

## MISTRA GEOPOLITICS ANNUAL REPORT 2022



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he Mistra Geopolitics research programme works with foresight to help decision-makers at all levels find the right knowledge on how to handle a crisis, providing examples and exploring possibilities to help them understand what might happen in the future. Our experts and researchers on climate issues, security policies, crisis management, food and raw materials combine knowledge and experience to produce research results and recommendations on policies.

When the programme was set up, no one could have anticipated the present combination of a global pandemic that is still affecting billions of people, a financial system response that is causing widespread inflation, increasing climate effects, a European energy crisis, a global food crisis and the aggressive Russian war on Ukraine. The cross-border working methods of Mistra Geopolitics have an even more important role to play in today's world.

During 2022, Mistra Geopolitics researchers provided insights and knowledge to the important Stockholm+50 conference, which served as a preparatory platform for both the climate Conference of the Parties (COP) in Sharm el-Sheikh and the biodiversity COP in Montreal. Experience has shown how crucial meeting places like this can be as global forums to discuss sensitive and important topics prior to formal multilateral negotiations. The combination of this conference and reports and seminars provided valuable input to climate and biodiversity negotiations in both the EU and the UN.

Mistra Geopolitics' four workstreams – Food Security, Sustainable Oceans, Decarbonization, and Foresight Capabilities and Emerging Technologies – have proven to be of great value in this exceptionally complicated global situation. Reports on loss and damage caused by climate change, exposure to climate risk via international trade, how climate tipping points will reshape geopolitics, climate risks in the mining sector, and climate security and resources are examples of the research programme's contributions.

The Board of Mistra Geopolitics hereby proudly presents the 2022 annual report. A warm thank you to researchers and students, experts and participants, partners, financial supporters and everyone who contributed.

In today's multi-crisis world, where fake news is an increasing problem, research and cooperation becomes even more important. We hope that you, the reader, will find both facts and findings that will help you to assess what is happening and find solutions that will benefit the world.

Lena Ek, Chair of the Board Since Mistra Geopolitics was established, we have seen a steadily intensifying interest in the linkages between geopolitics, and global climate and environmental change. In the past year, however, this interest has become almost overwhelming. As the reporting from our work packages bears witness, the Russian war of aggression against Ukraine has had profound geopolitical repercussions for energy security, decarbonization, food security and the international multilateral system.

istra Geopolitics has been well positioned to provide a knowledge basis for numerous international organizations, countries, civil society organizations and companies on the geopolitical consequences of the war and its challenges to peace, security and societal transformations towards decarbonization. Our mission to enhance foresight capacity will remain highly pertinent for the coming decade.

The Russian war in Ukraine has also shone a harsh spotlight on toll that ecocide is taking on human security. A year of environmental devastation has caused long-lasting threats to both people and nature extending far beyond the war-torn areas. Ukraine's Ministry of Environmental Protection and Natural Resources claims to have gathered evidence of 2,000 "environmental crimes" during the first year of the conflict, and estimates that a fifth of the country's nature protection areas have been devastated. The contamination of previously fertile agricultural land has so far cost more than €11 billion in damages. The full impacts and losses will be difficult to assess while fighting continues.

The geopolitical outcomes of wars involving large countries have historically transformed the international order, changing how states interact to ensure stability and peace. In recent years, global discussions, spurred in part by a perceived inefficiency of our international institutions to deal with some of humankind's most pressing sustainability challenges, have been trying to envision a new, greener international order. In the wake of the war in Ukraine, one cornerstone of this new international order may be the recognition of ecocide – the deliberate destruction of the environment – as a violation of international law and ultimately as a crime against humanity.

Mistra Geopolitics has the privilege to host Dr Rinata Kazak as a visiting researcher. She is a lecturer at the Yaroslav Mudryi National Law University in Ukraine, but was forced to leave a bomb-shattered Kharkiv. Through Dr Kazak's involvement in the programme, we are reminded of the brutal reality behind the often abstract analyses of human security.

Mistra Geopolitics is also investigating how the shifting geopolitical landscape can provide new opportunities. For example, Small Island Developing States and other climate-vulnerable countries managed to not only push loss and damage up the agenda of the climate negotiations at COP27 in 2022, but also convince reluctant parties to explore a process towards its implementation. Countries' risky energy dependency on authoritarian regimes may provide other geopolitical opportunities to propel societal transformations towards decarbonization. However, we can also see how Russia, to forward its geopolitical interest, is making fossil fuels available at bargain prices.

Ultimately, there is a risk of a new bipolar world emerging. This time it would not be based on ideology, as in the Cold War, but on countries' financial and technical ability to capture the benefits of decarbonization. To build trust and navigate away from even deeper polarization in world affairs, it is critical that green diplomacy forges high-ambition coalitions and alliances to support the green transformation worldwide.

The release of the chatbot ChatGPT in late 2022 led many people to talk about a critical threshold in artificial intelligence being passed. Following the release, the number of registered users for ChatGPT exploded and there were intense media discussions about the technology's risks and potential. As this report shows, Mistra Geopolitics addresses both the applications and implications of artificial intelligence in the broader sustainability field – work we will intensify in the coming years.

In a world of growing uncertainties and emerging opportunities such as these, Mistra Geopolitics will continue to provide timely and robust knowledge to better understand geopolitics, security and global climate and environmental change.

#### Björn-Ola Linnér Programme Director



## WHAT IS MISTRA GEOPOLITICS?

istra Geopolitics is a research programme that critically examines how the dynamics of geopolitics, security and global environmental change interrelate in the 21st century. It seeks to develop strategies to better navigate and tackle increasing geopolitical insecurity while taking advantage of opportunities created through innovation and technological development. Mistra Geopolitics combines theory testing and development with a co-creation approach. A variety of stakeholders from the public, private and civil society sectors are actively involved to ensure that the programme's theoretical perspectives and empirical research are relevant for the people who will translate them into policy and action.

#### **HOW WE WORK**

Mistra Geopolitics is an interdisciplinary research programme that brings together researchers from different fields of expertise to combine their intellectual skills. This effective, and sometimes challenging, approach is necessary to understand the complex world we live in. The programme consists of two phases, each lasting four years. 2021 marks the second year of Phase II, which will run until 2024. Mistra Geopolitics explores the interactions between peace and security, human security, global environmental change, and global environmental governance. We do this by focusing on the transformative potential of the UN 2030 Agenda for Sustainable Development, rapid global environmental change, and new and emerging technologies that are shaping the geopolitical landscape and prospects for sustainable development.

Our research in Phase II will concentrate on three empirical areas, or themes, with a fourth overarching theme in which we will develop the programme's core mission to enhance foresight capacity in a changing geopolitical landscape influenced by the emergence of new technologies. These themes have been developed in close dialogue with our stakeholder partners from Phase I. The themes are:

- The Geopolitics of Food Security
- The Geopolitics of Sustainable Oceans
- The Geopolitics of Decarbonization
- Foresight Capabilities and Emerging Technologies

We believe it is essential that research findings are synthesized and communicated in an accessible, comprehensible and credible way that engages key audiences. We have a specific work package (see figure 1) dedicated to communication, engagement, synthesis and rapid response. Mistra Geopolitics also offers a four-year research school programme mandated with the task of training the next generation of scholars.

Mistra Geopolitics is a consortium that includes both Swedish and international partners. These partners are the Stockholm Environment Institute (SEI), the Stockholm International Peace Research Institute (SIPRI), Linköping University, Uppsala University, Stockholm University and Lund University, as well as the think-tanks E3G ("Third-Generation Environmentalism", UK) and adelphi (Germany). The programme is funded by Mistra, the Swedish Foundation for Strategic Environmental Research.

Figure 1: The programme's research structure

#### WP1 FOOD SECURITY

1.1 Interconnected food security risk

1.2 Promoting food security in and geopolitical change

#### WP2 SUSTAINABLE OCEANS

- 2.1 Geopolitics of Blue Economy
- Geopolitics of marginality" and stakeholder views on

#### WP3 DECARBONIZATION

- the geopolitcs of sustainable resource and finance flows
- 3.2 Carbon Lock-in: fossil interests, infrastructures and ideas
- 3.3 Governing large-scale transformations: State repsonses to large scale climate risk

#### WP4 FORESIGHT CAPABILITIES AND EMERGING TECHNOLOGIES

- 4.2 New technologies and geopolitics of sustainable development4.3 Applying artificial intelligence methodologies to forecast climate4.4 Anticipating the future; humanitarian aid in a changing climate

#### WP5 RESEARCH SCHOOL

#### WP6 COMMUNICATION, ENGAGEMENT, SYNTHESIS AND RAPID RESPONSE

6.1 Engagement 6.2 Synthesis and Rapid Response

**STRATEGIC FUND** 

## HIGHLIGHTS FROM ONGOING RESEARCH THEMES





## FOOD SECURITY

The year 2022 was in many ways an extremely challenging year for global food security. While the Covid-19 pandemic loosened its grip during the year, the Russian invasion of Ukraine not only continues to take a terrible toll on the Ukrainian population, but also had major impacts on global food supply. Ukraine is one of the world's breadbaskets and the halting of Ukrainian exports had major impacts on import-dependent countries and raised global food prices.

These major shocks added to the mounting challenges of disasters such as heatwaves, droughts and floods attributed to climate change. For example, as Eastern Africa is facing a multi-year drought, the impacts of the Ukraine war on food prices have been devastating. A top area of concern is Somalia: with 1.5 million children facing acute malnutrition already, the region is projected to face famine in 2023.

These compounding crises, first of all, underscore the timeliness of making food security a main theme in Phase II of Mistra Geopolitics' research programme, more so than we could have anticipated when planning the research. Second, we very clearly see the transboundary character of the threats – the war in Ukraine affects food crises thousands of kilometres away, at the same time as transboundary climate change impacts continue to increase in importance and European supply chains affect and are affected by these geopolitical and environmental shocks. Finally, it is clear that Swedish and international development cooperation is vital to prevent the worst humanitarian crises and contribute to resilience.

#### IMPACT AND STAKEHOLDER ENGAGEMENT DURING 2022

Researchers in the Food Security theme have influenced policy debates in different forums.

In Brazil, the defeat of President Bolsonaro in the 2022 general election brought hope for the Amazonas rainforest, which is vital to the global climate but has been diminishing at an alarming rate. Mistra Geopolitics researcher Maria-Therese Gustafsson commented in the Swedish media on the election and its implications for the use of the Brazilian rainforest. Along with Almut Schilling-Vacaflor, she also gave a presentation at the University of Brasilia titled "Global Supply Chains and Corporate Accountability: Does Mandatory Due Diligence in France Contribute to Address Sustainability Problems in Brazil", attended by representatives from civil society, state agencies and academia.

"... the Russian invasion of Ukraine not only continues to take a terrible toll on the Ukrainian population, but also had major impacts on global food supply."

Research for the report *New Risk Horizons: Sweden's Exposure to Climate Risk via International Trade*, by Frida Lager and Magnus Benzie, provided important input to Swedish climate policies: Magnus Benzie (SEI) took part in a political briefing sharing the results of the report with members of the Swedish Parliament. Frida Lager also hosted a side event at

COP27 in Egypt on green growth and transboundary climate risks, and commented on COP27 outcomes in the Swedish media. The Swedish National Expert Council on Climate published a report with several contributions by Frida Lager as a Mistra Geopolitics rapid response project. The report has been instrumental in building an understanding of transboundary climate risk for Sweden and the implications for adaptation in different sectors, and has informed Swedish climate strategy.

Tina-Schmidt Neset (Linköping University) presented on food security and phosphorus for the foreign policy section of the Swedish Parliament (Riksdagens Utrikesutskott).

Nina von Uexkull (Uppsala University) informed thinking on climate change, food security and conflict as a discussant at a seminar on Somalia at the International Fund for Agricultural Development. She also held presentations on the topic at the EU Commission Joint Research Centre during an expert workshop on the EU's Global Conflict Risk Index, which is used in European conflict prevention work. Further, she organized a panel involving work package members Farah Hegazi (SIPRI) and Lisa Dellmuth (Stockholm University) on the topic at the Environmental Peacebuilding Conference. The panel and audience included representatives of the World Bank and other international governmental organizations and non-governmental organizations (NGOs).

#### **RESEARCH TEAM FOOD SECURITY**



Nina von Uexkull



Maria-Therese Gustafsson



Lisa Dellmuth

P

Almut Schilling-Vacaflor



Magnus Benzie



Farah Hegazi



uu \_ugei



Tanushree Rao



Sara Talebian



Genevieve Metson



**Tina Schmid Neset** 



## **SUSTAINABLE OCEANS**

Oceans are crucial to human security worldwide. They provide food, livelihoods and jobs, and serve as an important source of energy and coastal and marine resources. Maritime security has attracted increased interest since the codification of the Law of the Sea in 1982.

oday, the geopolitics of the oceans are undergoing far-reaching change, as more than half of all maritime boundaries have not yet been settled. The governance of the high seas, which constitute 95% of the global oceans, is undergoing transformative renegotiation. Power struggles over oceans involve resource competition, changed trade and resource flows, food security, and climate-induced displacement and migration following loss of territory (not least for small island states). However, oceans also form a thriving arena for interstate cooperation and are included in the UN 2030 Agenda for Sustainable Development through Sustainable Development Goal (SDG) 14, "Conserve and sustainably use the oceans, seas and marine resources".

The changing global geopolitical landscape and greater

tension between the US, China and Russia following the war in Ukraine also impact negotiations and collaboration in supra-national institutions for the governance of oceans. Our work in the research theme Sustainable Oceans investigates these geopolitics and their implications. We also investigate the role of strategies to exert influence of actors with less or no formal power, such as smaller states and civil society groups.

#### IMPACT AND STAKEHOLDER ENGAGEMENT DURING 2022

Various activities were organized in 2022 to engage with stakeholders in Sweden and beyond.

