hunting and trading of wildlife, illegal mining, logging, and illegal waste disposal and shipments. In many cases, law enforcement’s full potential to contribute to environmental protection and conservation has not yet been realized, although there are clear connections with areas including maritime security, border management, and cross-border trafficking.

- The *distribution of access to security and justice services across urban and rural areas* deserves more attention. Various pressures drive migration to urban areas, resulting in increasing stress on these areas, from demands for energy and other resources to rising crime rates. At the same time, particularly in conflict-affected areas, urban migration may also result from insecurity and violence in areas outside the capital. The idea of decentralization is not new, but environmental pressures add a different dimension to the importance of providing security and justice at the local level across national territories.
- *Security cooperation, capacity building, and partnerships* should be informed by environmental risks. Significant resources are dedicated to security cooperation; mainstreaming environmental concerns in these partnerships can play an important role in sharing emerging good practices and scaling up the resources dedicated to climate security.

Across all of these areas, *good governance of security and justice* will be crucial in order to develop responses which meet the real needs of communities, to prioritize and responsibly use scarce resources, and to integrate the contributions of security and justice institutions with broader whole-of-government and whole-of-society strategies.

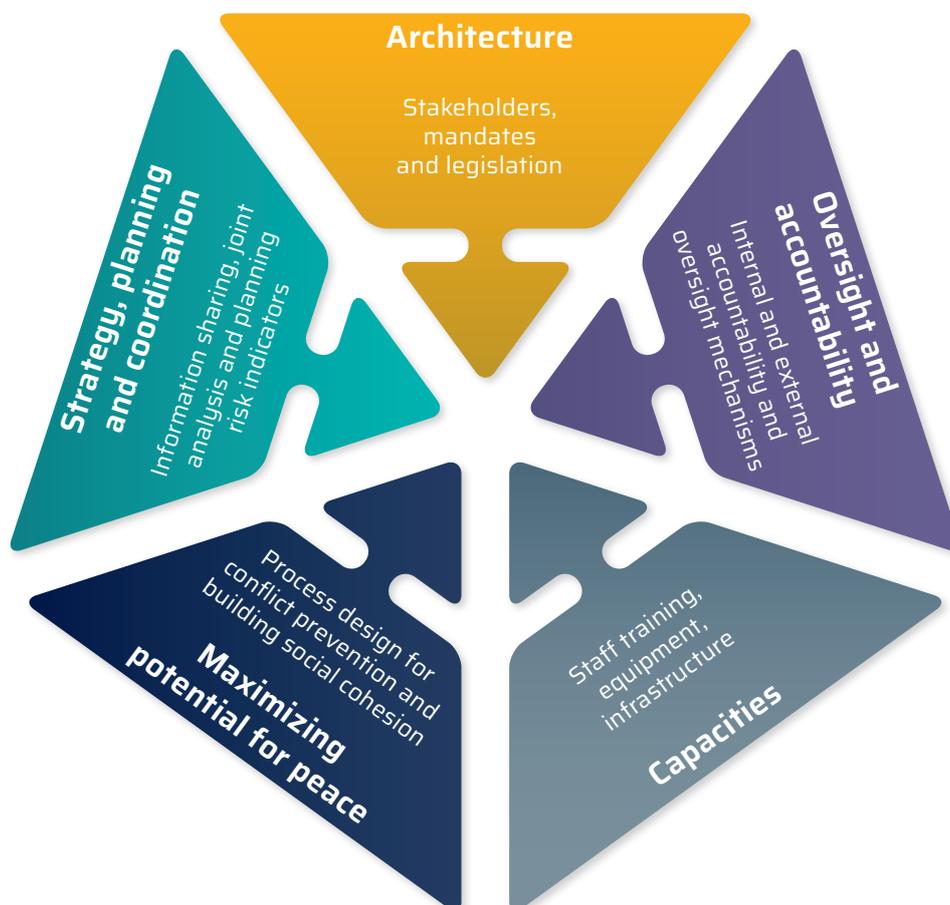


Figure 2: Entry points for addressing climate and environmental risks in security and justice reform

## Operationalizing new insights

DCAF is grateful for the participation of our five expert panelists. Together, their insightful contributions remind us of the value of reaching across sectoral boundaries to develop new ideas, new partnerships, and new ways of making states and people safer and more secure.

DCAF focuses on the good governance of security and justice as a cornerstone of peace and development. Supporting our partners in responding to new and emerging security challenges is a key part of this mandate; and our work in the coming months and years will reflect the central role climate change and environmental degradation now play, not only in government strategies but also in the daily lives of communities around the world. This will include working with security and justice institutions in different regions to develop a clearer understanding of the opportunities and limitations associated with their roles in climate change adaptation, disaster risk reduction and environmental protection; supporting regional and sub-regional networks in identifying and sharing emerging best practices; analyzing the implications of the gendered impact of climate change for security and justice institutions; and developing new partnerships to strengthen governance at the intersection of environmental and human security.

---

### 1. Speakers:

Dr. Jonathan Marley, Policy Analyst - Crises and Fragility, Organization for Economic Cooperation and Development  
Dr. Mathis Wackernagel, Founder and President, Global Footprint Network  
Dr. Animesh Kumar, Head (Bonn Office), UN Disaster Risk Reduction Office  
Dr. Juha Siikamaki, Chief Economist, International Union for the Conservation of Nature  
Captain Steve Brock (USN, Ret), Senior Advisor, Council on Strategic Risks, the Center for Climate and Security

#### Moderators:

Abigail Robinson, Programme Management Advisor, DCAF  
Viola Csordas, Security Sector Reform Advisor, DCAF

2. York University, FoDaFo, Global Footprint Network, National Footprint and Biocapacity Accounts, (2021) edition, <https://data.footprintnetwork.org>.
3. IUCN (2021), Conflict and Conservation. Nature in a Globalised World Report No. 1. (Gland, Switzerland, IUCN), <https://doi.org/10.2305/IUCN.CH.2021.NGW.1.en>.
4. Castaneda Carney, I., Sabater, L., Owen, C., Boyer, A. E., Wen, J. (2020), Gender-based violence and environment linkages: the violence of inequality, (Gland, Switzerland, IUCN), <https://doi.org/10.2305/IUCN.CH.2020.03.en>.
5. Global Footprint Network (2021), Earth Overshoot Day, Earth Overshoot Day 2021 Home - # MoveTheDate.
6. Brock, S., Loomis, D., (2021), Climate 21 Project Department of Defense, <https://climate21.org/defense/>.



**For more information, please contact:**

Abigail Robinson, Programme Management Advisor ([a.robinson@dcaf.ch](mailto:a.robinson@dcaf.ch))

Viola Csordas, Security Sector Reform Advisor ([v.csordas@dcaf.ch](mailto:v.csordas@dcaf.ch))