



MARCH 2017

Translating Climate Security Policy into Practice

Climate change involves different consequences (flood, drought, sea level rise, etc.) which simultaneously affect numerous issue-areas (agriculture, transport, energy production, human and animal health, etc.), different levels of society (ranging from local to global), and different regions across the globe. Because of these risks' multi-faceted characteristics, policy responses are needed from different policy communities simultaneously. A key element in such efforts is to incorporate different approaches and knowledge that have previously been separate, such as how climate changes challenges traditional peacebuilding efforts or how climate change programming can increase conflict risks. Doing this will contribute to developing the integrated approaches on which risk analysis and policy responses must be based if they are to address climate-related security risks successfully.

This policy brief provides an overview of the challenges policy organisations face if they are to respond to climate-related security risks. It sets out some practical recommendations on how policy organisations can strengthen their efforts to respond to these risks. It highlights the importance of clear leadership and explicit institutional change strategies as the basis of these changes.

1. Multifaceted climate-related security risks¹

Climate change is widely recognized as one of the major forces shaping the future.

It is also an example of how human actions fundamentally affect the basic physical processes of the world, with far-reaching and, in the worst case, potentially disastrous consequences for human societies. One dimension of these consequences lies in the realm of security, peace and conflict.

During the last decade, as awareness has grown and understanding has deepened about the large-scale impacts of climate change on the biosphere and human livelihood, so has there also been greater appreciation of the multifaceted character of climate risks for human society. The basic necessities of life, the conditions for a healthy life, the prospects of prosperity are all affected by climate change and are felt differently by different groups depending not

¹ This policy brief draws heavily on a session at the December 2016 Planetary Security Conference in The Hague, on the theme of *Translating climate security policy into practice*, moderated by Dan Smith (SIPRI); with panellists Camilla Born (E3G, UK), John Carstensen (DFID, UK), Mely Caballero Anthony (Centre for Non-Traditional Security Studies, Singapore), Oli Brown (UNEP), Paula Caballero (World Resources Institute, USA) and Pascal Delisle (EEAS, Brussels); and with rapporteurs Benjamin Pohl, Janani Vivekananda (both adelphi, Berlin) and Malin Mobjörk (SIPRI).

only on their geographical location but also on their socioeconomic position. The poor will suffer more and climate change must thus be seen as a challenge for development and governance.

Security risks posed by climate change entered the high-level policy agenda in the early 2000s. Initially, the potential security implications of climate change gained most attention as an argument that added to the case for taking urgent action to mitigate carbon emissions so as to slow down global warming and climate change. The next step was recognition that the impact of climate change on, for example, water security would have knock on consequences on food security and livelihoods, thus social and political stability, and therefore on conflict risk. This linked the discussion of climate change to both development and peacebuilding and especially to conditions in fragile states. The recognition of climate change as a security risk is now well established and was acknowledged in the most recent IPCC Assessment Report in 2014.²

Analysing the security risks posed by climate change needs to encompass a range of different impacts and risks and accordingly will normally draw on diverse approaches to the basic questions of security – emphasising human security, the security of communities and states, and international security. At the same time, such an analysis needs to cover not only the variety of issues and approaches but also the ways in which both the problems and the approaches to them are interlinked.³

Because the effects of climate change are diverse and wide ranging, so too are the security risks related to them. As concluded in the fifth assessment report of the Intergovernmental Panel on Climate Change (IPCC) climate change will, among other things, progressively threaten human security, contribute to factors that increase the risk of violent conflict, affect vital transport, water and energy infrastructure, and increasingly shape conditions of security and national security policies.⁴ Consequently, different policy and issue-areas are affected simultaneously and the impacts of climate change need to be integrated in multiple organisations with diverse mandates working at different levels in society. These are different policy communities – development, crisis management, environment, defence and foreign affairs. These communities are currently at different stages of developing strategies to integrate climate-related security risks into their work.⁵

Ultimately, climate change is a process of transformation. It involves both processes that have not been experienced before in human history such as sea level rise, and others that are well known but changing, such as droughts, heavy rainfall, cyclones and heat-waves. As a result, climate change involves many uncertainties. On many of the risks posed by climate change, the statistical data are strong enough to be sure there is a risk but not strong enough to be precise

2 Adger, W. N. et al., 'Human Security', eds. C. B. Field et al., *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge and New York: Cambridge University Press, 2014), pp. 755–91.

