#### **Discussion Article**

# The Peace and Security Implications of Climate Change for the Nordic Region

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#### **Abstract**

Climate-related stressors like extreme weather events, in combination with factors such as increased global rivalry for natural resources and a changing global order, will exacerbate existing vulnerabilities, and drive compounding and cascading effects. Such developments may undermine the resilience of communities and institutions also in the Nordic region and can have a negative impact on social cohesion and human security. In the Arctic region, in particular, temperature rises faster than the global, which further increases vulnerability and risks. This discussion article suggests that the Nordic countries are relatively well equipped to tackle comprehensive security risks and have adaptive capacity towards climate change. We argue, however, that far more could still be done on foresight and preparedness for climate-related security risks. In particular, the Nordic countries must strengthen their cooperation on climate security to effectively address the escalating challenges.



Climate security, Nordic region, climate change, Nordic cooperation



#### Introduction

Climate change, especially the gradual rise in global temperatures, is already disrupting weather patterns, changing ecosystems, reducing biodiversity and exacerbating environmental degradation across the planet. These changes are happening faster in the Arctic region than in the rest of the world and are already resulting in the melting of arctic ice, permafrost and glaciers. Over time this will lead to, amongst other things, rising sea levels that would make some coastal zones – where most people in the Nordic region currently live – uninhabitable in this century. Climate change is also expected to increase the scope and frequency of extreme weather events – such as droughts, floods, and heat waves – which will have an impact on the primary industries in the Nordic region, including agriculture, forestry and fisheries.

These climate related stressors, in combination with factors such as increased global rivalry for natural resources and a changing global order, will exacerbate existing vulnerabilities, and drive compounding and cascading effects. These may undermine the resilience of communities and institutions in the Nordic region, and could have a negative impact on social cohesion and human security. Some effects of climate change – such as seasonal changes in the polar ice cap – have also increased hard security risks in the Arctic region. The Arctic, in particular, experiences the effects of climate change such as a rise in temperatures between three and four times faster than the global average. The Arctic region is becoming more accessible to shipping and extractive industries, and this may increasingly lead to an 'Arctic scramble' that will exacerbate geo-political tension in the Nordic region. However, cooperation to manage shared natural resources like fish stocks, or to cope with transboundary natural disasters, can also contribute to sustaining peace in the Nordic region.

This discussion article will explore the profound implications that climate change will have for present and future human and hard security, but also the opportunities to influence how to build and sustain peace, including in the Nordic region. It argues that the Nordic countries have an opportunity – and a responsibility – to cooperate even more closely in order to reduce climate security risks and increase resilience, both in the region and beyond it.

# Nordic countries' responses to climate change and Nordic cooperation

The Nordic countries have been considered resilient to climate-related risks due to their relatively low direct exposure to severe climate hazards like storms and floods. As democracies with high income levels, they also are well placed to adapt to and prevent potential risks. Yet they are also small countries that strongly rely on international trade and functioning multilateral systems. With increasing geopolitical tensions – and also further threatened by climate change – the Nordics are exposed to new vulnerabilities.

The consequences of climate change are not limited to direct risks. Cascading risks occur when the ecological change is combined with socio-economic and geopolitical factors, such as supply chain disruptions or forced migration. In addition, transition risks are associated with the mitigation of and adaptation to the climate crisis. These can manifest, for example, through lack of access to critical materials for the energy transition, increased polarisation resulting from poorly planned climate policies, a lack of acceptance for the need to adapt, as well as misinformation. Cascading and transition risks will also be felt by the Nordic countries.

One example of a cascading risk is more frequent and more intense heat waves in continental



Europe, with indirect implications in the Nordic countries in the form of supply chain disruptions, economic impacts and possibly even political volatility. Already during the European heatwave in 2022, transportation routes were hampered due to low water levels in rivers and extreme heat, hindering energy supply and raising production costs. In the long run, increasingly severe heat and wildfires may strain relations among countries within the European Union (EU). The incidence of direct impacts is unequally divided, with Southern European countries generally disproportionately affected. The EU may need to consider compensation mechanisms to address the damages, but the solidarity of less vulnerable member states may be limited when it comes with a price tag. Heated political debate within the EU about such measures could feed – and be deliberately used to feed – nationalist, populist or EU-sceptic rhetoric.