As part of Stockholm+50, the Sustainable Oceans team co-organized a side event focusing on building partnerships to promote a sustainable blue economy. The event was "Today, the geopolitics of the oceans are undergoing far-reaching change, as more than half of all maritime boundaries have not yet been settled."

organized in partnership with the Government of Kenya, specifically the State Department for Fisheries, Aquaculture and the Blue Economy and the Ministry of Sports, Culture and Heritage. In the days leading up to the conference, we organized an associated hybrid side event co-hosted by the Swedish Agency for Marine and Water Management on "overcoming the geopolitics of the blue economy".

We informed Sweden's Ministry for Foreign Affairs and Jakob Granit, the Chairman of the Commission for the Conservation of Antarctic Marine Living Resources, about our research on the Commission, the status of marine protected areas and the future of the Antarctic Region. As part of our work with the report *Towards a Sustainable Blue Economy in Sweden*, we convened key stakeholders and governmental institutions to discuss how this might be achieved. On Arctic governance, we investigated the involvement of civil society organizations in the governance of the Arctic, drawing on documents, interviews and a survey. The survey was conducted among Swedish state and non-state stake-holders in six sectors (politics, public administration, media, research, civil society and business) who work on Arctic issues, to examine and provide recommendations to the Swedish Government on policy ideas and the support for these policies for a more sustainable Arctic. The survey itself may already have shed light on the importance of sustainability issues and geopolitics in the Arctic among respondents. A SIPRI insights paper including some of the survey results on civil society involvement in Arctic governance was published in February 2023. Further findings will be published in 2023 and disseminated to Swedish and international stakeholders.

As part of our work on the geopolitics of marginality, a workshop on loss and damage was organized in Suva, Fiji, featuring a wide range of attendees and speakers that included stakeholders from communities, civil society, regional organizations, the Fijian Government, and local, regional and Swedish university partners, as well as Kajsa Fernström Nåtby of the Swedish Warsaw International Mechanism Executive Committee. Insights from this workshop and interviews with representatives, at multiple levels, from Small Island Developing States were disseminated through various means, such as a presentation at Massey University, New Zealand, a radio interview during COP27 and a webinar. More information on this workshop can be accessed on page 26.

#### **RESEARCH TEAM SUSTAINABLE OCEANS**



Karen Meijer



Priyatma Singh



Karina Barquet



Lisa Dellmuth



Anders Hansson



Malaika Mikaelsson



Elin Leander



Emilie Broek



Victoria Wibeck



Franco Vaccarino



Björn-Ola Linnér



## DECARBONIZATION

Russia's war on Ukraine, and the responses from Western countries that followed, illustrate many of the interactions between decarbonization and geopolitics that we study.

Our work in the Decarbonization research theme explores which actors and geographical regions stand to gain or lose from the shift from fossil fuels to renewable sources of energy and materials, and how interests, institutions and ideas can be transformed to break carbon lock-ins and meet the ambitions of the Paris Agreement. We unpack the geopolitical dynamics of the transformation across three projects:

- Focus on enhancing our understanding of the underlying interests and motivations that drive actors to become transformation frontrunners.
- Study the geopolitical interests, institutions and ideas that uphold the fossil fuel economy and thereby contribute to carbon lock-in.
- Focus on state responses to governing large-scale transformations.

Energy has come to the forefront in the conflict as civilian infrastructure and gas pipelines have been targeted in Ukraine and the Baltic Sea, respectively. Energy and geopolitics have become even more intermingled as the EU and US try to reduce their dependence on Russian energy while preparing for higher energy prices. This has stimulated a rapid deployment of policies to reduce the use of energy but also to decrease taxes on fossil fuels, increase investment in new fossil fuel supply and establish new fossil fuel trade partnerships. This demonstrates the inherent difficulties of prioritizing long-term sustainability goals in a time of crisis that calls for immediate responses from policymakers.

In the context of a global energy crisis and difficult geopolitical relations, the dynamics of COP27 starkly illustrated the challenge of moving away from fossil fuels in an equitable way. A case in point is that representatives from the oil and gas industry outnumbered the combined number of delegates from the 10 countries most affected by climate change.

Our recent policy brief on the equity dimensions of anti-fossil fuel norms argues that an emphasis on an oil and gas phasedown, in addition to a coal phasedown, would be more equitable than focusing only on coal phase-out. However, reiterating language from the Glasgow COP, the Sharm el-Sheik COP decision only stressed the need to phase down unabated coal power, and not the need to phase down all fossil fuels. Nevertheless, on the sidelines of the climate conference, organizations like the Beyond Oil and Gas Alliance (BOGA) continued to build momentum towards additionally addressing oil and gas production, with Portugal and Washington State (US) becoming BOGA members while Fiji, Kenya, Chile and Tuvalu became "Friends of BOGA".

#### IMPACT AND STAKEHOLDER ENGAGEMENT DURING 2022

In addition to communicating our own research we experienced an increased demand from the media for comments and interviews on recent events. Most of these were connected to events that followed Russia's war on Ukraine. We were able to improve the understanding of the present situation and the implications of a range of policy responses.

We attended the International Conference on Fossil Fuel Supply and Climate Change and presented preliminary find-

"Russia's war on Ukraine, and the responses from Western countries that followed, illustrates many of the interactions between decarbonization and geopolitics that we study."

ings from our study on the geopolitics of oil and gas narratives in Colombia and Nigeria. In this study, we draw attention to the strong discursive push for fossil gas production and consumption as a pillar of (just) energy transitions in both countries, which reflects a broader trend in governments' transition plans in the Global South, and points out the risks of carbon lock-in associated with these discourses. As current geopolitics are rapidly transforming the global energy landscape, with political and academic attention focusing on the Global North and emerging economies, our research emphasizes the need to critically assess the role of fossil gas in energy transition plans around the world and develop more effective narratives to highlight the climate and other socio-economic risks, as well as the inconsistencies, that such paths entail.

Scientific reports on the risks of climate extremes by Working Group II of the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, the University of Exeter and the Potsdam Institute for Climate Impact Research, as well as media coverage of extreme weather events such as floods in Pakistan and Nigeria and the European summer drought, have increased attention and awareness on climate impacts and influenced our work in 2022.

Our report on the geopolitics of climate tipping points (read more about this report on page 21) aimed at linking scientific evidence to policymakers' interests. In the policy circle, our target audience comprised policymakers from climate, security and foreign affairs departments. Our report also reached

Mr. Erik Widmann, the Swedish Climate Ambassador, and allowed us to better inform Swedish policy and trigger interest on how the topic could be integrated in the Swedish Presidency of the Council of the EU.

We proceeded to send recommendations on how the EU and the Swedish Presidency could approach the geopolitics of climate tipping points. For example, we have recommended the integration of climate risk as a priority for EU's climate diplomacy, or the use of existing partnerships to hold dialogues on extreme risk, climate security and adaptation. This engagement gives us the opportunity to shape the Swedish and EU climate diplomacy agenda for 2023, which will be crucial to send strong political signals at the EU level in the year ahead.

#### **RESEARCH TEAM DECARBONIZATION**





Daria Ivleva





Biörn-Ola Linnéi

Claudia Strambo



Dennis Tänzler



Ebba Minas



Elisa Arond



Eva Lövhrand

Karin Bäckstrand



Patricio Calles



Carolina Cecilio

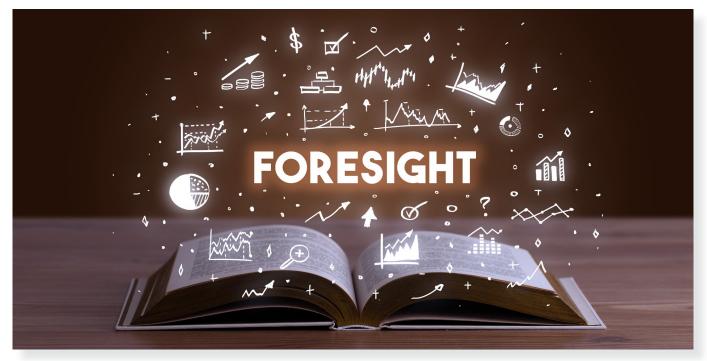


Eugène Petelin



Cleo Verkuijl

## FORESIGHT CAPABILITIES AND EMERGING TECHNOLOGIES



Artificial intelligence (AI) is a common thread across many of the research activities in Mistra Geopolitics' theme on Foresight Capabilities and Emerging Technologies. All has the potential to significantly impact geopolitics in a number of ways:

- Military applications: Al could be used to enhance military capabilities, such as in the development of autonomous weapons systems or in the analysis of intelligence data. This could lead to shifts in the balance of power between different countries.
- Economic implications: Al has the potential to significantly impact industries and economies around the world. Countries that are

able to effectively harness the power of AI could see significant economic benefits, while those that are slow to adopt AI technologies could fall behind.

Societal and cultural impacts: Al could also have significant impacts on society and culture, as it has the potential to disrupt traditional ways of life and work. This could lead to conflicts and tensions between different groups within and between countries. Overall, the relationship between Al and geopolitics is complex and multifaceted and will likely continue to evolve as Al technologies advance and become more widespread.

xcept for the first sentence, this whole paragraph was written by ChatGPT, a prototype artificial intelligence chatbot developed by the US-based company OpenAI. When this chatbot was released in November 2022 many people started to talk about a critical threshold being passed. ChatGPT is a large language model fine-tuned with both supervised and reinforcement learning techniques. The number of registered users exploded and there was intense media coverage of the release of ChatGPT in newspapers around the world as well as in social media.

Given this rapid technological development, there is a need for research to shift the balance from analyzing the past towards improving an understanding of the present as it unfolds to better anticipate emerging events and crises. Informed discussions about the future would expand our capacity to address future risks.

To respond to these challenges, the Foresight research theme embraces a broad range of topics with the common

denominator of a futures perspective. Within this theme, we investigate the relationship between global environmental change, geopolitics and emerging technologies from a futureoriented perspective. The underlying rationale for the work is to provide the policy community with better foresight capabilities to support more robust decision-making in a time of increased geopolitical tensions and deepening uncertainty.

#### IMPACT AND STAKEHOLDER ENGAGEMENT DURING 2022

The research within this theme on the 2030 Agenda and SDG interactions, including the use of the SDG Synergies tool (www.sdgsynergies.org), has focused on sub-national implementation. A project with the National Coordinator for the 2030 Agenda and six Swedish municipalities has strengthened interest in and the capacity for systems thinking in SDG implementation at the sub-national level. Our contributions to SDG interactions research is visible in reports, articles and book chapters and is feeding into SEI's engagement in

"We investigate the relationship between global environmental change, geopolitics and emerging technologies from a future-oriented perspective."

preparing the Global Sustainable Development Report 2023, connecting it directly with strategic policy processes.

During 2022, we initiated work on the role of future technologies for climate change research and policy. This investigated the potential role of AI in scenarios used by the climate change research community, the so-called Shared Socioeconomic Pathways. We also explored the potential of AI in helping to achieve the SDGs. A journal article on how international organizations are making sense of the opportunities and challenges that AI represents for sustainable development will be submitted for review in Q1 of 2023: it provides a comparative analysis of relevant publications by the EU, UN and the World Economic Forum. In addition, a SIPRI policy paper that will be issued in Q2 of 2023 discusses the potential of AI for better understanding and addressing climate change-related security risks. Both papers are intended to deconstruct the hype around AI and the SDGs, particularly as it relates to SDG 13 (climate) and the interaction between SDG 13 and SDG 16 (peace and justice). Some of the key findings were presented in a panel for Swedish stakeholders at GOTO 10 (an event run by the Swedish Internet Foundation) and through bilateral interactions with researchers and policymakers at COP27.

We also contributed to a geographical expansion of the Violence Early-Warning System (ViEWS) armed conflict forecasting model, and in expanding from dichotomous predictions to making forecasts on numbers of fatalities. The team contributed to a United Nations High Commissioner for Refugees (UNHCR) report focusing on anticipating complex emergencies in the Sahel entitled Moving from Reaction to Action. ViEWS has been presented on multiple occasions to decisionmakers within intergovernmental organizations as well as to government representatives. The project arranged a highly successful prediction competition that was covered in a special issue in International Interactions, co-edited by Mistra Geopolitics researchers.

We also produced an article arguing that the long-term GDP per capita projections used by the climate research community must be corrected to account for the massive income losses due to armed conflict. In another paper, we provided insights into the complex nature of distress mobility at the household level in Bangladesh. Related to this, the team presented two articles applying machine-learning tools to assess the effect of drought and climate extremes on conflict incidence and (de-) escalation to academic conferences, including the International Studies Association Convention, 2021 and 2022.

Finally, work was initiated on analyzing and assessing how humanitarian actors are responding to the growing body of scientific evidence pointing to the escalating frequency of weather and climate extremes. This not only presents humanitarian actors at various policy and governance levels with an increasing need for better prediction and analysis tools to prioritize how to best use their resources, it also presents a perhaps larger challenge - what should count as humanitarian aid and assistance if climate change means that events that were once perceived to be infrequent and haphazard are becoming more regular and systematic, now and in the future? One publication has been published related to this subject, and the theme was discussed at a session organized by SIPRI at the Stockholm Water Week in August 2022.

#### **RESEARCH TEAM FORESIGHT**





Sara Talebian





Moa Peldán Carlsson



Nina von Uexkull



Maxine Leis





Florian Krampe



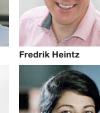
Håvard Hegre





**Rickard Söder** 













Marie Francisco





Anna Michalski





## SHOWCASING MISTRA GEOPOLITICS THEMES

To showcase the prioritized research themes within Mistra Geopolitics – Food Security, Decarbonization and Foresight – three films were produced and launched in 2022. The process was led by the Communication, engagement and synthesis work package, in close collaboration with research theme leaders, external experts and stakeholder partners.

#### FILM: MANAGING CRISES – CONFLICT, PANDEMICS AND FOOD INSECURITY

Mistra Geopolitics experts discuss how to handle food insecurity, conflicts, climate change and pandemics. In the film, Dan Smith, Director of SIPRI, said, "In essence, peace and nature are connected, if you damage one you damage the other. If you protect one, you enhance the other."

Other experts include Henrik Hammargren, Board Member of Mistra Geopolitics and Executive Director of the Dag Hammarskjöld Foundation; Nina von Uexkull, Associate Professor at Uppsala University; and Frida Lager, Research Associate at SEI.

