WORKING GROUP ON

CLIMATE, NUCLEAR, AND SECURITY AFFAIRS

BREAKOUT BRIEFER: STABILITY AT STAKE: ADDRESSING CRITICAL REGIONS FACING COMPLEX CLIMATE, SECURITY, AND NUCLEAR RISKS

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Cover Photo:
Soldiers from the Border Security Force of India and the Pakistan Rangers of Pakistan shake hands during the daily 'Beating of Retreat' Ceremony at the International Border at Wagha.
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In addition to the Working Group members named above, other experts contributed to the development of this project but could not attend group workshops; or preferred to contribute anonymously at this time.
KEY TAKEAWAYS

• U.S. national security requires a long-term dedication to research and development, innovation, and economic competition capacity tied to a low-carbon future. In the short-term, understanding how to do that includes revamping the response capacity of the international community, beginning with how the U.S. government and the interagency process understands the risks the Working Group has identified.

• The next step is building U.S. government analytic capacity to understand how the climate change-nuclear security nexus operates and its implications. Perhaps the best existing framework is found in Theater Security Cooperation Plans.

• Stress tests and climate and nuclear crisis scenario exercises will be important inputs into understanding the nature of climate-nuclear-security risks.
When the Working Group on Climate, Nuclear, and Security Affairs met in May 2017, it affirmed that there are no linear, predictable pathways for catastrophic events in either the climate change or nuclear risk spheres. Climate change and nuclear security are acted upon by a variety of actors in the international system. The contributing factors to a crisis can be a combination of both long-term trends in technology and governance and shorter-term factors like resource scarcity, ethno-nationalism, and rising populism.

The Working Group’s starting point for discussing these issues is that they are critically important to the preservation of international peace and security, but there are glaring deficiencies in how the world currently understands the risks around them.

Specifically, the Working Group recommended further work to understand crisis regions--areas where the confluence of nuclear trends, climate change effects, and other security challenges may create the greatest risks. The regions of highest concern were South Asia, the Middle East, the South China Sea, and Central and North Africa. According to the Working Group, it is imperative that the security community “Focus on potential crisis regions and game out ways in which applying specific policies, technologies, normative structures, and other measures can be stabilizing or destabilizing.”1

To begin advancing our understanding of this question, the second Working Group session, held in January 2018, included a breakout session on stabilizing crisis regions. Participants in this discourse came to agreement that it is incumbent on the international system, led by the United States, to develop and deploy stabilizing strategies that are both reactive (crisis response) and preventive (building resilience). Regions which are susceptible to crises often suffer from multiple complex and interlocking vulnerabilities. Many of these vulnerabilities are the result of long-standing deficiencies in the international system, as well as local issues with political legitimacy of national leaders and institutions. Working to resolve these vulnerabilities requires efforts across multiple levels of governance and varied timelines. The time to consider and plan for such efforts is now, before intersecting nuclear, climate change, security issues trigger a large-scale crisis.

Discussions in these sessions highlighted three main themes:

- The current state of the international system makes responding to a crisis in the climate change-nuclear security nexus difficult;

- There are specific areas in which the U.S. government in particular needs to build capacity to understand and respond to a variety of risks within the nexus; and

- A comprehensive risk assessment undertaken by non-governmental research institutes (think tanks, academia, and foundations) could complement what governments already do in the realm of disaster risk reduction (DRR)
Working Group members identified numerous deficiencies in global governance which handicap the response to potential risks arising from climate change or nuclear-related impacts. Their discussions began with two fundamental questions: what are the common security issues facing global governance around the climate change-nuclear security nexus; and what are the interventions necessary to act as stabilizers, both in the short- and long-term?