3 Mobjörk et al., *Climate-related Security Risks: Towards an Integrated Approach* (Stockholm: SIPRI and SU, 2016).

4 Adger, W. N. et al., 'Human Security', eds. C. B. Field et al., *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge and New York: Cambridge University Press, 2014), pp. 755–91.

5 For an overview of these processes, see Rüttinger et al. *A New Climate for Peace: Taking Action on Climate and Fragility Risks* (adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies, 2015); Mobjörk, Smith and Rüttinger, *Towards a Global Resilience Agenda: Action on Climate Fragility Risks* (Clingendael, adelphi and SIPRI, 2016).

about probability and consequences.⁶ Better analytical tools are needed.⁷ We will outline three major sources of challenges for analysing climate-related security risks, which are also relevant in the development of appropriate policy responses.

2. Three challenges for climate risk analysis

2.1 Climate-related security risks are context-dependent

Research on trans-boundary water management, food security and extreme weather events has demonstrated that the same pressures can affect different societies differently. Some societies have the capacity to adapt to significant levels of stress, while others suffer severe impacts from lesser pressures. The point is that the impacts of climate change on human societies depend not only on the magnitude and speed of climate change, but also on vulnerabilities and adaptive capacity. These are unequally distributed within and between societies.⁸ In turn, this means that contextual

political, institutional, economic and social factors need to be taken into account when analysing risk.⁹

These issues of governance structure, social equity and adaptive capacity are the reason why studies that try to identify a direct link between a specific climate variable, such as rainfall, and a specific negative security outcome, such as violent conflict, produce contradictory results. The fact that these studies do not produce a uniform conclusion is only because they are not able to address the complexity of the real world. Their shortcomings make them misleading when it comes to formulating policies to address the problems and the risks.

2.2 Climate-related security risks have a compound character

For example, increased water stress exacerbates food insecurity, and extreme weather events put additional pressure on areas facing sea level rise. While these interactions have always existed, they are likely to be intensified as a consequence of a changing climate. Policymakers and scholars alike need to pay careful attention to how these interactions affect any particular region or, indeed, any particular generic problem. In other words, studying the effects of climate change on food security alone results in an incomplete picture. It may even produce a too narrow picture of the problems of food insecurity itself because the study fails to bring the interactions into focus.

It is crucial that policy responses take this compound character into account, not least so as to avoid negative spill-over effects, sometimes known as blow-back or the back draft. The problem is that positive measures taken in one area can have a negative effect on another.¹⁰

6 Steinbruner J.D. et al. *Climate and Social Stress: Implications for Security Analysis* (National Academic Press: Washington DC, 2013)

7 Klein, R. et al. 'Adaptation Opportunities, Constraints and Limits', in eds. C.B. Fields et al., *Climate Change 2014: Impacts, Adaptation, and Vulnerability, Part A: Global and Sectoral Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, (Cambridge University Press: Cambridge and New York, 2014), pp. 899-943; Oppenheimer, M. et al., 'Emergent risks and key vulnerabilities', eds. C. B. Field et al., *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge and New York: Cambridge University Press, 2014), pp. 1039-99.

8 IPCC, 'Summary for policymakers', eds. C.B. Field et al., *Climate Change 2014: Impacts, Adaptation, and Vulnerability, Part A: Global and Sectoral Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press: Cambridge and New York, 2014), pp. 1-32.

9 Vivekananda, J. and Rüttinger, L. 'Climate and security', SIPRI Yearbook 2015, pp. 453-488.

10 Rüttinger et al., *A New Climate for Peace: Taking Action on Climate and Fragility Risks* (adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies, 2015).

2.3 Climate-related security risks are transmitted across time and space¹¹

Some climate risks such as extreme weather events occur rapidly; others such as sea level rise develop over long periods of time. More generally speaking, it has taken well over a century for the impact of ever-rising carbon emissions to be identifiable in the natural world; it will take decades of reducing carbon emissions before their impact will ease, let alone cease.

