

# BRIEFER

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## Increasing Concern over Climate and Security Trends in Nuclear Weapon Capable States

Report from the 3rd Convening of the Working Group on Climate, Nuclear, and Security Affairs, January 31-February 1, 2019

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### Background

The Council on Strategic Risks (CSR) convened the 3rd meeting of its Working Group on Climate, Nuclear, and Security Affairs on January 31st and February 1st, 2019.<sup>1</sup> The Working Group launched in 2016 on the recognition that climate and nuclear risks, and general security and stability trends, are growing more complex and interconnected, and are beginning to converge in new ways. CSR is breaking down silos among the nuclear, climate, and security communities and bringing together diverse experts in each field in order to understand and address this confluence of challenges.

The 2019 workshop had three primary objectives. The first was for the Working Group help prioritize the most important countries for CSR's 2019 research on the nexus of climate, nuclear, and security issues. The second was to understand the specific trends the Working Group considers of highest concern in these countries. The third objective was to continue building unity among the nuclear, climate, and security communities and helping experts in each identify ways to better work toward shared goals.

### Key Findings

The multidisciplinary experts of the Working Group converged around several key themes. The starkest trend among the group is an increasing worry about how a range of security and climate-related events are combining to strain nuclear weapon capable states. Pakistan and India rose to the highest concern, and indeed, within weeks conflict sparked between the two countries beginning with fighting in Kashmir.<sup>2</sup>

In addition to their long-standing historical tensions and the security challenges they pose to one another, India and Pakistan have been enduring massive losses from disasters such as heat waves

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<sup>1</sup> The Working Group on Climate, Nuclear, and Security Affairs is part of CSR's Converging Risks Lab, see <https://councilonstrategicrisks.org/theconvergingriskslab/>

<sup>2</sup> See Andrea Rezzonico, "[The Future of South Asia: Nuclear, Climate & Security Nexus in India & Pakistan.](#)" Council on Strategic Risks, March 7, 2019. In addition to the military attacks traded between the countries, some Indian officials threatened further reduction in water flowing through its territory to Pakistan. See Jeffrey Gettleman, "India Threatens a New Weapon Against Pakistan: Water," *The New York Times*, February 21, 2019.

and floods for years. These types of pressures combine in many nuclear weapons-possessing countries. There is clear need for deep analysis on how climate change effects may work with other stressors to increase the risks of nuclear miscalculation or escalation.

Second, the Working Group called attention to the fact that the trajectories of many countries experiencing major security and climate-related challenges while exploring nuclear energy development will have an outsized impact on the stability of their regions. These include Egypt, Nigeria, Indonesia, and the Philippines.

Additionally, while these first two groups of countries raise important concerns to understand and prepare for, the world's superpowers were ever-present in the discussions for every region. The Working Group provided strong guidance to overlay the behavior of the United States, China, and Russia on each case study, as well as how the actions of these superpowers are shaping the international order. It is incredibly important that the United States work to regain its long-held role of global leadership.

Finally, while conflict between or instability within nuclear weapon capable states was the Working Group's highest concern, many in the group also cautioned not to dismiss the challenges climate and security trends pose to civil nuclear sites and infrastructure. As the group previously identified, these include the long-term commitment of resources to safety and security of nuclear sites and materials, whether countries seeking nuclear energy in part for climate change mitigation reasons will draw politically closer to suppliers such as Russia and China, and the direct effects of climate change (heat waves, flooding, etc.) on nuclear energy facilities. In 2019, the group also focused more on the threat of radiological releases, as both accidents and non-state actor attacks may worsen in areas of significant stress or change.

### **Highest Priority Countries for Further Research**

In addition to these areas of convergence, many Working Group members diverged on how CSR should prioritize its forthcoming research on the various regions it discussed. Many believed strongly that the area around the South China Sea and the Nigeria-Lake Chad region should rise higher in prioritization; others believed that from a U.S. security perspective, these regions were less important than, for example, South Asia and the Middle East/North Africa.

In order to gauge the instruction of our multidisciplinary group, CSR used a variation of the Delphi method by which experts engage in iterative rounds of polling or delivering estimates with discussion among them in between each round. This gave us a ranked prioritization of countries in addition to a deep well of qualitative advice that we will use to shape our research.

The following list shows the priority ranking of case study countries as set by the Working Group. While the group did not show common majority views on most singular rankings, almost every Working Group member agreed that India was the single most important country for field research.

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|-----------------|---------------|-----------------|
| 1. Pakistan     | 6. Nigeria    | 11. China       |
| 2. Egypt        | 7. Indonesia  | 12. Philippines |
| 3. India        | 8. Iran       | 13. North Korea |
| 4. Turkey       | 9. Bangladesh | 14. UAE         |
| 5. Saudi Arabia | 10. Russia    |                 |

## Next Steps

CSR will incorporate a wealth of Working Group input into a forthcoming series of case studies on many of these countries. It will be critical to further examine what occurs when climate and security trends merge in countries that have or seek nuclear energy, including around the South China Sea region, in the Middle East, and across Africa. Many of the nuclear security and safety challenges that may be complicated by this nexus of trends are solvable, and there is a clear responsibility to ensure the world is prepared to address them.<sup>3</sup> Much more complicated are the myriad ways these trends will complicate the balances among nuclear weapon capable states---a topic for which there is far less agreement on what measures will prove stabilizing or destabilizing.<sup>4</sup> It is urgent that the international community continue to strengthen global governance and develop new approaches to arms control to help mitigate nuclear weapon risks while understand the complex ways those risks may be amplified when security, climate, and other trends combine.

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<sup>3</sup> Christine Parthemore, Francesco Femia, Caitlin Werrell, “The global responsibility to prepare for intersecting climate and nuclear risks,” *Bulletin of the Atomic Scientists*, November 1, 2018.

<sup>4</sup> Admiral John Gower, CB OBE, “Briefer No 1: Improving Nuclear Strategic Stability Through a Responsibility-Based Approach,” Council on Strategic Risks, January 7, 2019.