Among the pathways to instability identified by the Working Group:

**Governance fragility**: many states in the international community seem to be strong and coherent but are in fact quite brittle in the face of domestic turbulence. The breakdown of order in Syria following anti-regime protests in 2011 is only the most high-profile example. At the interstate level, Working Group members agreed that current multilateral institutions are currently ill-equipped to understand the issues at the heart of this nexus.
Rapid technological change: while new advances in artificial intelligence and data analytics can serve the international community in understanding the nature of the risks it faces, the Working Group also highlighted how the diffusion of technology and its use by potential adversaries and non-state actors could make responding to a crisis within the nexus more difficult.

Hypernationalism and the weaponization of language: the ubiquity of social media is amplifying messages that are potentially destabilizing. The second Working Group meeting took place during a spate of anti-government protests in Iran, in which organizers at least partially relied on social media to coordinate messaging and direct action. Tellingly, Iran is one of the countries the Working Group identified early as high risk for these types of pressures occurring in correlation with a year of ongoing tensions regarding the future of the Joint Comprehensive Plan of Action for its nuclear program, and climate-related pressures such as record temperatures and continuing drought.

Working Group members focused on stabilizing crisis regions further elaborated on these themes and identified additional specific pressures that impact the climate-nuclear-security nexus.

Energy poverty emerged as one pressure worthy of distinct consideration in stability. The desire to address energy poverty is a challenge for many developing states. Even states with rapidly growing economies, like India, have large populations who either lack access to electricity altogether, or their access is very unreliable. The desire to electrify large populations in a relatively short period of time may lead some states to embrace nuclear energy, especially if climate change undermines the productive capacity of thermal (especially coal) or hydroelectric power plants (because of water scarcity). Such new nuclear energy systems would need to be highly sensitive to both climate considerations and security risks.

Working Group members identified resource scarcity as a second important vector. Climate change is seen as a threat multiplier in large part because of the unrest which could be caused by a relative or absolute decline in access to vital resources (food and water in particular), and the political implications of those scarcities for states with weak governance. The relationship among these factors is highly complex, and the exact mix of factors which could have security impacts will depend on the local circumstances of particular states. Predicting where a crisis spurred by these factors will breakout requires a significant data analysis capacity. Researchers and government alike must prioritize such analysis surrounding geographies critical to reducing nuclear risks.

Lack of domestic political legitimacy is another factor to examine closely in potential crisis regions. Resource scarcity alone is not sufficient to spur a crisis. Rather, that scarcity will interact with the pre-existing correlation of domestic political and social factors (who or what determines the distribution of resources, for example) to lead into a political and, potentially, a security crisis. In some instances, a government’s fear of its people can lead to policy innovation, or an increasingly repressive regime.
A country’s perception of its role in the international system—where a particular state sits in the international order—can also be an important factor for determining how it responds to crises. Often a state’s self-perception is determined by the structure of power in international affairs. It is for these reasons that the perception of a United States pullback from global governance is potentially destabilizing. Many of these factors are driven by the political and economic framework of the global system, which is being challenged by rising populism and unilateralism worldwide.

As the Working Group discussed at its May 2017 meeting, the climate-nuclear-security nexus is a dynamic system, and stresses at any side of the equation can impact the other in unpredictable ways. The combination of all of these factors may lead to a complex multi-state crisis which, if it involved nuclear materials, could conceivably rise to the level of an existential threat to global stability.

Developing the tools to reverse these destabilizing factors requires a significant investment of resources, technology, and human capital, deployed strategically and in the name of not simple philanthropy, but power projection, with the ultimate end being the stability of the international community. Working Group members identified the need for both a climate change (including disaster risk reduction) and nuclear security safety net. As a result, U.S. national security requires a long-term dedication to research and development, innovation, and economic competition capacity tied to a low-carbon future. In the short-term, understanding how to do that includes revamping the response capacity of the international community, beginning with how the U.S. government and the interagency process understands the risks the Working Group has identified.
Among the first steps for bolstering the response capacity is to leverage existing frameworks within the U.S. government to understand the nature of the risks the international community faces from the climate change-nuclear-security nexus. The U.S. intelligence community, especially the Office of the Director of National Intelligence and the National Intelligence Council, has built analytical capacity regarding the stability risks from resource scarcity due to climate change impacts. Working Group members agreed that routinizing that perspective within the U.S. intelligence community through assessments and estimates would be an important part of the approach of the federal government to understanding these risks and planning to mitigate them.

