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Responsibility to Prepare and Prevent (R2P2): Applying Unprecedented Foresight to Addressing Unprecedented Climate Risks



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Synonyms

[Climate change](#); [Climate security](#); [Conflict](#);
[Responsibility to prepare and prevent](#); [Security](#);
[Water security](#)

Introduction

The web of intersecting security risks that challenges human civilization today is more complex and challenging than any other stage of history. Some of these security risks, such as tensions among powerful political entities and disputes over geographical boundaries, have been with human civilization for millennia. Other risks, such as nuclear weapons and cyber threats, are relatively recent. In some cases, as with rapid climate change, the risks to human society are unprecedented. However, the tools human society possesses today also give it an unprecedented

foresight. This is a primary feature that differentiates the twenty-first century from past periods of disruption – the ability to harness scientific and technological tools to better predict and prepare for a range of plausible future scenarios, including climate change.

In this context, nation-states and intergovernmental security institutions have a responsibility to use their enhanced predictive capacities to manage and minimize climate change and other foreseeable risks. This combination of “unprecedented risk” and “unprecedented foresight” creates the case for a “Responsibility to Prepare and Prevent (R2P2)” – a responsibility to build a resilient world order against a more dangerous yet more reliably foreseeable future.

Unprecedented Risks

The relatively stable climatic period geologists called the Holocene (beginning at approximately 11,701 BP) is making way for a new epoch: the Anthropocene (Waters 2016). The Anthropocene is characterized by human-induced changes in the climate that are happening at an extremely rapid rate in terms of geologic and civilizational time and are unprecedented in history (Solomon 2007). These changes – including the melting of the glaciers and polar icecaps, extreme rainfall variability, and sea-level rise – are all changes that disrupt the foundations of the sociopolitical institutions that form the basis of civilization. Simply

put, these changes affect the basic resources that support human livelihoods, nations, and the global order those nations participate in (Werrell and Femia 2016). The implications of a rapidly changing climate, coupled with other demographic, economic, and technological shifts, contribute to an era of unprecedented risk. However, some of those same dynamics – particularly rapid technological change – have also contributed to unprecedented foresight.

Unprecedented Foresight

Despite the unprecedented risk of climate change, there is a small silver lining that provides the foundation for the R2P2 framework. Namely, climate change, especially when compared to other drivers of international security risks, can be modeled with a relatively high degree of certainty. Consider, for instance, that the first accurate climate change model is from 1967, half a century ago, and for the most part, the climate is changing as the model predicted. A political scientist in 1967 would have had a much more difficult time predicting the current international security landscape (Siegel 2017). Other climate models have also shown prescient prediction capabilities (Cowtan et al. 2015). Strikingly, where inaccuracies have occurred, they have often been characterized by an underestimation of the rate and severity of change, showing a milder picture than what eventually emerged (Allison et al. 2009; Stark 2017). Subsequent technological and scientific refinements have led to more complex models and ultimately a strong record of accurate predictions of the rate and scale of global climatic changes under emissions scenarios that ultimately materialized. While significant uncertainties in predicting local-scale climatic changes and ecological interactions remain, existing projections from climate models and Earth observations paint a fairly clear picture of what the future holds for the global climate, which provides a strong basis for governments and societies to plan accordingly.

A Responsibility to Prepare and Prevent Framework (R2P2)

The combination of unprecedented risks and an unprecedented ability to forecast such risks creates a clear responsibility for governments and intergovernmental institutions to prepare for unavoidable changes and prevent the potentially unmanageable ones. The transnational and cross-sectoral nature of climate change risks demand a comprehensive approach that is adaptable to unique local and regional circumstances, but this approach should be clearly articulated and systematized into goals and principles that nations and intergovernmental institutions can adopt, measure, and promote, in order to avoid the paralysis that such complex risks can create. In this context, an R2P2 agenda should adhere to the overarching goal of “climate-proofing” security institutions at all levels of governance (local, national, regional, and international) in order to increase the capacity of states to absorb and reduce climatic stresses. This climate-proofing should consist of six core principles: routinizing, integrating, institutionalizing, and elevating attention to climate and security issues, as well as developing rapid response mechanisms and developing contingencies for unintended consequences.

Routinization: Climate change is happening now and affects nearly all aspects of society, yet that reality is not reflected in the routine activities of most governance bodies responsible for security. Doing so would help break climate change out of its traditional cage within the environment and development ministries and broaden the aperture of security institutions to include this complex risk.

Institutionalization: How climate change impacts security is not deeply understood within and across governments. In this context, the issue requires institutional centers to conduct climate security analysis and inform decision-makers. Creating institutional centers (or leveraging existing institutions in civil society) to collect and interpret information, using the best analytical tools available and then regularly delivering recommendations for action to decision-makers

would go a long way in increasing preparedness for such eventualities and strengthen efforts for conflict prevention.

Elevation: In some cases, warnings related to the security risks of climate change are delivered to governments by analysts, but not at a high enough level. This is often based on a particular issue not being prioritized within a government or intergovernmental institution, or the issue not being presented in a fashion that appropriately contextualizes the risks as they pertain to other geostrategic priorities. In this context, elevating such issues within governing bodies is critical for ensuring preparedness.

Integration: In order to ensure that climate and security issues are not treated as a special interest concern, security institutions should integrate climate change trends into their analyses of other critical security priorities. This is the “just add climate” approach, justified by the nature of the threat and the simple fact that changes in the climate, acting as a threat multiplier, will affect the entire geostrategic landscape. For example, the questions of how climate change intersects with health security, conflict, international terrorism, nuclear proliferation, and maritime security are all critically important but may be missed if such analysis sits solely in the kind of specialized centers described above.

Rapid response: Though the approaches above are designed to facilitate preventive solutions, there will undoubtedly be future cases of climate-exacerbated dynamics that demand immediate attention from the security community. Developing scaled warning systems that identify long, medium, and short-term risks and that include clear “triggers” for emergency action on climate and security would help ensure that foreseeable events are acted upon with commensurate levels of urgency. This is particularly important for anticipating low probability/high impact risks and creating a governance capacity to prepare for “unknown, unknowns” or “black swans” (Femia et al 2011).

Contingencies for unintended consequences: Despite best efforts, unintended consequences of solutions to these risks may inevitably arise.

Governments should seek to identify these potential eventualities and develop contingencies for addressing them. For example, unilaterally deployed geoengineering solutions to climate change, particularly in the absence of international norms to regulate their use, could result in new and unpredictable disruptions to climate, water, food, and energy systems. These are foreseeable possibilities that security institutions can identify and attempt to prevent sooner rather than later. Facilitating or institutionalizing cross-sectoral coordination to hedge against these unintended consequences would be a good start.

Conclusion

The window of opportunity to strengthen security governance in a world of rapid and unprecedented climate change is narrowing. Stalled or delayed actions may result in diminishing returns and, in the worst-case scenarios, difficult and perhaps inhumane choices in the face of continued strains on natural resources and political will. This scenario is foreseeable. Technological developments have given us climate models, and predictive tools, that enhance human society’s ability to anticipate and mitigate risks. These tools must be better utilized and integrated into international, regional, national, and local security institutions in order to manage this new world. That foresight renders the realization of a Responsibility to Prepare and Prevent (R2P2) agenda both practically and morally essential.

Cross-References

- ▶ [Human Rights and Urban Sustainability](#)
- ▶ [New Regionalism and New Localism](#)
- ▶ [Water-Energy-Food Nexus: From Concept to Implementation](#)

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