The slow moving nature of climate change is relatively well understood. Perhaps less well understood is the fact that the effects of climate change also cross geographical borders. Drought in one country, if it is a major agricultural producer, may cause food prices to fluctuate in another. Glacial melt in one country may cause floods downstream in a cross-border river system.

To respond to these challenges policy making must be based on a risk analysis that pays careful attention to how risks are transmitted over time and space. In this, climate change is not unique; in an interdependent world, there are other challenges – such as disruption in financial markets – that also cross borders.

3. In search of suitable integrated approaches for risk analysis

Altogether, climate-related security risks pose profound challenges for research and policy making. The common feature of these challenges is systemic. To summarise them:

- Climate change involves diverse consequences;
- These affect diverse policy areas;
- Their effects are variously felt at local, national, regional and global levels;

11 Mobjörk et al., *Climate-related Security Risks: Towards an Integrated Approach* (Stockholm: SIPRI and SU, 2016).

- How these effects play out depends on a wide range of social, economic, political and institutional factors;
- Different policy communities have responsibility for different issues and levels.

Three broad conclusions can be drawn at this point:

1. Risk analysis and policy-responses need to take systemic issues into account. In risk analysis this is sometimes described as a multi-hazard or holistic approach, which denotes an approach striving towards including not only contextual factors grounded in the political economy, but also second and third-order risks.¹²
2. Security risks – the particular focus of this brief – are particularly context-dependent; the issues of specific vulnerabilities and specific adaptive capacity has to be in the analytical foreground.¹³
3. While the risk analysis has to grasp the connections between the diverse risks posed by climate change in the risk analysis, policy making has to address them. For this, the different policy communities have to come together to develop an integrated approach.¹⁴

There is growing agreement today that **successful, and sustained, responses demand an integrated approach** to the security risks posed by climate change, and that climate-related security risks need to be considered both in mitigating climate change and in developing adaptive capacity. There is less clarity on the specifics of such an approach. This is partly because of what may seem like a paradox at the heart of

12 Vivekananda, J. and Rüttinger, L. 'Climate and security', SIPRI Yearbook 2015, pp. 453-488.

13 Steinbruner J.D. et al. *Climate and Social Stress: Implications for Security Analysis* (National Academec Press: Washington DC, 2013)

14 Heyvaert, V., Governing climate change: towards a new paradigm for risk regulation, *The Modern Law Review*, 2011, vol. 74, pp. 817-844; Rüttinger et al., *A New Climate for Peace: Taking Action on Climate and Fragility Risks* (adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies, 2015).

the issue. The approach that is needed has to be integrated but cannot be monolithic. That is to say, it needs to integrate a variety of themes and policy areas, and thus a range of different kinds of knowledge and policy competence. However, it cannot be monolithic because it must also respect and address the specificity of each locale.

An essential element in such efforts is to incorporate different approaches and knowledge that previously have been separate. Rüttinger, et al. identify four critical stages where this integration is needed: in risk assessment and early warning; in strategy and planning; in financing; and in implementation.¹⁵ In all these stages cross-fertilisation is needed. If this integration fails, responses in one area may cause unintended negative effects in another. By contrast, successful integration generates co-benefits and synergies, for instance between adaptation and development, development and humanitarian aid, and peacebuilding and conflict prevention. Altogether, this can strengthen the resilience towards climate impacts and help in achieving long-term and sustainable peace even in fragile contexts.

A major shift in policymaking is needed towards this comprehensive approach. Here, an important distinction can be drawn between mainstreaming strategies and an integrated approach. The primary advantage with mainstreaming, is its potential to raise awareness in an organisation as it has done with gender and human rights. However, in order to translate climate-security policies into practice, strategies are also needed to ensure that climate risks are taken into account in analysis and programming.¹⁶ Accordingly, an integrated approach is not about adding-on a new issue – climate change – to already established policy areas; rather it is about fundamentally transforming

the policies and programmes being proposed.

- New approaches in risk analysis will take account of the compound trans-boundary character of climate risks;
- Altered design in development programmes will address short- medium and long-term challenges of climate change as well as transboundary and transnational risks;
- The inclusion of vulnerabilities and adaptive capacity in security and conflict analysis will modify approaches to conflict prevention and peacebuilding.¹⁷

4. Impediments to integration

Many policy organisations at different levels – national, regional and global – have developed climate security policies in their area of responsibility. Key questions are:

- What is needed for supporting policy organisations to take a grounded view on complex, climate-related security risks?
- How can cooperation be strengthened between organisations having mandates in different policy areas?
- What new or recently developed tools seem fruitful for strengthening knowledge about climate-related security risks?
- What role does leadership play in encouraging groups to relax their organisational boundaries?