Watch the film: https://www.mistra-geopolitics.se/news/ conflict-pandemics-food-insecurity/



## FILM: HOW CAN ARTIFICIAL INTELLIGENCE CONTRIBUTE TO AGENDA 2030?

Mistra Geopolitics experts discuss the geopolitics of emerging technologies, artificial intelligence and the importance of foresight. In the film, Henrik Carlsen, Co-Director of Mistra Geopolitics and SEI Senior Research Fellow, said, "Complexities are constantly increasing, and within Mistra Geopolitics we are combining emerging technologies with the sustainable development agenda. When combining two such broad topics, it is obvious how important foresight capabilities of new innovations and policy decisions become."

Other experts include Lena Sellgren, Chief Economist at Business Sweden and Fredrik Heintz, Professor of Computer Science at Linköping University.

Watch the film: https://www.mistra-geopolitics.se/news/ film-innovation-agenda-2030/

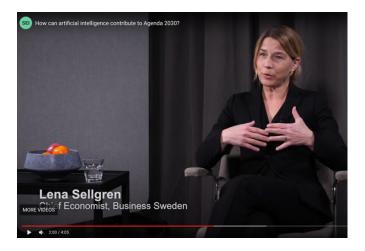


#### FILM: THE GEOPOLITICS OF DECARBONI-ZATION, FINANCE AND TRADE

Mistra Geopolitics experts discuss the geopolitics of decarbonization, finance and trade. In the film, Daria Ivleva, Senior Advisor for climate policy and diplomacy at adelphi, said, "Trade will change as the global economy decarbonizes – quite profoundly, actually – and this is a geopolitical issue."

Other experts include Torbjörn Hamnmark, Head of Strategic Asset Allocation at the Third Swedish National Pension Fund (AP3); Dan Smith, Director of SIPRI; and Taylor Dimsdale, Director of E3G's Risk and Resilience Program.

Watch the film: https://www.mistra-geopolitics.se/news/ film-the-geopolitics-of-decarbonization/



## MISTRA GEOPOLITICS RESEARCH SCHOOL

Mistra Geopolitics includes a four-year research school programme tasked with training the next generation of scholars in methods, theories and data collection for advanced geopolitics and sustainable development analysis.

The research school contributes to the overall goal of the research programme by exploring the interaction between geopolitics, human security and global environmental change, and offering training to doctoral students. Hosted by Stockholm University, the research school invites scholars to participate in its activities, seminars and workshops, where senior scholars offer feedback on the work of doctoral students and discuss policy outreach and research communication issues.

The most recent workshop took place at Stockholm University in December 2022. Researchers within the programme and PhD students discussed the latest publications and attended a presentation titled "United Nations Security Council Politics: the Role of Switzerland" by guest speakers Lucile Maertens and Sara Hellmüller.

The research programme recruited seven PhD students in Phase II, and two students defended their thesis in 2022. All PhD students pursue their studies at one of the partner universities in the research programme: Linköping University, Lund University, Stockholm University and Uppsala University. Three PhD students, hosted by Linköping University and Stockholm University, joined the programme as visiting PhD students for three months in autumn 2022.



Research School Lead: Niklas Bremberg (Department of Political Science) and Lisa Dellmuth (Department of Economic History and International Relations), Stockholm University.

## OUR VISITING PHD CANDIDATES MEET KANIN LAOPIRUN



## Why did you decide to join the Mistra Geopolitics research school?

I joined because I wanted to expand my research on climate and environmental issues, especially from a geopolitical perspective. I was also keen to learn from researchers with different expertise as well as contribute to the programme.

#### What is your research area of interest?

I am interested in environmental economics, policy and governance in Southeast Asia. My research is focused on the plastic circular economy in Thailand and solving transboundary marine plastic pollution.

Taking account of Thailand's regional position in the Association of Southeast Asian Nations (ASEAN), I investigate an assessment framework to measure the status and extent of how plastics such as PET, HDPE and PP are produced and used by industries, consumers and trade. In addition, I pay attention to how plastics are managed and recycled back into new materials within the economy.

#### What are your thoughts on our ability to address climate change and how do you think your work can contribute to it?

In my view, we need to start with a responsible lifestyle, changing our habits and everyday life patterns, for example by purchasing goods and services with lower environmental footprints and by separating waste before disposal. These changes can influence other people, businesses and producers at multiplied scales. My research could inform circular economy policy measures, contributing to monitoring and assessment systems to better use resources and reduce plastic waste leakage into the environment.

### What are you looking forward to the most about joining the research school?

I look forward to learning about the research perspective of geopolitics as applied to environmental issues and enjoying the international environment of living and studying at Lund University.

### MEET OLUWATUNMISE PAIMO



#### Why did you decide to join the Mistra Geopolitics research school?

After reading about the Mistra Geopolitics research school, I was fascinated by the multidisciplinary and multidimensional approaches used to explain environmental problems. I believe these perspectives and analytical frameworks can pro-

vide answers to questions that have been raised in my research.

#### What is your research area of interest?

I have an interest in security issues, looking at the Boko Haram insurgency in Nigeria, climate change and digital technology. Exploring some in-depth theories can help explain broader security issues – national, human and environmental. The study of digital technology as a tool of national security and counterinsurgency is envisaged as a way to prevent human threats, thereby ensuring a peaceful and habitable environment.

#### What are your thoughts on our ability to address climate change and how do you think your work can contribute to it?

At the Mistra Geopolitics research school, analysis about climate change and multidisciplinary methods converge to explain the threats to national security I am investigating in my research.

My research could assist in bringing attention to climate change to properly understand insurgency and counterinsurgency. For instance, security threats emanating from the shrinking of Lake Chad, around the bordering countries of Nigeria, Niger, Chad and Cameroon, are mostly visible in the increasing conflict between farmers and herders who struggle for limited natural resources in the region. If the discussion on climate change is added to that on terrorism, the latter will be better understood.

### What are you looking forward to the most about joining the research school?

I look forward to building up a research network of people to collaborate with, and contributing to general discussions on climate change and environmental issues.

### MEET PÁVEL FRANCOISE AGUILAR DUEÑAS



#### Why did you decide to join the Mistra Geopolitics research school?

I studied with a former Mistra Geopolitics PhD student in my academic programme. After I discovered the Mistra Geopolitics research approach to the interaction between geopolitics, human security, climate and environmental change, I decided

to apply with the support of my thesis supervisor in Peru.

#### What is your research area of interest?

My research focuses on the impact transnational extractive agriculture has on food security and food sovereignty on the northern coast of Peru. I'm interested in understanding how the liberalization policies implemented in Peru during the 1990s have established private governance on natural resources, with detrimental effects on vulnerable populations and fragile environments.

#### What are your thoughts on our ability to address climate change and how do you think your work can contribute to it?

In the current scenario, where transnational capital and global supply chains degrade the environment and local livelihoods,

landscape transformations need to be paid attention to. I'm convinced that generating evidence through my research on these processes can help to improve public policies and state-level initiatives, regulating access to and exploitation of natural resources.

### What are you looking forward to the most about joining the research school?

Because Sweden has expertise in implementing the SDGs, I think being here is a wonderful opportunity to learn more about institutional changes, global governance and the boundaries between politics, society and the environment.



## MISTRA GEOPOLITICS KEY FEATURES



## SWEDEN'S EXPOSURE TO CLIMATE RISKS VIA INTERNATIONAL TRADE

Half of the world's population lives in the 50 most food-insecure countries – mainly located in Africa, the Middle East and Central Asia. Challenges to food security have been amplified by the ongoing war in Ukraine, climate change and persistent armed conflicts, often fuelled by geopolitical tensions.

ransboundary or cascading climate risk is a relatively new concept. It can be used to refer to weather events causing delays and disruptions in supply chains around the world. In recent years, storms in Texas, fires in Japan and challenges in shipping logistics due to lockdowns in Asian countries have directly affected broad swathes of the global economy, including car manufacturing and the electronics industry. These chains of cause and effect illustrate the impacts of transboundary or cascading climate risk.

New Risk Horizons: Sweden's Exposure to Climate Risk via International Trade analyzes Sweden's role in the global trade system and identifies the climate risks it faces as a result of its international trade relations.

The analysis indicates that Sweden's most stable trade relations tend to be with countries that are both close to Sweden and relatively resilient to climate change. However, innovative datadriven methods reveal the true extent of Sweden's dependence on more vulnerable countries – particularly emerging economies in Asia and Africa – that play an increasingly critical role in Swedish supply chains.

The report provided a number of findings and recommendations to decision-makers ahead of the revision of Sweden's national strategy for climate adaptation, COP27 climate negotiations and Sweden's EU Presidency in 2023, detailed below.

"With new and more detailed research results, we see how vulnerable Sweden is, as a small, open country in the global market, to the effects of climate change in countries far away," said Frida Lager, SEI Research Associate and Mistra Geopolitics project leader. "Climate change threatens to disrupt global production and distribution chains, and thereby negatively impact Swedish consumption, posing risks to food supply and business continuity. The country's resilience depends on international cooperation and a strong, global climate adaptation agenda to reduce these risks."

#### SWEDEN'S CLIMATE RISK EXPOSURE

The report shows that traditional methods for assessing Sweden's climate risk exposure present a relatively reassuring picture and highlight the dominant role played by geographically close trading partners such as Germany and the Nordic countries – some of the least vulnerable countries in the world. In addition, Sweden trades largely with EU countries and other relatively resilient markets.

"Trading partners earlier in the supply chain, such as producers of agricultural commodities, manufacturing inputs and critical minerals, are more difficult to track in the statistics, but they play a crucial role in the Swedish economy," Lager noted. "The risks of climate change disruptions via trade are greatest in these economies and their influence on Sweden's climate vulnerability has not been visible until now."

#### GLOBAL TRADE AND CLIMATE VULNERABILITY

The effects of the pandemic and ongoing, interlinked food and energy crises have opened the eyes of Swedish society to our deep interconnections with and dependence on faraway parts



"With new and more detailed research results, we see how vulnerable Sweden is, as a small, open country in the global market, to the effects of climate change in countries far away."

of the global economy. They also revitalize questions about the level of preparedness in Sweden to external shocks and remind stakeholders across business, government and society of how international events and trade shocks can disrupt life.

"We are already seeing how the effects of climate change are leading to heat waves, droughts and forest fires, both in Europe and globally. Climate risks interact and are reinforced by other geopolitical risks with broad effects at the societal level. Despite this, climate adaptation is almost exclusively, even in Sweden, treated as something that takes place within the country's borders," Frida Lager said.

The report highlights what climate adaptation should really be about for countries like Sweden, where trade issues, business and international cooperation should be the key components. As similar research results from Germany and Austria show, the impact on trade of climate change in Sweden may be greater than the risks we face within the country's own borders.

Climate risks linked to global trade are a relatively unexplored area of research and mapping the climate vulnerability of countries is challenging. The report is a significant advance in terms of innovation in methods for evaluating transnational climate risks. It provides important new insights for climate adaptation policy and global governance.

Sweden's dependence on soy from Brazil is highlighted as an example of a commodity where climate risks in production (on Brazilian farms) and transport (via Brazilian inland road, rail and shipping networks) are expected to drive risks for consumers and businesses in Sweden. The flow of risk from farm to fork is mapped and analyzed.

### REVISION OF SWEDEN'S NATIONAL ADAPTATION STRATEGY

Ahead of COP27 and the revision of Sweden's national strategy for climate adaptation, as well as Sweden's ongoing presidency of the EU, the report's authors made the following recommendations to Swedish decision-makers:

- Prioritize cross-border climate risks as a risk area in the new climate adaptation strategy.
- Establish a new working group that spans several sectors to improve and clarify the management of cross-border climate risks, especially those related to trade. It should include decision-making bodies for trade and foreign policy as well as civil contingency planning.
- Establish a position with responsibility for coordinating adaptation efforts across government and by other actors in Sweden to cross-border climate risks.
- Press for ambitious operationalization of the Global Goal on Adaptation (part of the Paris Agreement) as part of the Glasgow-Sharm El-Sheikh work programme, which will be discussed at COP27 in Egypt. Sweden is in a unique position to lead international coalitions and raise the level of understanding and management of cross-border climate risks.

#### SWEDEN'S CLIMATE ADAPTATION STRATEGY

Based on the report's results, the authors have supported the work of the National Expert Council for Climate Adaptation in developing data for the revision of Sweden's climate adaptation strategy, which should be in place by 2023. The Council's recommendations to the Swedish Government include prioritizing cross-border climate change risks and adaptation for Sweden, with a particular focus on food security, business and energy supply.

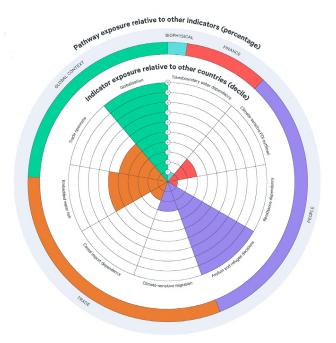


Figure 2 illustrates Sweden's high exposure to climate risk cascading via the pathway of trade, particularly with regard to commodities that are impacted by droughts, such as soy, which is an integral part of the foods consumed in the country. Graphic: Mia Shu/SEI.

Authors: Frida Lager, Research Associate, SEI and Magnus Benzie, Senior Research Fellow, SEI. Report: New Risk Horizons: Sweden's Exposure to Climate Risk via International Trade. Mistra Geopolitics, Stockholm Environment Institute.





## LIVING ON THE EDGE: HOW CLIMATE TIPPING POINTS WILL RESHAPE GEOPOLITICS

The world is getting closer to dangerous climate tipping points and no country is prepared for the subsequent geopolitical turmoil, according to a study launched in September 2022 by E3G and Mistra Geopolitics.

R esearchers from the international climate change think-tank E3G have studied how climate risk and measures to avoid breaching tipping points could impact international geopolitics.