Cascading and transition impacts are complex and therefore difficult to anticipate and prepare for. They emerge through chains of events involving multiple factors and usually end up affecting various sectors of society, so they also require cross-sectoral responses. The Nordic countries have an advantage as they already apply whole-of-society thinking in civil preparedness through their comprehensive security or total defence models. On paper, such an approach to security appears ideal for integrating preparedness for climate-related risks. So far, however, the Nordic systems have only considered climate-related risks at the surface level, largely neglecting the more complex cascading and transition impacts.

Therefore, more needs to be done to integrate climate-related risks to Nordic civil preparedness. Risk assessments should incorporate climate change in a comprehensive way, also taking into account compound effects with political and economic factors and the structural changes brought about by the green transition. The chains of effects through which cascading and transition risks emerge need to be more explicitly traced in order to anticipate their impacts on critical functions of society. In the longer term, systematic monitoring of global climate-related risks could help to prepare for risks while they are in the process of emerging.

The Nordic countries can gain considerably by acting together on climate security. As they are facing similar risks and share similar approaches to civil preparedness, they could join forces in developing effective responses. Rather than all individually building up risk analysis models or monitoring systems, they could pool resources for collaborative approaches. Here, the Nordic countries could also contribute to broader international cooperation by developing globally applicable solutions.

## Climate change and social (in)cohesion in the Nordics

The impact of climate change in the Nordic region can adversely affect social cohesion by aggravating environmental challenges and pressures on indigenous people. The Nordic region struggles with serious environmental challenges, such as biodiversity loss, altered natural habitats and ecosystems, melting glaciers, sea ice and permafrost, excessive waste stemming from overconsumption, and more. These ecological risks are exacerbated by the fast-changing climate. The Arctic partly overlaps with Sápmi, the indigenous Sámi territory spread across Finland, Sweden, Norway and Russia. Indigenous peoples such as the Sámi tend to be more vulnerable to the negative effects of climate change because they are to a larger extent than others dependent on nature, functional ecosystems and biodiversity for their subsistence and cultural survival as peoples.

At the same time, Nordic governments have adopted ambitious plans and policies aiming to mitigate climate change by reducing their emission and accelerating 'Green Transition'. Unfortunately, the way some of the green transition projects relate with local and affected communities, and in



particular indigenous Sámi communities, has in many cases been problematic. This runs the risk of undermining their potential usefulness as 'green' projects and may lead to negative unintended social, environmental, and cultural consequences, including reduced social cohesion.

Green transition and extractive initiatives, such as wind power plant construction on land as well as mineral extraction, are major sources for social and political tension in affected Sami areas as they have a negative impact on traditional Sami reindeer herding practices. In Norway, Sami communities in Øyfjellet and Fosen, where wind power parks have been constructed, have experienced that reindeer avoid grazing in areas where they can see or hear the wind turbines. In addition, the wind power plants disrupt the migration of reindeer, which is crucial for their survival in the winter months.

Reindeer herding is key for southern Sámi cultural survival, both in terms of language, knowledge transfer and cultural belonging. Green transition projects like wind power on land could be seen as representing an historical continuation of a process where the foundations for the future of reindeer herding are gradually reduced. Sami communities thereby become exposed to a double burden of climate change - one concerning direct exposure to negative impacts of climate change, and the other linked to the measures implemented to combat climate change.

In Norway, massive long-lasting protests and demonstrations occurred in front of the Norwegian parliament in Oslo. Sámi activists chained themselves to the entrances of different governmental departments to protest against what they saw as violations of indigenous rights inflicted by the wind power park in Fosen. The Sámi communities eventually won the case in the Norwegian High Court in the case of Fosen. The Sámi in Sweden share a similar experience. One thousand turbines have been constructed at the Markbygden wind farm in Piteå despite the concerns by the Sámi reindeer herders. In Finland, the Arctic railroad project into Sapmi sparked resistance and was eventually cancelled by the government.