An important and recurrent topic in discussions among practitioners and experts¹⁸ is **the framing of the issue**. This encompasses the relationship of climate change to both development and security.

15 Rüttinger et al., *A New Climate for Peace: Taking Action on Climate and Fragility Risks* (adelfi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies, 2015).

16 Mobjörk et al., *Climate-related Security Risks: Towards an Integrated Approach* (Stockholm: SIPRI and SU, 2016).

17 Birkmann, J. and von Teichman, K. "Integrating disaster risk reduction and climate change adaptation: key challenges, scales, knowledge, and norms", *Sustainability Science*, vol. 5, no. 2 (2010), pp. 171-184; Matthew, R., 'Integrating climate change into peacebuilding', *Climatic Change*, vol. 123, no. 1 (2014), pp. 83-93; Steinbruner, J.D., Stern, P.C. and Husbands J.L., *Climate and Social Stress: Implications for Security Analysis* (National Academies Press: Washington, DC, 2013).

18 Such as the session at the December 2016 Planetary Security Conference on which this policy brief draws.

It is a significant impediment to an integrated approach that, in many circles, policy responses to climate change are defined primarily in terms of mitigation of global warming – i.e., reducing carbon emissions. In poor and conflict-affected countries, however, this is not the main question. First, they are too poor to be producing significant carbon emissions. Second, however fast carbon emissions are reduced, the climate will still change and there will still be disruptive social, economic and political consequences for decades to come.

Instead, in poor and conflict-affected countries, development and peacebuilding are key. Indeed, it is often the case that in order to motivate national engagement in the issues of climate, a positive link to development has to be identified and stressed. To talk about what is going to be achieved in concrete terms – such as access to fresh water, greater food security, better development – is more productive than talking about climate change and adaptation.

In a similar way, the discussion of climate-related security issues can often go wrong because, in some circles, the concept of security is almost exclusively seen in terms of the military – so-called ‘hard security’. This leads to a situation in which some of the organisations that can best address climate change-related insights in peace-building do not want to deal with the question of security explicitly. They are wary of being seen as security-related organisations and of interfering with a country’s security. This reticence is understandable but unacceptable because it inhibits risk assessment and makes it extremely difficult to develop any worthwhile policy on climate-related security.

A further impediment arises from **the compound character of climate risks**. This makes it difficult – and often misleading – to draw crisp distinctions between climate-related risks and other structural risks. And the fact that they are compound means cause is diffuse and difficult to attribute. As a result, everything can seem to be equally important and it is

consequently difficult to prioritise between different responses. It is also difficult to be sure about identifying the impact of policies and their achievements. In other words, the complexity of the risk means that it is hard to give the policy response a tight focus. This has the further consequence of making any costs associated with it harder to justify.

A corner stone in achieving an integrated approach is to span boundaries between different issue and policy areas. This challenges not only how organisations are set-up, but also how **the funding mechanisms** cross silos or remain within them. There is a need to direct funding to addressing the causes of security risks by reference to local perceptions of them. The agricultural sector is one example: currently, adaptation in agriculture only attracts a small part of overall adaptation funds, despite its prominent role in many developing countries’ Intended Nationally Determined Contributions (INDCs) under the Paris Climate Agreement. On this issue also more progress could be made in programmes that aim to support the implementation of what is now called NOCs.

The importance of long-term financing also merits emphasis. Addressing the causes of insecurity demands persistence. Short-term investments are often directed to addressing symptoms; this needs to be balanced with finance to address structural impediments, which can strengthen resilience.

How are these impediments to be reduced?

The role of leadership is paramount. It permeates all our topics. It is of major importance for creating change incentives within organisations. Critically, to achieve the transformation that is needed, long-term thinking is required. The integration of climate-related security risks in policy and practice demands a transformation in how different organisations work. This can only be through decision of a determined political leadership. That is how national policies are changing; it is how the Paris Climate Agreement was achieved in December 2015; it is how further progress will be registered.