Lead author Taylor Dimsdale, Director of E3G's Risk and Resilience Program in Washington, DC and part of Mistra Geopolitics' Decarbonization theme, stated: "We're already struggling to manage climate impacts at just 1°C of warming. The closer you get to tipping points like ice sheet collapse, the more you start worrying about unmanageable impacts. Understanding those risks will upend everything we think we know about climate change and geopolitics. Policymakers have consistently missed opportunities to prepare for climate change. We literally can't afford to miss this one."

#### THE GEOPOLITICS OF CLIMATE TIPPING POINTS

Key messages include:

- The world is much closer to breaching climate tipping points in critical Earth systems than previously thought. The consequences are so severe that a better understanding of the risk will have far-reaching implications for global cooperation on technology, finance, food, energy and migration.
- No government or institution worldwide is prepared for a change at the scale needed. While some are integrating climate risk assessments into their planning, none are seriously considering the risk of tipping points and subsequent geopolitical tensions.
- Policymakers can still avoid unmanageable impacts by adopting comprehensive climate risk management frameworks. This includes investing in better data and risk assessment, scaling up finance for vulnerable countries and communities, and strengthening international dialogue on extreme risk.

### ABRUPT AND OFTEN IRREVERSIBLE CLIMATE CHANGE IMPACTS

Climate tipping points are thresholds of abrupt and often irreversible change in the climate system. The most recent science on extreme risk warns of some climate tipping points already being breached. Additional tipping points could be breached even with less than 2°C of warming. These include the melting of the Greenland and Antarctic ice sheets, the breakdown of the Gulf Stream, the dieback of the Amazon forest and coral reefs, and the slowdown of the Atlantic Meridional Overturning Circulation.

The impact of breaching these tipping points cannot be measured in economic or environmental terms alone, but they would have dire consequences for human society and international security.

The study has identified the impacts of climate tipping points in five different areas:

- Technologies such as geoengineering are untested and carry risks of unintended consequences that could be unevenly distributed geographically.
- Climate finance for adaptation and loss and damage are already contentious and will become more urgent as the risks increase.
- Food security can be threatened by tipping points, contributing to political and social instability.
- Energy security is likely to be affected by breaching tipping points, which could incentivize the energy transition but also shift the balance of power between energy producers and consumers worldwide.
- Migration flows could be exacerbated by extreme climate impacts, causing geopolitical tensions between countries and regions.

These potential geopolitical impacts do not receive enough political attention and planning. This could lead to geopolitical fragmentation where countries choose to "go it alone", jeopardizing ongoing mitigation and adaptation efforts.



Authors: Taylor Dimsdale, Carolina Cecilio, Ines Benomar. Read the study: Living on the Edge: How Climate Tipping Points will Reshape Geopolitics. https://www.e3g.org/publications/living-on-the-edgeclimate-tipping-points-reshaping-geopolitics/

## **STOCKHOLM+50** CONTRIBUTION AND OUTCOMES

The UN's international meeting *Stockholm+50: A Healthy Planet for the Prosperity of All – Our Responsibility, Our Opportunity* took place in an alarming context of intertwined planetary crises and extreme inequality among people and societies. These challenges are compounded by a shifting landscape of global security and geopolitical tensions, which will worsen human insecurity.

uring the meeting, former Prime Minister of Sweden Magdalena Andersson said: "As leaders we must not let one crisis overshadow another. Fossil fuel dependency is not only a climate risk, but also a security risk. No nation can tackle the environmental and climate challenge alone. Sweden's message is clear, to create growth, jobs and prosperity for all."

#### TIME TO ACT

The Covid-19 pandemic continued to slow or reverse progress in sustainable development. As part of the outcomes from the Stockholm+50 meeting, SEI in collaboration with the Council of Energy, Environment and Water launched the report *Stockholm+50: Unlocking a Better Future.* This report synthesizes up-to-date scientific evidence and analyzes the intertwined human and environmental crises facing the world today. The message from the report is clear: "It is now time to act".

"Planetary crises are humanitarian crises, and now collective actions are needed. The urgency is different today from before. Now, we have the opportunity, the knowledge and the finances to address the errors and do the right thing for a sustainable and prosperous future for all," said Dr Ligia Noronha, UN Assistant Secretary-General and Head of the United Nations Environment Programme (UNEP), New York office, at the launch event.

#### **KEY ACTIONS TO SEED CHANGE**

The report makes 52 recommendations and presents key actions to seed the transformative change that is needed to redefine the relationship between humans and nature, ensure lasting prosperity for all and invest in a better future. The report makes further recommendations for improving the conditions for change through:

- improved policy coherence
- strengthened accountability
- renewed multilateralism built on solidarity for our common challenges.

#### FOUR CRUCIAL PERSPECTIVES

Henrik Carlsen, Co-Director of Mistra Geopolitics and one of the lead authors of the report, highlights four crucial perspectives as we move forward:

- Rights of future generations: Foresight and long-term thinking, considering what environmental debt we are passing on to our children and grandchildren, is crucial when solving the environmental challenge. There are certain trade-offs and goal conflicts that can be turned into synergies with a longerterm perspective.
- Recognizing the rights of nature: The rights of nature constitute a legal instrument that enables nature, including ecosystems and species, to have inherent rights and legally be entitled to the same protection as individuals and corporations. Assigning legal rights to nature can be a way of limiting extraction of resources but can also lead to recognition of nature's intrinsic values and changed behaviour over time. Discussions around these issues are more common today.
- Redefining prosperity and moving beyond GDP: National accounts are a highly influential arena in which to redefine prosperity. It is time to move beyond GDP as the one and only metric and adopt indicators that help measure progress towards the vision of sustainable development, such as indicators on inclusive wealth and indicators recognizing the care economy.
- Accountability gap: We must be bolder in holding actors accountable for delivering on goals they have already promised to deliver. The younger generation should hold actors responsible. We must ensure constructive accountability, which incentivizes actors and leads to bold action and change rather than threatening them, which could lead to pre-emptive action and reduced ambition. We need to set goals and targets that matter and have value.



### THE SCIENTIFIC CONTRIBUTION OF MISTRA GEOPOLITICS

The independent scientific report was produced at the request of the Swedish Government ahead of the Stockholm+50 meeting. Eighteen scientific background papers provided the basis of the report, and Mistra Geopolitics contributed to two of these. Thomas Nilsson, Programme Director at Mistra, said: "It is positive and exciting that our research programmes, which contribute important knowledge and results that are primarily useful in Sweden and EU contexts, are now having a global reach."

### THE ELITE-CITIZEN GAP IN INTERNATIONAL ORGANIZATIONS

How can international organizations, governments and civil society work on creating a common understanding of environmental issues and their solutions? The first Mistra Geopolitics background paper, *The Elite–Citizen Gap in International Organization Legitimacy: Lessons for the United Nations*, covers multilateralism and how the UN could work more strategically to generate trust, thereby enhancing the democratic accountability and effectiveness of UN environmental policy. The paper was written by Lisa Dellmuth, Professor of International Relations, and David Fornborg, Research Assistant, both based at Stockholm University.

Dellmuth and Fornborg map legitimacy beliefs towards six key international organizations, including the UN, drawing on uniquely coordinated elite and citizen survey data from Brazil, Germany, the Philippines, Russia and the US. Based on recent research, they find a notable elite–citizen gap for all six organizations studied, in four of the five countries, and for all six different elite types. "The UN is not really suffering from a 'broad crisis of legitimacy', but it does not have the strong support from citizens, societal and political leaders of the five countries studied in the background paper needed to further deepen global environmental cooperation," said Professor Dellmuth.

Dellmuth and Fornborg discussed their results in relation to three core aspects of the UN Common Agenda: "build trust", "leave no one behind" and "listen to and work with youth".

"It is positive and exciting that our research programmes, which contribute important knowledge and results that are primarily useful in Sweden and EU contexts, are now having a global reach."

"What is needed for the UN's environmental policy to become more effective is to better include different social groups, to respect and use their knowledge. We also need to create conditions for people to be able to critically examine and perhaps even engage in international politics," they said.

The second Mistra Geopolitics paper, *Still One Earth*, was authored by David Michel (SIPRI), and focuses on the role of disarmament in the Stockholm Declaration of 1972 and its links to ongoing international environmental cooperation.

# MISTRA GEOPOLÍTICS FIELDWORK

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## EFFECTIVENESS OF DUE DILIGENCE REGULATIONS IN BRAZIL





Beef and soy production contributes to severe environmental damage such as deforestation, pesticide pollution and biodiversity loss in Brazil. Its production is also linked to human rights violations, such as land grabbing, violations of labour rights and violence against environmental defenders. In 2022, Maria-Therese Gustafsson and Almut Schilling-Vacaflor carried out three months of fieldwork in Brazil to analyze the implementation of new human rights and environmental due diligence (HREDD) regulations in the supply chains of soy and beef from Brazil to Europe.

hey aimed to study how different actors perceived the conditions under which HREDD regulations could contribute to improving the social and environmental sustainability of beef and soy production in Brazil.

Until recently, the possibility of holding multinational companies accountable for severe impacts in distant production sites has been very limited. However, the recent wave of HREDD regulations has raised expectations that the long-standing accountability gap in global trade could finally be reduced.

New HREDD regulations oblige companies to assess and address the impacts caused by their subsidiaries and suppliers, and companies that fail to comply face the risk of lawsuits and civil society campaigns. However, the effectiveness of HREDD regulations in terms of enhancing corporate accountability is strongly dependent upon the perceptions and uptake of such laws by different stakeholders in production sites.

Maria-Therese Gustafsson and Almut Schilling-Vacaflor carried out fieldwork in Brasília, São Paolo, and the states of Bahia and Pára. During their stay, they conducted over 100 interviews with representatives of grassroots organizations, NGOs, companies, producers and state institutions.

#### **KEY INSIGHTS**

Civil society actors are engaging in new initiatives to generate and disseminate evidence of the negative impacts of business activities. However, Brazilian organizations often need to collaborate with foreign NGOs or law firms to handle complex transnational lawsuits. In addition, producers highly dependent on the European market, such as leather producers, have expressed concerns about how they will be affected by new regulations and are discussing how they can comply with the new requirements.

- In Brazil, there are robust data on deforestation, whereas data on human rights, land tenure and associated conflicts are often missing. Therefore, the lack of data on different types of human rights violations, such as pesticide pollution or water grabbing, represents a significant limitation to holding companies accountable for the impacts beef and soy production have on local livelihoods.
- To enhance corporate accountability, there need to be institutions in place monitoring and enforcing existing regulations. However, during the tenure of Jair Bolsonaro (2019-2022), there was a general dismantling of state institutions focused on environmental protection, and social movements were criminalized. Thus, the election of Lula holds the promise of significantly strengthening domestic institutions, which

is likely to improve conditions for the effective implementation of HREDD over the next few years.

Several interviews addressed a HREDD regulation focused on forest risk commodities (coffee, cocoa, maize, timber, palm oil, beef) that integrates land tenure rights and the narrow focus on deforestation in the upcoming EU regulation on deforestation-free products. The question of whether and how land tenure rights can be integrated has been contested in the ongoing policymaking process with regard to this regulation.



Maria-Therese Gustafsson



Almut Schilling-Vacaflor



## LOSS AND DAMAGE WORKSHOP IN FIJI

Pacific Island nations, such as Fiji, have played a key role in global negotiations elevating the issue of climate-related loss and damage on the international agenda. Björn-Ola Linnér, Programme Director at Mistra Geopolitics and Professor at Linköping University, together with Malaika Mikaelsson, PhD student, took part in the *Loss and Damage and the Climate Negotiations* workshop in Fiji in October 2022.

### ADDRESSING LOSS AND DAMAGE AHEAD OF COP27

Extreme weather events, such as droughts, hurricanes and floods, are exacerbated by climate change. While international climate negotiations address mitigation and adaptation measures to reduce the impacts of climate change, extreme weather events impact local communities. Despite loss and damage becoming a pillar in the latest international climate negotiations as a form of financial compensation contributing to climate justice, there is still a gap in understanding perspectives and experiences at the local level.

#### CAPTURING LOSS AND DAMAGE INTERPRETATIONS IN THE PACIFIC REGION

The University of Fiji held a two-day workshop titled *Loss and Damage and the Climate Negotiations* in collaboration with local and international partners, including the Ministry of iTaukei Affairs, Pacific Islands Development Forum, Linköping University, Mistra Geopolitics, and the Australian National University Institute for Climate, Energy & Disaster Solutions. The workshop provided a space to listen to different perspectives and discuss the issue of loss and damage, with the goal of strengthening collaborations and knowledge sharing.



Malaika Mikaelsson

Representatives from communities offered comprehensive, nuanced, sensitive and Pacific-relevant interpretations of loss and damage. Participants shared their experiences of relocation and discussed the practical ways in which loss and damage is currently being addressed. This provided the opportunity to share ideas, lessons learned and strategies being pursued to address loss and damage.

The organizers worked in collaboration with Honson Chan, a local artist, who created live illustrations as the speakers presented, capturing the daily realities of loss and damage. The panel discussions gained international media attention, and highlighted testimony from a resident of Narikoso, one of the 48 villages earmarked for relocation by the Fijian Government: "Seawater comes right into the village grounds on a daily basis, and this destroys the foundation and walls of homes, but we will keep fighting." – Mr Saukitoga, Fiji Sun (Kelera Sovasiga, 15 October 2022).

#### POLICY RESPONSES TO CLIMATE CHANGE IN FIJI

The Mistra Geopolitics research team had the opportunity to meet Fijian politicians to discuss climate change strategies and their views of the future. Given the preference of Fiji residents to stay on their land, it was seen as essential that global warming be limited to 1.5°C above pre-industrial levels by 2030 or 2050. However, the then-Prime Minister of Fiji, Mr Frank Bainimarama, expressed his pessimism about achieving this target, saying that there was insufficient commitment. "When considering the strategies being implemented by Pacific states, Fiji is aiming to increase the amount of mangrove trees and to offer residents of Kiribati and Tuvalu the opportunity to relocate to Fiji", said Malaika Mikaelsson, PhD student, Linköping University.