Interagency deliberative bodies like the National Security Council already have mechanisms in place to coordinate among different departments and agencies. Working Group members agreed that tweaking the federal bureaucracy would be a lot easier to accomplish than creating new procedures or bodies from whole cloth.

The next step is building U.S. government analytic capacity to understand how the climate change-nuclear security nexus operates. Perhaps the best existing framework for addressing the implications of the climate change-nuclear security nexus is found in Theater Security Cooperation Plans:
• Every relevant department has a seat at the table: Department of Defense, Department of State, Department of Energy, and USAID;

• They leverage the geographic breakdowns of combatant commands and State Department bureaus;

• They are already designed to facilitate all of the tools necessary to engage with, deploy resources to, and build confidence with U.S. partners, adopting an all tools approach: diplomacy and economic development; humanitarian assistance and disaster relief; and, if necessary, the security component represented by the full-spectrum capability of the U.S. armed forces.

The climate change-nuclear-security nexus could fit seamlessly into these planning dynamics, with a focus on both crisis response and crisis prevention. Doing so would require overcoming institutional barriers and gaining bureaucratic buy-in, but much of that has been accomplished by the reporting trail that has already been done by the Department of Defense in its strategizing for the impact of climate change. TSCPs will drive resource allocation for potential contingencies, including by civilian and military agencies of both the United States and the TSCP partner country.

Moving beyond the immediate crisis response posture, Working Group members recommended that it would be advantageous to all sides to include the combination of climate change and nuclear risk issues in the strategic and economic/commercial dialogues that the United States conducts with important partner countries like China and India. Doing so would both raise the profile of both issue areas separately, while also recognizing the important cross-cutting nature of the threats.
In order to make the expansion of the TSCPs for the climate change-nuclear security nexus effective, the federal government would need to conduct a comprehensive risk assessment to understand high-priority areas, and where further investment in capacity would be needed. Such a risk assessment would include threats to critical infrastructure, susceptibility to resource scarcity, and where the governance risks would hold back a response to a particular crisis. Granular information on what can “go wrong” and where can help build a better structural approach to mitigating a crisis. In particular, there has been a lack of attention paid to emerging risks and hazards regarding nuclear operations; and contingencies for nefarious actors using natural disasters or combinations of social, political, and environmental strains to exploit weak spots in nuclear security and safety systems, the interruption of which would have important security implications in a variety of locations.

Working Group members identified hitherto underutilized federal assets for helping in the information-gathering stage, especially open-source information. The National Labs and National Academies maintain the human capital and databases to inform a risk assessment effort, including sophisticated data modeling. There exists space for conceiving of a public-private partnership to add data and more analytic rigor to some of the issues identified by the Working Group. Doing so would ground TSCPs, as well as the overall national security decision-making effort, in a strong data framework.
CONCLUSION AND NEXT STEPS

The breakout sessions on stabilizing crisis regions, as well as the wider Working Group, agreed that the complexity of the climate change-nuclear-security nexus requires new tools for monitoring hotspots and testing government responses. Building that baseline knowledge would inform policymakers on the nature of these intersecting threats. Stress tests and climate and nuclear crisis scenario exercises will be important inputs into understanding the nature of climate-nuclear-security risks.

Members underscored the role of the non-government analytical community (think tanks, academia, and foundations) to think highlight future research areas and build the relationships necessary to move this work forward. The Working Group is well-situated to advance these efforts through its members’ own institutions, in combination in other multi-stakeholder efforts, and through future meetings of the Working Group.
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