Explicit **institutional change strategies** are also indispensable. These require sustained effort at raising awareness within relevant institutions along with training and retraining opportunities. Collaboration across issue- and policy-areas is needed, and measures need to take into account compound risks and how risks are transmitted across time and space. There are genuine technical difficulties in achieving this; people in different policy communities with different knowledge and training do not always find cooperation straightforward. Beyond awareness and training, however, what is needed are champions of change to drive it forward, illustrate the possibilities and register achievements. As institutional change progresses, there will be a significant degree of learning to change by doing. The further this goes, the more synergies there will be.

5. Conclusions and recommendations

Climate-related security risks cross boundaries – not just national and geographical boundaries but also temporal and sectoral ones. There is broad agreement that prevention is the best way of dealing with security risks. The three sources of challenges elaborated in this policy brief point towards the need for improved analysis of climate-related security risks to inform policy on this issue. Both improved analysis and successful responses require integrated approaches.

An essential element in such efforts is to incorporate different approaches and knowledge that have previously been separate. This demands new processes and methods for how work is done, including new forms of collaborations. Accordingly, to develop integrated approaches not only requires spanning institutional barriers and having sufficient resources; it also requires that different guiding principles and interests are transcended.

To close the gap between different policy- and issue-areas is an important step. This does not mean, that all actors need to have a mutual understanding on all details, but that there is mutual understanding of the path forward, the need for integration, and that this involves transforming the way of working.

Steps that can strengthen the capacity and capability to develop integrated responses are:

- Develop concepts that span boundaries between policy and knowledge areas and develop forums and meeting points between different parts of an organisation so as to discuss and explore those concepts;
- Challenge risk assessment teams to take into account the systemic challenges posed by climate change and the inter-connectivity between climate change, peace, security and development – i.e., to address structural and compound risk;
- Likewise challenge policy teams to craft responses to structural and compound risk, for which new instruments and kinds of activity are likely to be necessary;
- In parallel, ensure that financial instruments are available to match the analysis of compound risk and resource integrated responses;
- Stress-test policy measures across governments and international organisations to see how they stand up to pressures generated by climate change and its impacts on societies, in order to identify and prepare response capability to potential new situations of insecurity;.
- Strengthen the capacity to monitor policy implementation and assess its impact;
- Develop explicit institutional change strategies.

Above all, however, the conclusion of this policy brief rests on the importance of leadership to achieve the necessary changes so that climate-related security risks are properly analysed and adequately addressed.

Further reading

- Mobjörk, M. et al., *Climate-related Security Risks: Towards an Integrated Approach* (Stockholm: SIPRI and SU, 2016).
- Rüttinger et al., *A New Climate for Peace: Taking Action on Climate and Fragility Risks* (adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies, 2015).
- Steinbruner, J.D., Stern, P.C. and Husbands J.L., *Climate and Social Stress: Implications for Security Analysis* (National Academies Press: Washington, DC, 2013).
- Mobjörk, M., Smith, D. and Rüttinger, L., *Towards a Global Resilience Agenda: Action on Climate Fragility Risks* (Clingendael, adelphi and SIPRI, 2016).
- Peters, K. and Vivekananda, J., *Topic Guide: Conflict, Climate and the Environment* (International Alert: London, 2014).

About the Planetary Security Initiative

The Planetary Security Initiative aims to help increase awareness, to deepen knowledge, and to develop and promote policies and good practice guidance to help governments, the private sector and international institutions better secure peace and cooperation in times of climate change and global environmental challenges. The Initiative was launched by the Netherlands Ministry of Foreign Affairs in 2015 and is currently operated by a consortium of leading think tanks headed by the Clingendael Institute.

Follow us on social media

 @PlanSecu

 The Planetary Security Initiative

 The Planetary Security Initiative

E-mail: psi@clingendael.nl

Website: www.planetarysecurityinitiative.org

About the authors

Malin Mobjörk is a Senior Researcher in the SIPRI Security and Development Programme. Her research focuses on the nexus of climate change, security and development.

Dan Smith is the Director of SIPRI and a Professor of Peace and Conflict at the University of Manchester, England. His research focuses on climate change and insecurity, the Middle East and global conflict trends.