Illustrations: Honson Chan

## MISTRA GEOPOLITICS KEY EVENTS

## MISTRA GEOPOLITICS CONVERSATION SERIES

As part of the communication strategy of Mistra Geopolitics, we engage stakeholders and key audiences through seminars, workshops and focus groups. Throughout 2022, several large external seminars were held under the Mistra Geopolitics umbrella. Details and video recordings of key events organised by Mistra Geopolitics can be found at www.mistra-geopolitics.se/events. The following sections present highlights.

### CLIMATE RISKS IN THE MINING SECTOR: HOW TO PROMOTE LOCAL SUSTAINABILITY

The mining sector is critically important for the low-carbon transition and the fulfilment of the UN 2030 Agenda. Mining is, however, associated with pressing environmental and social challenges in extraction sites, many of which are likely to be exacerbated by climate change. How companies choose to respond to climate risks is likely to have far-reaching impacts, positive and negative, on society.

A webinar on climate risks in the mining sector, hosted by Mistra Geopolitics, addressed the role of the private sector in climate adaptation, with a focus on its societal consequences, and identified key governance gaps for securing community resilience. More than 100 people attended the webinar, which featured a high-level panel of esteemed speakers from the Ford Foundation, the International Council on Mining and Metals, and the International Finance Corporation. Opening remarks were made by Anna George, Programme Manager with the Environmental Governance Programme, Swedish Environmental Protection Agency.

Mistra Geopolitics researchers from Stockholm University, Maria-Therese Gustafsson, Associate Senior Lecturer, and Isabella Strindevall, Research Assistant, presented findings from a new report that analyzes the adaptation responses of the 37 largest global mining companies, and to what extent such private initiatives have been regulated by states. The authors conclude that the push for climate action within the mining industry is largely driven by investors rather than civil society and governments. Mining companies are thus more incentivized to cater to the investment community than local stakeholders and this may come at the expense of the climate resilience of local communities.

Speaker panel:

- Anthony Bebbington, International Program Director for Natural Resources and Climate Change, Ford Foundation
- Verónica Martinez, Lead Strategist for innovation and climate change at the International Council on Mining and Metals
- Krishna Matturi, Global Mining & Climate Advisory Consultant in the International Finance Corporation's Natural Resources and Infrastructure Department
- Anna George, Programme Manager, Environmental Governance Programme, Swedish Environmental Protection Agency (opening remarks).

Watch video recording of the event: https://www.mistra-geopolitics.se/ eventer/climate-risks-in-the-mining-sector-how-to-promote-local-sustainability/edate/2022-05-05/

Maria-Therese Gustafsson, Associate Senior Lecturer, Stockholm University Isabella Strindevall, Research Assistant, Stockholm University



### ONLINE DIALOGUE: COP27 POST-MATCH ANALYSIS

Over 100 people attended a webinar hosted by Mistra Geopolitics, the Centre for Climate Science and Policy Research at Linköping University and SEI on COP27. The event featured a prominent panel discussing whether COP27 had fulfilled the expectations of political leaders, scientists, civil society and youth organizations around the globe.

The fact that COP events no longer only focus on climate negotiations but are becoming an arena highlighting climate-related initiatives was discussed. Panellist Emma Modéer Wiking, Global Head of International Sustainable Business, CEO Office at Business Sweden, saw a disconnect between the official negotiations and the pavilion discussions. At the pavilion, researchers and companies showcased solutions and innovations that have much to offer to the negotiations.

When the panellists considered how COP27 outcomes differ from those of previous years, they pointed out a shift in conversations from mitigation towards adaptation and loss and damage. The global goal of adaptation has become increasingly problematic in the negotiations because it is less precise than the mitigation goal (1.5°C). This makes it more difficult to assess progress and operationalise goals.

Although the agreement on loss and damage funds was one of the highlights of COP27, panellists raised the need to ensure access to available climate funds as well as the need for these resources to be utilised to determine the extent of success at COP27. Mattias Frumerie, Head of Delegation to the United Nations Framework Convention on Climate Change (UNFCCC) at the Swedish Ministry of Environment, pointed out that the priority moving forward is to ensure sufficient finance and discuss how funding institutions can efficiently meet developing countries' needs in adaptation, mitigation, and loss and damage.



### SCENARIO WORK WITH MISTRA GEOPOLITICS STAKEHOLDER PARTNERS

Mistra Geopolitics held its annual conference in March 2022 and the Mistra Geopolitics research team, board members and stakeholder partners met for an in-person meeting.

#### PANEL DEBATE

During the conference, Mistra Geopolitics stakeholder partners from the Swedish Agency for Marine and Water Management, Swedish Energy Agency, Junglemap, Business Sweden and Futurion held a panel discussion on the pace of change towards a sustainable future and the main barriers to change. Panellists discussed what policies were missing for a sustainable transformation and what opportunities they could see for their organization.

#### SCENARIO WORKSHOP

Mistra Geopolitics seeks to engage stakeholders to take part in the research process itself through co-creation of knowledge to strengthen and develop our foresight capacity, so that we continue to provide research that can identify and strengthen the opportunities for sustainable development. A scenario workshop was held during the conference together with our stakeholder partners on the topic of how we should build future scenario work to support decision-making today and how the 2030 Agenda and the SDGs could be used as a foresight tool framework.



Klaus Hammes, Chief Economist, Swedish Energy Agency; Carl Melin, Research Director, Futurion; Ann-Therese Enarsson, CEO, Futurion; Lena Sellgren, Chief Economist and Head of Research, Business Sweden. Moderator: Somya Joshi, SEI. Photo: Johan Söderlund.

#### **CO-CREATION**

The research theme Sustainable Oceans has used inputs from a wide stakeholder group including our stakeholder partners in their research work on Arctic governance. Our stakeholder partners have been asked to provide input on different institutions governing the Arctic and how Arctic governance could become more sustainable and effective.

### **MISTRA GEOPOLITICS IN ALMEDALEN**

Mistra Geopolitics took part in the Swedish Almedalen week and in front of a full hall, hosted and co-hosted two seminars.

### BACKLASH ON THE CLIMATE ISSUE – HOW CAN POLITICS IMPROVE ON FORESIGHT

A high-level panel discussed how politics can equip society for rapid climate change in this Almedalen seminar arranged by Mistra Geopolitics and Hagainitiativet. The discussion was moderated by Nina Ekelund, Director General at the Hagainitiativet, and the panel consisted of representatives from the research community, political parties, business and civil society.

Mistra Geopolitics Co-Director Henrik Carlsen opened the discussion by pointing out that we now clearly see how geopolitical factors and perspectives are intertwined with environmental issues and climate change. Therefore, science and policy – and business – need to work closely to better navigate an uncertain future.

From a business perspective, Sofie Eliasson Morsink, CEO for the Coca-Cola Europacific Partners and Chair of the Board of the Swedish Food Federation, emphasized that we need to make long-term decisions and it is important that we all have the same goals. The panel called for broad alliances, along with a long-term policy with clear goals and objectives.

Ulf Wikström, Sustainability Manager, Stockholm Exergi, stated his belief that we have not succeeded in demonstrating the severity of the climate crisis. The panellists agreed that there is a need for political vision from across the ideological spectrum about what a sustainable society should look like.

Nina Ekelund summarized the debate, concluding that everybody understands the geopolitical challenges and the climate crisis, but there seems to be a lack of action in politics. She ended on a positive note: there is a clear will to change and move forward.



Magnus Demervall, Head of Policy and Deputy Party Secretary (C); Anders Wijkman, Chairman of Circular Sweden and former MEP; Ulf Wikström, Sustainability Manager, Stockholm Exergi. Moderator: Nina Ekelund, Director General at Hagainitiativet, Sofie Eliasson Morsink, CEO for the Coca-Cola Europacific Partners and Chair of the Board of the Swedish Food Federation; Karin Lexén, Secretary General for the Swedish Society for Nature Conservation; Malin Fijen Pacsay, Chairman of the Climate and Sustainability Committee in the Stockholm Region (MP); Elin Segerlind, Member of Parliament (V).



Henrik Carlsen, Co-Director, Mistra Geopolitics and Senior Research Fellow, SEI.

### **MISTRA GEOPOLITICS IN BRUSSELS – BRIDGING SCIEN**

The Mistra Geopolitics programme is unique being such a large research programme focused entirely on the interactions between geopolitics, security and global climate change.

In 2022, a delegation from Mistra Geopolitics visited Brussels to ensure that our research reaches decision-makers at EU level. The delegation took part in meetings with representatives from NATO, the European Commission and the European Parliament, and concluded that the demand for Mistra Geopolitics research is high in times of geopolitical turbulence. Björn-Ola Linnér, Mistra Geopolitics Programme Director and Professor at Linköping University, noted:

"The interest in the research programme is great. The current war and the crisis we are seeing in the international community and the world economy show how important it is that these issues are studied and potential hotspots identified. We are well equipped to deliver knowledge in this space." The meetings in Brussels provided valuable contacts as well as input on needs and new perspectives. This enables us to contribute with current analysis and formulate the programme's continued research. The packed agenda included meetings with the ambassador of Sweden's delegation to NATO, the cabinet of the European Commission Vice President Frans Timmerman, and the Permanent Representation of Sweden to the EU, along with meetings with members of the European Parliament. A seminar on food security and raw materials at the Centre for European Policy Studies was also held.

### TIMELY INPUT ON THE CONSEQUENCES OF THE WAR IN UKRAINE

Much of the discussion in Brussels revolved around security policy, the EU Green Deal and the ambitions of the Paris Agreement and climate adaptation. The war in Ukraine was at the centre of the conversation and we could see a special interest in the Mistra Geopolitics research themes on Food

#### CLIMATE, SECURITY AND RESOURCES - HOW DO WE HANDLE MULTIPLE CRISES?

Russia's invasion of Ukraine has changed the geopolitical situation and the global playing field. Our dependence on fossil fuels and raw materials is clear and multilateral cooperation on climate and environmental issues has been affected. These topics were discussed by an expert panel at a seminar in collaboration with Mistra.

The panel opened with an acknowledgement of the highly complex nature of the current situation. Vice-Chancellor of the Swedish Defence University and board member of Mistra Geopolitics, Robert Egnell, observed that these global challenges need to be addressed through global collaboration. The current security policy crisis, however, leads to the opposite of cooperation – a Cold War 2.0. Therefore, we now need to think both short- and long-term.

Referring to the impact on global energy supply, Filip Johnsson, Programme Director at Mistra Electrification, stated that electrification was a significant part of solving the climate problem. Globally, there has been an incredible expansion of renewable energy. The problem is that since the beginning of the 2000s, the share of fossil fuels in the world's primary energy sources has been constant, at over 80%. "We have managed to bring in renewable energy, but failed to price carbon dioxide," noted Johnsson.

The panel called for politicians to make brave decisions: considering how quickly measures were put in place in response to the Covid-19 pandemic and the war in Ukraine, we are stumbling when it comes to the challenges of climate and electrification.



Moderator: Anna Jöborn, CEO Mistra. Panellists: Henrik Carlsen, Co-Director, Mistra Geopolitics and Senior Research Fellow, SEI; Robert Egnell, Vice-Chancellor of the Swedish Defence University; Filip Johnsson, Programme Director, Mistra Electrification; Matilda Machacek, Development Manager, Offshore Norden at RWE Renewables; Markus Wråke, CEO, Energiforsk.

### **CE AND POLICY**

Security and Decarbonization as well as rare metals.

It was also apparent that Russia's war against Ukraine is accelerating the pace of the transition from fossil fuels within the EU. The desire to become independent of Russian oil and gas gives a whole new impetus to the work on the Green Deal that the EU has pursued for several years. Henrik Carlsen, Mistra Geopolitics Co-Director and Senior Research Fellow at SEI, observed that the Mistra Geopolitics research theme Foresight Capabilities and Emerging Technologies, addressing future-oriented perspectives on the interplay between geopolitics and sustainable development, was relevant to the needs of partners:

"From our meetings in Brussels we can conclude that foresight capabilities and the ability to deliver policy-relevant input is an area that is in high demand."



## MEDIA APPEARANCES – HIGHLIGHTS

#### GROWING INTEREST FROM MEDIA

Mistra Geopolitics researchers were frequently cited by international and Swedish news media in 2022. Media appearances by key researchers within Mistra Geopolitics resulted in 1 100 editorial mentions. Of these, 557 were editorial mentions in newspapers and media outlets, and 520 were mentions on social media platforms. The increase in media articles was therefore 23% compared to 2021.

The articles, published in Swedish and international news outlets, contributed to a total reach of 672 million potential readers and spanned 25 Countries with Sweden at the top. This year we see a few more female researchers cited compared to last year and we are happy that some of the Mistra Geopolitics PhD candidates have appeared in media articles.

#### THE CHALLENGE OF THE AGE - CLIMATE ADAPTATION

#### The Economist special report, November 2022

The report *New Risk Horizons: Sweden's Exposure To Climate Risk Via International Trade*, written by SEI Associate Frida Lager and Magnus Benzie, was cited in the article "The world has to adapt to the climate change it will not avoid", as part of a special report by The Economist in connection with COP27. The launch of the report led to media exposure around the globe.

The report addresses an emerging and highly topical global challenge: climate risks via global trade. It analyzes Sweden's role in the global trade system and identifies the climate risks Sweden faces due to its international trade relations. Sweden's most stable trade relations tend to be with countries that are both close to Sweden and relatively resilient to climate change. However, innovative data-driven methods

reveal the true extent of Sweden's dependence on more vulnerable countries – particularly emerging economies in Asia and Africa – that play an increasingly critical role in Swedish supply chains. *The Economist: https://www.economist.com/specialreport/2022-11-05* 



Frida Lager

#### THE HYBRID WAR AND CLIMATE CHANGE

#### SVT Agenda, October 2022

Henrik Carlsen, Co-Director of Mistra Geopolitics, appeared on Swedish Television (SVT Agenda) to talk about the Nord Stream gas pipelines, the hybrid war and how Russia can benefit from climate change – especially in terms of agriculture and food supply. In response to the security situation and the attacks on the Nord Stream pipelines during the autumn of 2022, SVT Agenda featured a programme with Henrik Carlsen and other experts from the Swedish Government, including Sweden's former Foreign Minister Ann Linde (S).