Political and social polarisation might be the result of decisions made without sufficiently considering the grievances of the local population. This underscores the need to seriously consider and apply a holistic, rights-based approach when assessing the impacts of climate actions including green transition policies. An environment and social impact assessment with a narrow focus is inadequate to ensure social cohesion and safeguard the rights of indigenous people. The 'ecological footprint' cannot be reduced to emissions alone.

# Impact of climate change on hard security in the Arctic

Climate change may compound the hard security risk in the relatively peaceful Arctic, which has a high significance for the Nordic region. Labelled as 'Arctic exceptionalism', since the end of the Cold War the Arctic region has been a space for constructive, pragmatic and mainly scientific cooperation and an area of low tension despite disagreements and tensions elsewhere in the world. In recent years, however, the Arctic has been emerging as a potential arena of global rivalry over military power, influence and resources between the United States, Russia and China. This has partly to do with climate change, which offers both opportunities and challenges to the Arctic.

Melting sea ice, at least during the summer, opens the Arctic for external actors through new sea routes. At least a part of the Arctic's resources have become or are becoming more easily accessible. This development has created a fear of conflicts about resources and even territory. A warmer Arctic is likely to attract more commercial and civilian activities such as shipping, mining and tourism, leading to a risk of more accidents and misunderstandings. In addition, the region is facing significant environmental changes, which have considerable influence on the population and various operations



in the region. However, differences between the three parts of the Arctic (American, Russian and European) need to be taken into account.

While climate change with all its implications and consequences has long been a concern for the Arctic, the situation has drastically changed since February 2022. The region is now directly affected by the intersection of two ongoing global crises: climate change and Russia's war against Ukraine. The latter marked the end of 'Arctic exceptionalism', where the shared challenges and opportunities created by climate change fostered cooperation among the countries of the region, including Russia. Now, a major problem is the lack of fully functioning platforms for cooperation. This means that tackling the implications of climate change by involving all countries has become nearly impossible.

On the other hand, military approaches have made a strong comeback in the region after having been neglected since the end of the Cold War. A growing reliance on the hard security dimension is exemplified by an increase in shows of force and military exercises. Finland's and Sweden's accession to NATO indicates that they feel more insecure following the Russian war against Ukraine and in response saw the need to strengthen their security cooperation and thus to invest more in deterrence. But it simultaneously divides the region even further, making dialogue and cooperation cumbersome also in the long term. These developments pose risks of miscommunication and misunderstandings that could lead to conflicts.

Hence, the Arctic is gaining strategic importance for multinational forces, especially within NATO. Global warming and increasing geopolitical competition make military operations more likely, but at the same time, military operations are becoming more difficult, complex and costly due to the changing environmental conditions. These include extreme and unpredictable weather conditions, difficult ice conditions, small breakaways from icebergs and glaciers threatening to damage ships, along with permafrost thaw. The last of these can undermine military infrastructure, ports and runways, which, however, is a lesser problem in the Nordic Arctic than in Greenland.

The new climatic conditions could also reduce the constraints for force projection in the Arctic. The increasing accessibility of the Arctic and new economic opportunities and related changes bring to the fore "new security realities, including the potential for increased drone, submarine, and intelligence-gathering activities, and concerning signs of a strategic capabilities arms race starting in the region" (Goodman et al., 2021).

These developments increase the need for enhanced situational awareness, operational capability, coordination, and policy changes on the part of the Nordic countries and their NATO allies. So far, various capability and coordination gaps - for example, insufficient resources and modern equipment, as well as the absence of joint command structures - restrict the ability to address current and future challenges adequately. Therefore, a robust policy framework and better coordination of policies and activities to maintain a strong and effective military presence in the region is required. This is also necessary for civilian tasks such as search and rescue and disaster response, in which armed forces will however be increasingly involved.

## Nordic contributions for building climate resilient peace

As discussed earlier, climate change poses risks to human security and hard security, as well as social cohesion in the Nordic region. To effectively address the escalating challenges posed by cascading and transition risks, the Nordic countries must strengthen their cooperation. This collaboration should consider not only safeguarding the rights of indigenous peoples, but also ensuring the resilience of social cohesion in the face of cascading risks. Outside the Nordic region, the Nordic



governments have played a crucial role in drawing attention to and addressing the peace and security risks exacerbated by climate change. Their efforts extend to the broader agenda of building sustainable peace globally.

