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BRIDGING RESEARCH AND POLICY ON CLIMATE CHANGE AND CONFLICT

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BACKGROUND

In March 2018, the Peace Research Institute Oslo (PRIO) and the Wilson Center co-hosted a conversation between policymakers and academic researchers to investigate how to improve the translation of scholarship on climate change and conflict to address pressing policy challenges in diplomacy, development and security. Following presentations led by academic experts, participants engaged in discussion on the synthesis of the evidence on climate and conflict risks and long-term scenarios, the pathways from food production and livelihood to instability, and the links between land rights, conflict and climate policy.

Four main recommendations are forwarded from this conversation for enhancing policy and research interactions:

1. Combine quantitative studies with examples and narratives to illustrate the relationships identified in the models.
2. Construct predictive models that can inform the effectiveness of a range of interventions.
3. Develop decision-support tools, such as integrated assessment models, for policy-makers to inform better implementation of programs.
4. Leverage the comparative advantages of academic researchers in new policy and projects to inform data collection and future analysis of effectiveness.

Fostering dialogue between policy and research communities on climate change and conflict

Globally, we have seen an increase in climate impacts and security risks. At the same time, we have seen substantial progress in research on how climatic changes may alter or enhance the propensity for new violence or interact with existing conflicts. More tightly coupling the research with the needs of policymakers could enhance the development of evidence-based policy to more rapidly and effectively address the challenges presented by climate change and conflict.

To foster dialogue between the research and decision-making communities, the Peace Research Institute Oslo (PRIO) and the Wilson Center co-hosted a workshop for a small group of researchers, policymakers and policy influencers drawn from academia, the United States government, international agencies, and NGOs. Over three presentations of new research, the participants discussed how to enhance the integration and relevance of scholarship to the policy challenges,

focusing on two questions:

1. What are the challenges towards integrating the 'state of the science' research into policy?
2. How can we improve the dialogue and feedback between these two communities?

Climate change and conflict research as a critical input for policy interventions

To focus the discussion, we invited presentations on three topics of high relevance to understanding and managing climate change and conflict, but where divergences and gaps between the scholarship and policy persist. The experts discussed the development of long-term climate-conflict scenarios; food production, livelihood and instability; and, land rights, violence, and climate change mitigation policies related to land use.

- **Expert elicitation of the risks of conflict due to climate change:** *Katharine J. Mach, Stanford University*

To develop effective policy on climate change and conflict, decision-makers often ask two big

questions: 1. the importance of climatic changes as a driver of conflict risk, and 2. the strength of that relationship over different scenarios of future climatic change. This work examines these questions through a structured protocol to elicit the judgments of experts in these processes. Experts rank socioeconomic development, state capacity and intergroup inequality as more important drivers of conflict than the impacts of climate change under current conditions. They also judge climatic change to be the most uncertain of the drivers. Over future climate scenarios, the quantitative risk estimates of the effect of climate change on conflict shows a wide range of median values; however, there is substantial overlap in the ranges on their estimates.

- **Food Production, Livelihoods and Societal Instability:** *Nina Von Uexkull, Uppsala University & Peace Research Institute Oslo*

Conflict is a primary driver of vulnerability with important implications for livelihoods and societal stability. In regions where livelihoods are highly dependent on rain-fed agriculture, climate

change is a major driver of vulnerability. While the decrease in agricultural productivity is not directly linked to the onset of new conflicts, agricultural production shocks further increase instability in regions that are already experiencing conflict due to interactions with poor socioeconomic and political conditions.

- **Land Rights, Conflicts and Climate Policy:** *Tor A. Benjaminsen, Norwegian University of Life Sciences & Peace Research Institute Oslo*

Climate mitigation policy also has the potential to increase conflict, especially when the interventions exacerbate existing tensions and conflicts. As stringent climate policy will require substantial changes to land use to offset greenhouse gas emissions, there is concern that there may be increased conflict in locations where land rights are poorly developed. An important example that is being observed today is in the drylands of Africa. The lack of recognition of pastoralism as a livelihood and the absence of rights to grazing land has led to a marginalization of pastoralists and increased conflict due to pressures from competing land uses.



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Recommendations for enhancing policy and research interaction

Following the presentations, the experts discussed how to improve the translation of scientific research for the development of policy interventions, as well as the research needs of policymakers for the scientific community. Four recommendations emerged:

- 1. Combine quantitative studies with examples and narratives to illustrate the relationships identified in the models:** The relationships between conflict and climatic changes have been explored largely through quantitative approaches. These methods focus on identifying underlying relationships and trends. The results are interpreted as the probability that a conflict will be observed given certain conditions. Qualitative scholars have also provided insight into these relationships through detailed tracing of conditions and interactions through case studies. While this information is in principle of high value to policy, these research approaches are difficult to translate for policymakers as they need to answer questions about generalizable patterns as well as counterfactuals (e.g. why some locations with observed environmental stresses tip into conflict and others do not). Narratives that compare locations with different degrees of violence, as well as efforts to ground-truth empirical findings, can help illustrate how research conclusions would be observed in a real-world context.
- 2. Construct predictive models that can inform the effectiveness of a range of policy interventions:** Policymakers' efforts are generally focused on preventing the onset of

conflict, supporting the cessation of existing violence, and peacebuilding. This begins by understanding the causal pathways to different forms of violence but also requires more understanding of the effectiveness of interventions. Retrospective evaluations of interventions, including monitoring and evaluation (M&E), and examples of how they play out on the ground, across the basket of programs and policies implemented by development and security communities could inform future interventions. Further, synthesizing this knowledge into models that can provide predictive information on both conflicts, as well as what interventions are effective and when to deploy them, would enhance the usefulness and translation of the research for policy needs.

- 3. Develop decision-support tools, such as integrated assessment models, for policymakers to learn the implications of the new results:** Predictive models, such as early-warning systems, play an important role in conflict, development and security communities. Decision-support tools could also enhance the translation of existing and new research results to the policy community. While this class of models can have predictive capacity, they often place equal or greater emphasis on learning about the system. The integrated assessment models (IAMs), such as those that are used to evaluate the costs and effectiveness of different climate policies, and system dynamic approaches may be useful frameworks. Starting with a framework that synthesizes the existing knowledge of the dynamics of conflict and climate change, alternative descriptions of these interactions

and novel findings can be implemented into the model to allow decision-makers to explore and update their understanding of the system.

4. **Leverage the comparative advantages of academic researchers in new policy development and projects to inform data collection and future analysis of effectiveness:** While it is not the role of academics to provide operational guidance, developing a greater understanding of pressing policy needs can frame what questions are asked, how the research is conducted and





to whom the results are communicated. Additionally, the comparative advantages of researchers can be further leveraged to evaluate the effectiveness of policies and projects by informing early data collection to facilitate these analyses. These efforts towards continued dialogue on how academic work can be linked to on the ground practices could constitute the development of a base of actionable science for policy on climate change and conflict.



Geoff Dabelko (Wilson Center and Ohio University), Halvard Buhaug (PRIO), Joshua Busby (University of Texas, Austin), and Sherri Goodman (Wilson Center) present at a March 2018 Wilson Center event, "Climate Change and Conflict: New Research for Defense, Diplomacy, and Defense."

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