"It is particularly important to have a long-term perspective on these crucial energy transformational issues. Most German politicians are aware of and agree on the fact that climate action is needed. Russia, on the other hand, takes every opportunity to expand their power with any available means, where the energy crisis is one area," said Carlsen.

In the Russian case, according to Carlsen, climate

change could mean that larger areas will be utilized for agriculture and food production. In fact, the Russian climate plan agreed on in January 2022 explicitly says that the country should utilize the future possibility of a more favourable climate for agriculture. *SVT Agenda* 



Henrik Carlsen

https://www.svtplay.se/video/36513903/ agenda/agenda-2-okt-21-15-1

#### LESS TALK, MORE ACTION IN CLIMATE FIGHT

#### Fiji Sun, October 2022

Loss and damage has been one of the key issues in the Pacific when it comes to climate change negotiations, wrote the Fiji Sun in a two-page news article, citing Björn-Ola Linnér, Director of Mistra Geopolitics and Professor at Linköping University. The newspaper summarized a two-day high-level workshop on climate adaptation held in Fiji, organized by Mistra Geopolitics and partners. The goal of the workshop, titled *Loss and Damage and the Climate Negotiations*, was to strengthen collaborations and knowledge sharing.

The workshop was organized by the University of Fiji in collaboration with the Ministry of iTaukei Affairs, Pacific Islands Development Forum, Linköping University, Mistra Geopolitics, and the Australian National University Institute for Climate, Energy & Disaster Solutions.

In his presentation, Professor Björn-Ola Linnér stated that there was increasing attention in international discussions across academia, politics and media to the geopolitical aspects of the climate negotiations.

"In the wake of the pandemic, we clearly could see how the geopolitical shifts in the world started to also affect the climate negotiations both for the better and for worse. We could see a larger self-interest from countries keeping the vaccine to

themselves, which created distrust, but we could also see an

emerging focus on what we rebuild and in a way what we can do to achieve the Paris Agreement," Professor Linnér said to the Fiji Sun.



https://www.pressreader.com/fiji/fijisun/20221015/281917366989149

Fiji Sun

Björn-Ola Linnér

#### TRANSITION TO SUSTAINABLE ENERGY IS BEING ACCELERATED

#### Sydsvenskan, March 2022

An article in Sydsvenskan explored the opportunities for energy transition opened up by the war in Ukraine. According to Björn-Ola Linnér, Mistra Geopolitics Programme Director and Professor at Linköping University, the conflict has made it difficult for European countries to buy Russian gas and oil, which finances military rearmament (Reuters reports that Russia's import revenues from gas and oil accounted for 36% of the state budget last year). Furthermore, the war is also bad for the climate. But as a result, Europe's energy transition is getting a push forward.

Linnér studies the connection between geopolitics and climate change. He and his research colleagues have long warned about how the EU, especially Germany, has become increasingly dependent on Russian gas. "There is a climate risk by locking yourself into a fossil dependency and at the same time a risk of reduced geopolitical stability," Linnér said to Sydsvenskan.

The newspaper also interviewed André Månberger, Associate Professor at Lund University and leader of the Mistra Geopolitics Decarbonization theme. Månberger, who studies energy security, said he finds it difficult to see how natural gas can be quickly replaced, particularly in Germany, by imports from other countries of liquefied gas.

"There is a lack of capacity: tankers and terminals among other things. Now Germany has said that they will build new facilities. But it is not possible to scale up as fast as you like," Månberger said. "Because natural gas is locked in pipelines, it is difficult to quickly change supplier while waiting for a transition to fossil-free."

The sum of all the changes that are now taking place is almost impossible to overview, he added. But hindsight can provide guidance for the future.

"History has shown that we can quickly reduce our energy dependence and rebuild systems. It is at times like this that big changes can happen." A recent example, said Månberger, is the Covid-19 pandemic, which accelerated a transition to remote work.



André Månberger

News article in Sydsvenskan:

https://www.sydsvenskan.se/2022-03-13/klimatforskare-tragiskt-att-enbroms-for-rysk-energi-skulle-krava-ett-krig



## HIGHLIGHTS OF MEDIA APPEARANCES IN 2022

#### **DAGENS NYHETER, 27 JUNE**

#### THIS IS HOW RUSSIA CAN USE FOOD AS A WEAPON

Russia has a stated strategy to become a food superpower and accounts for a significant part of the world's wheat exports, reported Dagens Nyheter. But what happens when the climate crisis and the Ukraine war cause the world to face a serious food crisis?

Jiayi Zhou from SIPRI, Henrik Carlsen from SEI and Björn-Ola Linnér from Linköping University talked about this topic in an interview with Dagens Nyheter.

https://www.dn.se/varlden/sa-kan-ryssland-anvandalivsmedel-som-vapen/

### SWEDISH SCIENCE RADIO KLOTET, 16 NOVEMBER

#### THE CLIMATE MEETING IN EGYPT: "CHAOTIC" AND "SWEDEN HAS LOST AS A LEADING COUNTRY"

Malaika Mikaelsson, Doctoral Researcher at the Centre for Climate Science and Policy Research, Linköping University and in Mistra Geopolitics, studies loss and damage to small island states in the Pacific Ocean, where people live close to coral reefs. In an interview at COP27, the Swedish Science Radio asked her: How are they affected by climate change?

"They are affected in several ways. Especially people living close to the sea cannot fish as much as they did previously. They need to search for fish further out, wait longer to get their catch and at the same time risk their safety", Malaika said.

https://sverigesradio.se/avsnitt/klimatministern-rominapourmokhtari-tror-att-malen-kan-nas

#### **EXPRESSEN, 28 FEBRUARY**

#### RESEARCHER DISCUSSED IPCC CLIMATE REPORT WITH READERS

Henrik Carlsen, Co-Director of Mistra Geopolitics and SEI Senior Research Fellow, answered questions from the readers of Expressen about the new IPCC climate report in an online chat.

https://www.expressen.se/nyheter/klimat/chatta-med-forskarenom-fns-klimatrapport/

#### FORSKNING.SE, 29 MARCH

## HOW THE WAR IN UKRAINE AFFECTS THE SUPPLY OF ENERGY, METALS AND FOOD

When Germany opts out of Russian natural gas, it could lead to higher electricity prices in Sweden, wrote the Swedish news outlet Forskning. se, led by the Swedish Research Council.

André Månberger, Associate Professor at Lund University, explained how the war in Ukraine affects the availability and prices of energy, metals and food.

https://www.forskning.se/2022/03/29/kriget-ukraina-paverkar/

#### **LE MONDE, 22 OCTOBER**

#### SWEDEN'S CLIMATE POLICY IS IN TURMOIL

In light of measures announced by the new Swedish coalition, which relies on support from right-wing parties, researchers and NGOs fear a step backward in the fight against climate change, wrote Le Monde.

In the coalition agreement presented on 14 September by the four parties forming the new majority, the climate is the subject of only one page out of 62 pages, and even then, "it is reduced to the issue of energy, which itself is reduced to the issue of nuclear power," said Karin Bäckstrand, Professor of Political Science at Stockholm University and a former member of the Climate Policy Council.

https://www.lemonde.fr/en/environment/article/2022/10/22/sweden-s-climate-policy-is-in-turmoil\_6001310\_114.html

#### **DAGENS NYHETER, 10 NOVEMBER**

#### HOW SWEDEN COULD BE AFFECTED BY A FAILURE IN EGYPT

Adaptation to the new climate is taking far too long across the world – and the consequences will not only be felt in countries affected in the West. New research shows how the effects are spreading all over the world, even to Sweden, wrote Dagens Nyheter.

"We are facing clear systemic risks in Sweden as well," said Frida Lager, Research Associate at SEI.

https://www.dn.se/sverige/sa-kan-sverige-paverkas-av-ettmisslyckande-i-egypten/

#### **SVENSKA DAGBLADET, 31 OCTOBER**

### NEW PROMISE ON THE AMAZON DIVIDES BRAZIL

Brazil's new president Lula da Silva promises to stop the devastation of the Amazon. But the road is lined with challenges. "Many in Brazil still want the Amazon to be used for economic development," said Maria-Therese Gustafsson, researcher at Stockholm University.

https://www.svd.se/a/LIM3vQ/amazonas-ode-splittrar-brasilienett-delat-land

#### TIDNINGEN NÄRINGSLIVET, 13 JUNE

#### THE EXPERT: RAMPANT ELECTRICITY PRICES CAN LEAD TO A HALT IN THE ECONOMY

Swedish industry is going through a steel bath after Russia's invasion of Ukraine. André Månberger, researcher in energy security at Lund University, believes that an economic slowdown is "completely possible" after the war's effect on energy prices. André Månberger warns that high energy prices can lead to a demand crash in the economy in the newspaper Näringslivet.

https://www.tn.se/inrikes/18222/experten-skenandeelpriser-kan-leda-till-stopp-i-ekonomin/

#### **AFTONBLADET, 19 SEPTEMBER**

#### THE ELECTION CAMPAIGN TURNED AGAINST THE CLIMATE

In several countries, the climate has become the focus of election debates. Not in Sweden – here, the election movement turned against climate issues, wrote Aftonbladet.

"It's about a bigger grip on the issue. Biden's package certainly does not include all parts that are important for the climate, for example biodiversity, but is a comprehensive approach to the energy issue that extends beyond just nuclear power. And that has led to a much more advanced discussion than we had in the election campaign," said Björn-Ola Linnér.

https://www.aftonbladet.se/nyheter/a/zEgXxO/ valrorelsen-vande-sig-emot-klimatet

#### **THE ECONOMIST, 5 NOVEMBER**

#### THE CHALLENGE OF THE AGE – CLIMATE ADAPTATION

The report New Risk Horizons: Sweden's Exposure To Climate Risk Via International Trade, written by SEI Associate Frida Lager and SEI's Magnus Benzie, was cited in the article "The world has to adapt to the climate change it will not avoid", as part of a special report by The Economist in connection with COP27.

https://www.economist.com/special-report/2022-11-05

#### **EL CONFIDENCIAL, 25 NOVEMBER**

#### THE NEW GENERATION OF WEAPONS THAT WILL MAKE THE DECISIONS FOR THE GENERALS

Areas such as AI, communication technologies, robotics, biotechnology and material science are expected to bring about economic, social and political transformations on an unprecedented scale – for better and for worse.

Vincent Boulanin, Senior Researcher at SIPRI, commented on current technological advances in an article about the dangers of new technologies used in war by the Spanish news outlet El Confidencial.

https://www.elconfidencial.com/tecnologia/novaceno/2022-11-25/control-z-armas-futuro-guerra-global\_3529282/

#### **DAGENS ARENA, 21 SEPTEMBER**

#### POWER SHIFT IN SWEDEN CREATES CON-CERN ABOUT INCREASED EMISSIONS

Following the Swedish election, there are signs that the new government, expected to be in power for the coming four years, will pursue a weaker climate policy, wrote the Swedish news outlet Dagens Arena.

"Tax reductions and a lower greenhouse gas reduction mandate for petrol and diesel will make it more difficult to achieve Sweden's climate goals. They should aim to compensate people in sparsely populated areas, rather than lowering the fuel price for everyone," said Björn-Ola Linnér, Director of Mistra Geopolitics and Professor at Linköping University.

https://www.dagensarena.se/innehall/makskifteskapar-oro-okade-utslapp/

#### **BORÅS TIDNING, 16 APRIL**

### THE CRITICISM: "WE DON'T HAVE TIME TO COMPENSATE FOR THE CLIMATE"

Several companies in the town Borås invest in climate change actions in India – but the measure is criticized. Offsetting one's carbon dioxide emissions can send the wrong signals, wrote the newspaper Borås Tidning.

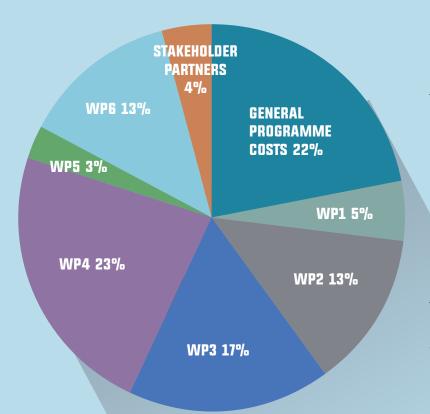
"It can make us believe that the problem is already solved," said Professor Eva Lövbrand, researcher in Mistra Geopolitics at Linköping University.

https://www.bt.se/boras/kritiken-vi-har-inte-tid-attklimatkompensera-d4329025/

## FINANCIAL SUMMARY

Revenues	SEK
Mistra	12,904,678
Co-funding from programme partners and stakeholders	2,903,528
Total revenues	15,808,206
Expenditure	
Salaries	10,052,792
Travel	337,525
Consumables	152
Other direct costs	2,221,004
Purchased services	0
Indirect costs	2,932,553
Strategic reserve	264,180
Total expenditure	15,808,206

### **2022 ACTUAL FIGURES BY WORK PACKAGE**



ACTUAL FIGURES BY WORK PACKAGE	SEK
WP 0: General programme costs	3 393 922
WP 1: Food security	824 652
WP 2: Sustainable oceans	2 099 818
WP 3: Decarbonization	2 655 420
WP 4: Emerging technologies and foresight capabilities	3 681 864
WP 5: Research school*	442 741
WP 6: Engagement, synthesis and rapid response	2 061 790
Stakeholder partners in-kind contribution	648 000
Total expenditure	15 808 206