The Nordic countries have a longstanding experience in integrative approaches for making sense of complexity. This approach favours adopting a holistic view when analysing conflicts and security, considering the social, political, economic, and ecological contexts. Rooted in Nordic perspectives, this integrative approach is inherently aligned with values such as sustainable development, equality, and human rights. These fundamental values compel us to prioritise the integrity of individuals and societies in our contemplation of peace - a consideration that is inseparable from the inclusion of nature in the discourse.

Some of the Nordic countries have played a pioneering role in recognising the linkages between climate change, peace, and security. This consistent advocacy for integrating climate change and environmental degradation into global security agendas has been carried out in the United Nations Security Council (UNSC) and the Organization for Security and Co-operation in Europe (OSCE). The climate, peace, and security agenda is not a Nordic invention but is embedded in profound conceptual and policy debates and reflections on the human security dimension of climate change. In the international security policy debate, the Nordic countries have spearheaded this agenda together with other likeminded countries.

The Nordic contribution to bringing climate, peace, and security onto the global policy agenda stems from their long-term commitment and support for environmental sustainability and peace in their international engagement. Sustainable development emerged as a global concept after the 1972 UN Conference on the Human Environment in Stockholm, where Gro Harlem Brundtland, who later became the Prime Minister of Norway in 1981, presented the landmark report "Our Common Future". The Nordic countries have since then consistently advocated for a balance between economic growth, social equity, and ecological sustainability.

The Nordic countries also have a long history of peace mediation, having played an important role in conflict resolution around the world. Not all attempts by Nordic countries to resolve conflicts have been successful, but their contributions have been significant in the sense that their approaches focusing on impartiality, consensus building, and dialogue have earned them a solid reputation as effective mediators. The Nordic countries remain committed to fostering peace and stability around the world by supporting peacebuilding efforts.

Leveraging their competences in sustainability and peace, the Nordic countries have been at the forefront in raising climate change to the agenda as a concern for global peace and security. During its UNSC membership in 2017-2018, Sweden initiated a discussion on climate-related security risks to the council debate (S/2018/749). This was the third time the UNSC had discussed climate change. but it was a timely moment as the conflicts in the Lake Chad basin region, West Africa and Sahel region, Mali, and Darfur had all been exacerbated by the adverse impacts of climate change. Sweden laid the groundwork for like-minded countries to continue addressing this issue on the Council's agenda.

Climate security was one of the four Norwegian priorities in the UNSC during its membership in 2021-2022. Together with Kenya, Norway spearheaded efforts to broaden the scope of the climate security debate to include the interlinkages between climate change and the peacemaking, peacekeeping and peacebuilding work of the UN. Despite some members of the Council objecting to having climate, peace and security on the agenda of the UNSC, many UNSC resolutions adopted



over this period and up to this day include language on climate-related peace and security risks. The Nordic reputation for being impartial and global promoters for peace may have helped the countries promote the climate, peace, and security agenda without undue politicisation, a challenging feat given the inherently political nature of issues on the UNSC agenda.

# **Conclusion and ways forward**

Climate change stands as one of the most formidable challenges of our time. The impact of climate change on society and individuals is not predetermined by our exposure to climate change. Climate change may influence our options, but we can choose how to respond to these climate-related stressors. The choices we make under stress from climatic and environmental causes are influenced by our adaptive capacity and resilience. We can influence these negative effects of climate change by firstly reducing emissions of greenhouse gases, slowing biodiversity loss and taking other steps to prevent environmental degradation; and secondly by investing in those capacities that will enable us to adapt, including especially our social cohesion and societal resilience. As this discussion article highlights, the Nordic countries have an opportunity as well as a responsibility to address climate risks and build resilience, and strengthening Nordic cooperation is one way to achieve climate security. How the Nordic countries respond to climate-related risks to our society can provide opportunities for building resilience and peace.



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