\*Reported as General programme costs in the financial report

## **EVENTS AND OUTREACH ACTIVITIES 2022**

POLICY DIALOGUES	
Magnus Benzie (SEI) took part in a political briefing hosted at SEI sharing the results of the "New risk Horizon's report" with members of the Swedish parliament.	23 Nov
Frida Lager (SEI) hosted a side event at COP27 in Egypt at the Nordic Pavilion titled: "Taking a strategic view on climate change: How to advance green growth while managing transboundary climate risks".	15 Nov
Håvard Hegre (Uppsala University) spoke at the Berlin Climate and Security Conference. Trading tools: The opportunities of quantifying and predicting climate security risks.	11 Oct
Karen Meijer (SIPRI) and Nina von Uexkull (Uppsala University) contributed to the Global Conflict Risk Index workshop on climate, conflict and short-term forecasting in Ispra, Italy.	22 Sep
Lisa Dellmuth (Stockholm University) analyzed the Swedish election results and relevance for Ger- man energy politicians: "Wahl in Schweden 2022".	12 Sep
Nina von Uexkull (Uppsala University). Invited presentation on climate change and conflict risk, Council on Foreign Relations & Geneva Centre for Security Policy workshop on "Climate change and regional instability", held in Geneva.	24-25 June
Tina-Schmid Neset (Linköping University) presented on food security and phosphorus as part of a presentation organized by the Centre for Climate Science and Policy Research at Linköping University for the foreign policy section of the Swedish Parliament (Riksdagens Utrikesutskott).	26 April
Maria-Therese Gustafsson (Stockholm University) and Andrea Lenschow (University of Osna- brück) chaired and co-chaired the ECPR Joint Session Workshop: Policy Integration of Human Rights and the Environment in Global Sustainability Governance held in Edinburgh.	19-22 April
Lisa Dellmuth (Stockholm University), Nina von Uexkull (Uppsala University) and Halvard Buhaug (Peace Research Institute Oslo) contributed to the Environmental Peacebuilding Conference Pan- el: Climate Change, Food Security and Armed Conflict.	2 Feb
PRESENTATIONS	
Kristina Petrova and Nina von Uexkull (both Uppsala University) participated in an expert work- shop on Climate Change, Conflict and Migration at the Potsdam Institute for Climate Impact Research (PIK), Germany.	14-16 Dec
Nina von Uexkull (Uppsala University) contributed as a panellist at the event Cascading Failures, Compounding Risks, and Social Instability: Exploring the Geographical Dimensions of Extreme Climate Change organized by the US National Academy of Sciences, Washington DC.	8 Dec
Niklas Bremberg (Stockholm University) participated in a roundtable discussion on NATO and Climate Security organized by SIPRI.	5 Dec
Maxine Leis (Uppsala University) presented at a workshop on improving humanitarian displacement data including presentation and feedback of the paper "Disaggregated analysis of distress internal and cross-border mobility using a prediction framework," at the Humanitarian Displacement Data Network (HDDN) workshop in Oslo.	8 Nov
Malaika Mikaelsson (Linköping University) presentation on loss and damage in Pacific small island developing states, at Massey University, New Zealand.	3 Nov
Claudia Strambo (SEI) invited presentation "Decarbonization, lock-in problems and incumbency". At Ford Foundations's online event: Just Energy Transition Knowledge Exchange. Learnings and experiences from Indonesia, South Africa and West Africa to Colombia.	2 Nov

PRESENTATIONS	
Eva Lövbrand (Linköping University) was keynote speaker at the workshop 'Politics of Future-Making: Pathways for STS', at the University of Munich. Title of talk "Stuck between promise and doom? Unlock- ing the politics of decarbonization".	26 Oct
Nina von Uexkull (Uppsala University) held a presentation on "cascading climate-security risks" at the Berlin Climate Security Conference.	20 Oct
Rinata Kazak (Linköping University) moderated the 6th Kharkiv International Legal Forum online panel "Scandinavian approach to the sustainable development: history and current trends", Yaroslav Mudryi National Law University, Ukraine.	6 Oct
Claudia Strambo (SEI) presented "Geopolitics of carbon lock-in in fossil fuel-dependent developing countries: case studies of Colombia and Nigeria" at the International Conference on Fossil Fuel Supply and Climate Policy, Oxford.	27 Sep
Nina von Uexkull (Uppsala University) held a lecture on the theme climate and conflict for Framtid- sakademin, Sweden.	14 Sep
Maria-Therese Gustafsson and Almut Schilling-Vacaflor (Stockholm University). New Supply Chain Regulations in Europe: Toward Foreign Corporate Accountability, presentation at the Centre for Development and Environment, Bern.	9 Sep
Paper presentation: "Disaggregated analysis of distress internal and cross-border mobility using pre- diction framework" by Maxine Leis and Kristina Petrova (both Uppsala University), Columbia University.	July
Nina von Uexkull (Uppsala University) was discussant in the panel "The Effect of Multi-sectoral Intervention in Somalia. Evidence from Multiple Datasets Collected over the Last Ten Years", at the IFAD Conference 2022 "Jobs, innovation and rural value chains in the context of climate transition: Bridging the gap between research and policy," held in Rome.	23 June
Henrik Carlsen (SEI) presented case studies on Swedish municipalities using the tool SDG Synergies, Kvalitetsmässan, Göteborg, Sweden.	3 May
Nina von Uexkull (Uppsala University) held a presentation on the role of prediction models, at the German Ministry of Foreign Affairs and US State Department: "Sustaining Peace Amidst the Climate Crisis: The Role of Data Science, Technology & Innovation" Panel Prediction models, Berlin.	2-3 May
André Månberger (Lund University) presentation on energy security in light of the War at the Swedish Energy Agencies research school. Gothenburg.	25 April
André Månberger (Lund University) presented at the public event on EU´s dependence on imported energy and natural resources "Apropå invasionen i Ukraina", in Lund.	5 April
Maxine Leis (Uppsala University) participated and presented the paper "Disaggregated analysis of distress internal and cross-border mobility using prediction framework" at the International Studies Association (ISA) Conference 2022 in Nashville.	1-4 April
Lisa Dellmuth (Stockholm University) presented at a seminar on global climate change governance organized by the Student Association for Sustainability in Stockholm.	30 March
Henrik Carlsen (SEI) presented "How do inner transformation, imaginaries and futures providing opportunity for new insights and transformations, including the role of arts?" at the Sustainability Frontiers Conference, Lund, Sweden.	15 Feb
Farah Hegazi & Elizabeth Smith (SIPRI) 'Climate change, food security and gender equality', Environ- mental Peacebuilding Conference.	2 Feb
SEMINARS	
Malaika Mikaelsson, Björn-Ola Linnér (both Linköping University) contributed to the Online dialogue: COP27 post-match analysis. Hosted by Mistra Geopolitics, the Centre for Climate Science and Policy Research at Linköping University and SEI.	24 Nov

	13-14 Nov
Priyatma Singh (University of Fiji), Malaika Mikaelsson, Stephen Woroniecki, Björn-Ola Linnér and Victoria Wibeck (all Linköping University), organized and contributed to the Workshop on Loss & Damage and the Climate Negotiations in Fiji and online.	10-141100
Launch seminar of a report from Phase I published by Delmi, with Maxine Leis (Uppsala University) in the panel. Climate Change and Migration: future scenarios and policy options.	8 Nov
During World Water Week in Stockholm, Mistra Geopolitics researchers contributed to: Humanitarian responses to climate shocks in fragile settings.	28 Aug
Backlash i klimatfrågan – hur kan politiken bli bättre på framsynthet? Henrik Carlsen (SEI) participated in the panel debate, organized by Mistra Geopolitics and Hagainitiativet in Almedalen, Visby, Sweden.	4 July
Klimat, säkerhet och resurser – hur hanterar vi flera kriser samtidigt?, Henrik Carlsen (SEI) participat- ed in the panel debate organized by Mistra and Mistra Geopolitics in Almedalen, Visby, Sweden.	4 July
Fredrik Heintz, Marie Francisco and Björn-Ola Linnér (Linköping University) contributed to the semi- nar Hur kan Al bidra till hållbar utveckling i Afrika?	10 June
Eva Lövbrand (Linköping University) chaired and convened the Nordic Environmental Social Science Conference: Emergency and transformation workshop 'Just Transition and the Role of the State', organized by Gothenburg University.	7-9 June
Nina von Uexkull, Maxine Leis (Uppsala University) and Lisa Dellmuth, Maria-Therese Gustafsson (Stock- holm University) contributed to the Swedish Climate Symposium held in Norrköping, organized by SMHI.	16-18 May
Climate risks in the mining sector: how to promote local sustainability, launch seminar of the report "Climate risks and community resilience in the mining sector" with Maria-Therese Gustafsson and Isabella Strindevall (Stockholm University). Organized by Mistra Geopolitics	5 May
Mistra Geopolitics annual conference 2022 opened by Björn-Ola Linnér (Linköping University) and Måns Nilsson (SEI). Keynote speeches from Mistra Geopolitic's board members and partner organizations.	March
Security, Insecurity and the Anthropocene, launch seminar of the book: Anthropocene (In)securities: Reflections on Collective Survival 50 Years After the Stockholm Conference.	15 Feb
FILMS, VIDEOS & PODCASTS	
In the Mistra Geopolitics film "How can artificial intelligence contribute to Agenda 2030?" Henrik Carlsen, Lena Sellgren and Fredrik Heintz discuss the geopolitics of emerging technologies, artificial intelligence and the importance of foresight.	16 Dec
In the Mistra Geopolitics film "The geopolitics of decarbonization, finance and trade" Torbjörn Hamnmark, Dan Smith, Daria Meva and Taylor Dimsdale discuss the geopolitics of decarbonization, finance and trade.	7 Nov
In the Mistra Geopolitics film "Managing crises – conflict, pandemics and food insecurity" Henrik Hammargren, Nina von Uexkull, Dan Smith and Frida Lager discuss how to handle food insecurity, conflicts, climate change and pandemics.	23 Aug
Anders Wijkman shares his reflections on how politics can improve foresight from the seminar "Backlash on the climate issue", organized by Mistra Geopolitics and Hagainitiativet.	7 July
Mistra Geopolitics Co-Director Henrik Carlsen (SEI) shares his reflections from the seminar "Climate, security and resources – how do we manage several crises at the same time?", organized by Mistra and Mistra Geopolitics.	7 July
In the Mistra Geopolitics video "Stockholm+50 and the Anthropocene" Malin Mobjörk and Eva Lövbrand summarize key insights on Stockholm+50, security issues and the Anthropocene from the book "Anthropocene (In)securities".	11 Feb
In the Mistra Geopolitics film "Climate risks to global food trade" lead author Kevin M. Adams sum- marize key insights on trade, climate change and food security from a recent report.	3 Jan

## **PUBLICATIONS 2022** SUMMARY OF PUBLICATIONS

## **PEER-REVIEWED PUBLICATIONS**

The programme's second year of the second phase (2022) has produced 40 publications. The programme has produced 13 journal articles or papers, 15 reports and 1 policy report, 11 books or book chapters and have contributed to 2 completed PhD dissertations. Find publications from the Mistra Geopolitics programme on mistra-geopolitics.se.

## BOOKS

Linnér, B-O. (May 2023). The Return of Malthus: Environmentalism and the Postwar Population–Resource Crises, 2nd edition, Whitehorse Press.

## **BOOK CHAPTERS**

Bennich, T., Weitz, N., Carlsen, H. (2022). "Scientific Approaches to SDG Interactions Analysis", in Governing the Interlinkages between the SDGs: Approaches, Opportunities and Challenges, edited by Breuer, A., Malerba, D., Srigiri, S, Balasubramanian, P., Routledge, London. (WP4.1)

Bremberg, N. (2022). Climate Change and Security in the Mediterranean: Exploring the Nexus, Unpacking International Policy Responses. Instituto Affair Internazionali research studies, Italy. ISBN: 978 88 3365 458 4. (Additional publ.)

Brownlie, W.J., Sutton, M.A., de Boer, M.A., Camprubí L., Hamilton, H. A., Heal, K.V., Morgandi, T., Neset, T.-S., Spears, B.M. (2022). Phosphate Rock: Reserves, Resources and Uses. In W. J. Brownlie, M. A. Sutton, K. V. Heal, D. S. Reay, & B. M. Spears (Eds.), Our Phosphorus Future: 322591131 [91201] UK Centre for Ecology and Hydrology, Edinburgh. https://doi.org/10.13140/RG.2.2.10598.91201 (WP1)

Brownlie, W., Sakrabani, R., Metson, G. S., Blackwell, M. S. A., & Spears, B. M. (2022). Chapter 6. Opportunities to recycle phosphorus-rich organic materials. In Brownlie W. J., Sutton M. A., Heal K. V., Reay D. S., & Spears B. M. (Eds.), Our Phosphorus Future: 322591131 [91201] UK Centre for Ecology and Hydrology, Edinburgh. https://doi.org/10.13140/RG.2.2.10598.91201 (WP1)

Brownlie, W., Spears, B. M., Heal, K. V., Reay, D. S., Benton, T. G., Cordell, D., A. Louise Heathwaite, Hermann, L., Johnes, P. J., Cargele Masso, Mcdowell, R. W., McGrath, J. W., Metson, G. S., Sakrabani, R., Van Der Beck, I., & Sutton M.A. (2022). Chapter 9. Towards our phosphorus future. In Brownlie W. J., Sutton M. A., Heal K. V., Reay D. S., & Spears B. M. (Eds.), Our Phosphorus Future: 322591131 [91201] UK Centre for Ecology and Hydrology, Edinburgh. https://rgdoi.net/10.13140/RG.2.2.16995.22561 (WP1)

Carlsen, H., Weitz, N., Bennich, T., (2022). "A Decision-Making Tool for Systems Thinking in SDG Implementation: Experiences from Sweden's Voluntary National Review 2021", in Governing the Interlinkages between the SDGs: Approaches, Opportunities and Challenges, edited by Breuer, A., Malerba, D., Srigiri, S, Balasubramanian, P., Routledge, London. (WP4.1)

Cordell, D., Benton, T., Withers, P., Johnes, P. J., Neset, T-S., & Spears, B. (2022). Transforming food systems: implications for phosphorus. In Brownlie W. J., Sutton M. A., Heal K. V., Reay D. S., & Spears B. M. (Eds.), Our Phosphorus Future: 322591131 [91201] UK Centre for Ecology and Hydrology, Edinburgh. https://doi. org/10.13140/RG.2.2.10598.91201 (WP1)

Kazak R. (2022) Concept of "sustainable development" in Ukraine and world: general and legislative perception (based on Google Trends) - The European dimension of modern legal science: Scientific monograph, Riga, Latvia: «Baltija Publishing», pp. 206 - 220 https://doi.org/10.30525/978-9934-26-252-4-10 (WP4.2)

Lager and Benzie (2022) cited in the book "Världen som väntar" by Peter Alestig (2022), based on the Mistra Geopolitics report: New risk horizons: Sweden's exposure to climate risk via international trade.

Metson, G. S., Brownlie, W., Bausch, J. C., Jonell, M., Matsubae, K., Mnthambala, F., Schill, C., & Tilley, E. (2022). Chapter 8. Consumption: the missing link towards phosphorus security. In Brownlie W. J., Sutton M. A., Heal K. V., Reay D. S., & Spears B. M. (Eds.), Our Phosphorus Future: 322591131 [91201] UK Centre for Ecology and Hydrology, Edinburgh. https://rgdoi.net/10.13140/RG.2.2.36498. 73925 (WP1)

## **JOURNAL ARTICLES**

Bragge, P., Becker, U., Breu, T., Carlsen, H., Griggs, D., Lavis, J.N., Zimm, C., Stevance, A.-S. (2022), How policymakers and other leaders can build a more sustainable post-COVID-19 'normal'. Discover Sustainability 3, 7 (2022). https://doi.org/10.1007/s43621-022-00074-x (4.1)

Bremberg, N., Mobjörk, M., & Krampe, F. (2022). Global Responses to Climate Security: Discourses, Institutions and Actions. Journal of Peacebuilding & Development, 17 (3). https://doi.org/10.1177/15423166221128180

de Bruin, Sophie, Jannis Hoch, Nina von Uexkull, Halvard Buhaug, Hans Visser, Niko Wanders. (2022). Projecting long-term armed conflict risk: An underappreciated field of inquiry? Global Environmental Change 72. https://doi.org/10.1016/j. gloenvcha.2021.102423 (additional publ. 4.3)

Eliasson, K., Wiréhn, L., Neset, T-S., Linnér, B-O. (2022). Transformations towards sustainable food systems: contrasting Swedish practitioner perspectives with the European Commission's Farm to Fork Strategy. Sustainability Science. https://doi.org/10.1007/s11625-022-01174-3.

Eliasson, K., Christopher D. West, Simon A. Croft, Jonathan M. H. Green (2022). A spatially explicit approach to assessing commodity-driven fertilizer use and its impact on biodiversity. Journal of Cleaner Production, volume 382. (1).

Eriksson, E.A., Hallding, K., Skånberg, K. (2022). Ensuring representativity of scenario sets: The importance of exploring unknown unknowns. Futures 102939. (4.1) https://doi.org/10.1016/j.futures.2022.102939

Feetham, P., Vaccarino, F., Wibeck, V., Linnér, B-O. (2022). Using Talanoa as a Research Method can Facilitate Collaborative Engagement and Understanding between Indigenous and Non-Indigenous Communities. Qualitative Research. https://doi.org/10.1177/14687941221087863

Gustafsson, M-T., Schilling-Vacaflor, A., Lenschow, A. (2022). Foreign corporate accountability: The contested institutionalization of mandatory due diligence in France and Germany. Regulation & Governance. https://doi.org/10.1111/rego.12498 (1.1.1)

Hedlund, J., Carlsen, H. et al. (2022). Impacts of climate change on global food trade networks. Environmental Research Letters, volume 17, 124040. https://doi. org.10.1088/1748-9326/aca68b (additional publ. 1.2)

Kazak, R. (2022). Konferentsiia OON u Stokholmi 1972 r.: znachennia dlia Ukrainy ta svitu [The 1972 Stockholm Conference: significance for Ukraine and world]. Law State Technology No 1. p. 1, 3–9. https://doi.org/10.32782/LST/2022-1-1Wibeck, V., Eliasson, K., Neset, T-S. (2022). Co-creation research for transformative times: Facilitating foresight capacity in view of global sustainability challenges. Environmental Science & Policy, volume 128. https://doi.org/10.1016/j. envsci.2021.11.023 (5.5.2)

Zhou, J. (2022). Naturalizing the state and symbolizing power in Russian agricultural land use. Political Geography, volume 93. https://doi.org/10.1016/j.polgeo.2021.102545

#### JOURNAL ARTICLES SUBMITTED FOR PEER REVIEW

Bremberg, N. The changing geopolitics of climate security: contestation and learning in communities of diplomatic practice in the OSCE, under review.

Carlsen, H., Nykvist, B., Joshi, S., Heintz, F. Chasing artificial intelligence in Shared Socioeconomic Pathways, under review.

Dellmuth, L., Gustafsson, M.-T. Legitimacy in the trans-scalar governance of climate adaptation, under review.

Francisco, M., Linnér, B-O. Al and the Governance of Sustainable Development. An idea analysis of the European Union, the United Nations, and the World Economic Forum, under review.

Gustafsson, M. T., Schilling-Vacaflor, A. & Lenschow, A. (forthcoming). The politics of supply chain regulations: Towards foreign corporate accountability in the area of human rights and the environment. Regulation & Governance (additional publ. 1.1.1)

Lindberg-Bromley, S., von Uexkull, N. Addressing (food) insecurity: sub-national peacekeeping deployment and food security outcomes, submitted.

Petrova, K., G. Olafsdottir, H. Hegre, E. Gilmore, The 'conflict trap' reduces economic growth in the Shared Socioeconomic Pathways, R&R Environmental Research Letters.

Schilling-Vacaflor A. and Gustafsson, M-T. Environmental and human rights impacts in global supply chains: Does mandatory due diligence in France steer company practices and foster corporate accountability?, R&R at Environmental Politics (additional publ. 1.1.1)

Schilling-Vacaflor A. and Gustafsson M-T. Transnational supply chain governance and policy integration challenges: The deforestation-land tenure nexus, under review at Environmental Science and Policy. (1.1.3)

Wibeck, V., Vaccarino, F., Singh, P., Feetham, P., Charan, D. and Linnér, B.-O. Changing environmental landscapes threaten the ontological security of Pacific nations, submitted. (additional publ. 2.2.2)

Zhou, J. Embedding realism: food independence and security in the Russian Federation, under review.

Zhou, J. The macro-securitization of hunger: between national and human food securities, Gottenhuber, S., Carlsen, H., Weitz, N., Linnér, B.-O. When local governance meets indivisibility – a study of SDG implementation and governance challenges in 6 Swedish municipalities", plan to be resubmitted in Q2, 2023. (4.1.3)

#### REPORTS

Dellmuth, L., Fornborg, D. (2022). The elite–citizen gap in international organization legitimacy: lessons for the United Nations. Stockholm+50 background paper series. Stockholm Environment Institute and Mistra Geopolitics, Sweden.

Dimsdale, T., Cecilio, C., Benomar, I. (2022). Living on the edge: How climate tipping points will reshape geopolitics. Mistra Geopolitics & E3G report, Sweden and the US/Belgium. (3.3.4)

Ek, L., Carlsen, H., Cole, M., Dellmuth, L., Linnér, B-O., Månberger, A., Rylander, Y., Uexkull, N. (2022). Mistra Geopolitics Annual Report 2021. Mistra Geopolitics, Sweden.

Ghosh, A., Kemp-Benedict, E., Lambe, F., Carlsen, H., Weitz, N., Jain, P., Persson, Å. (2022). Stockholm+50: Unlocking a Better Future. An independent scientific report for the UN international meeting, 'Stockholm+50: a healthy planet for the prosperity of all – our responsibility, our opportunity'. SEI and CEEW report. Stockholm Environment Institute, Stockholm. (WP6)

Gottenhuber, S., Carlsen, H. (2022). Analys av synergier och målkonflikter i Alvestas arbete med Agenda 2030, SEI och Linköpings universitet. (4.1.2a)

Gottenhuber, S., Carlsen, H. (2022). Analys av synergier och målkonflikter i Falköpings arbete med Agenda 2030, SEI och Linköpings universitet. (4.1.2b)

Gottenhuber, S., Carlsen, H. (2022). Analys av synergier och målkonflikter i Flens arbete med Agenda 2030, SEl och Linköpings universitet. (4.1.2c)Gottenhuber, S., Carlsen, H. (2022). Analys av synergier och målkonflikter i Luleås arbete med Agenda 2030, SEl och Linköpings universitet. (4.1.2d)

Gottenhuber, S., Carlsen, H. (2022). Analys av synergier och målkonflikter i Vellinges arbete med Agenda 2030,. (4.1.2e)

Gottenhuber, S., Carlsen, H. (2022). Analys av synergier och målkonflikter i Örebros arbete med Agenda 2030, SEI and Linköping University. (4.1.2f)

Lager, F., Benzie, M. (2022). New risk horizons: Sweden's exposure to climate risk via international trade. Mistra Geopolitics & Stockholm Environment Institute report, Sweden. (1.1.5)

Michel, D. (2022). Still One Earth: environmental risks, nuclear threats and the 1972 Stockholm Conference. Stockholm+50 background paper series. Stockholm Environment Institute and Mistra Geopolitics, Sweden.

Münz, R., Czaika, M., Preface by Palme, J., Malm-Lindberg, H. (2022). Climate Change, Displacement, Mobility and Migration: The State of Evidence, Future Scenarios, Policy Options. Delmi Research Overview 2022:9. Swedish Government Inquiries, The Migration Studies Delegation. (W6, Phase I of Mistra Geopolitics).

Nazareth, A., Shawoo, Z., Verkuijl, C., and van Asselt, H. (2022). The equity dimensions of anti-fossil fuel norms. SEI and Mistra Geopolitics policy report (additional, linked to 3.2.1)

Strindevall, I., Gustafsson, M-T., Dellmuth, L. (2022). Climate Risks and community resilience in the mining sector: How to promote local sustainability? Mistra Geopolitics Mistra Geopolitics report with additional funding from Stockholm University, Sida, the Swedish EPA and UNEP. (WP6, Rapid response)

van Ruijven, B.J., Carlsen, H., Chaturvedi, V., Ebi, K., Fuglestvedt, J., Gasalla, M., Harrison, P.A., Kok, K., Kriegler, E., Leininger, J., Monteith, S., O'Neill, B.C., Pereira, L., Pichs-Madruga, R., Riahi, K., Seneviratne, S., Sillman, J., Takahashi, K., Tebaldi, C., van Vuuren, D.P. (2022). Forum on Scenarios of Climate and Societal Futures: Meeting Report. International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria. (WP4.1).

#### **POLICY BRIEFS / BLOGS**

Boulanin, V., Ovink, C. (August 2022). Civilian AI is already being misused by the bad guys, IEEE spectrum. (4.2)

Broek, E., Kim, K. (August 2022). Leveraging hydropower for Peace, New Security Beat. (4.2)

Buhaug, H., von Uexkull, N. (January 2022). Can we predict climate change impacts on future peace and security?, PRIO Climate & Conflict Blog. (4.3)

Meijer, K.S., Barnhoorn, A. (October 2022). Information challenges for humanitarian response to climate shocks in fragile settings. SIPRI WritePeace blog. (4.4.2)

#### WORKING AND CONFERENCE PAPERS

Gustafsson MT and Schilling-Vacaflor A. The agribusiness, climate adaptation and local water conflicts: Can new transnational approaches contribute to just transformation? Paper presented at the workshop "Facing the Challenges of Climate Change – Latin American Perspectives", at the Nordic Latin American Institute, 17 November 2022, Stockholm University. (1.1.3)

#### **COMPLETED AND FORTHCOMING PHD DISSERTATIONS**

#### Mistra funded

Ahlén, A. (2022). Managing migration in modern welfare states: Essays on the development, causes, and effects of policies regulating family immigration. PhD thesis. Uppsala University, Uppsala.

Eliasson, K. (PhD defence 9 March 2023). Transformations towards Sustainable Food Systems: Pathways, Governance, and Actors in a Swedish and European Union Context. PhD thesis. Linköping University, Linköping.

Lundquist, S. (PhD defence 28 April 2023). Governing the Green Economy Transition: Public Opinion, Political Parties, and Environmental Outcomes. PhD thesis. Stockholm University, Stockholm.

Zhou, J. (2022). Producing food, security and the geopolitical subject. PhD thesis. Department of Thematic Studies – Environmental Change Faculty of Arts and Sciences, Linköping University, Linköping.

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VINCENT BOULANIN Senior Researcher, SIPRI



FREDRIK HEINTZ Professor of Computer Science, Linköping University



FLORIAN KRAMPE Senior Researcher and Director of SIPRI's Climate Change and Risk Programme



MOA PELDÁN CARLSSON Research Assistant, SIPRI



SOMYA JOSHI Head of Division – Global Agendas, Climate and Systems, SEI



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EMILIE BROEK Research Assistant with SIPRI's Climate Change and Risk Programme



FRANCO VACCARINO Lectures in the School of Communication, Journalism and Marketing, Massey University's Manawatū Campus



EBBA MINAS PhD Candidate, Stockholm University

#### RESEARCHERS



TANUSHREE RAO PhD Candidate, Stockholm University



MAXINE LEIS PhD Candidate, Uppsala University



MARIE FRANCISCO PhD Candidate, Linköping University







RICKARD SÖDER PhD Candidate, Stockholm University



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BWALYA CHIBWE Programme Coordinator Linköping University



ELIN LEANDER Research Fellow, SEI

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Mistra Geopolitics examines the dynamics of geopolitics, human security and environmental change. Mistra Geopolitics brings together an interdisciplinary research team of six Swedish consortium partners: Stockholm Environment Institute (SEI), Stockholm International Peace Research Institute (SIPRI), Linköping University, Uppsala University, Stockholm University and Lund University, with two high-profile international research institutes, E3G and adelphi. The research programme gathers stakeholder partners including Swedish government agencies, companies and industry associations. The programme is funded by MISTRA, the Swedish Foundation for Strategic Environmental Research.

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MISTRA GEOPOLITICS Linnégatan 87d SE–115 23 Stockholm info@mistra-geopolitics.se www.mistra-geopolitics.se