



Tagungsbericht

CLON -
CLimate (im)mobility
and cONflict

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Final report of the CLON workshop

CLON - CLimate mobilities and cONflict

The current state of knowledge and avenues for future research and policy

in Potsdam, 14-16 December 2022

Potsdam Institute for Climate Impact Research (PIK)

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Abstract

The interdisciplinary expert workshop CLON took place at the Potsdam Institute for Climate Impact Research (PIK) between 14 and 16 December 2022. The workshop is a part of the larger CLON research project, which aims to summarize the mixed evidence about *when* and *how* climate, mobilities and conflicts are linked. A better understanding of these dynamics is also of an immense political relevance, enabling design of policies that foster security in a changing climate. The three-day interdisciplinary expert workshop gathered researchers across different communities (e.g., methods, fields) working on the climate-mobilities-conflict nexus or parts of it. These communities have been predominantly working in silos hindering a holistic understanding of the dynamics. The workshop further fostered participation of underrepresented groups including female researchers, early career researchers and international researchers. Overall, it provided a productive framework for knowledge exchange enabling scholars across different communities to engage in conversation. The outcomes of the workshop discussions helped to revise evidence emerging from and the research content and design of the CLON project. For instance, the workshop discussions helped to narrow down the scope of the research project, sharpen the main research questions, define particular, topic-specific terminologies as well as further conceptual decisions such as the need to emphasize the role of contextual understanding and knowledge uncertainty. The outcomes of the CLON research project, including the workshop discussions, will be exploited in a form of scientific and non-scientific publications.

1. Point of departure

Slow onset climate change and the related increased frequency and intensity of extreme weather events have already affected human mobilities (IPCC 2022, chapter 16). In the future, the climate mobilities will increase depending on the degree of global warming climate change (Xu et al., 2020, Hoffmann et al. 2021, Thalheimer et al., 2021). Only recently, *quantitative* scholars from climate migration and climate and conflict communities have started to empirically analyze the climate mobilities outcomes, including peace and security (e.g., Ash and Obradovich 2020; Bosetti et al. 2021; Breckner and Sunde 2019; Koubi et al. 2018 and 2021; Petrova 2021), and the mobility outcomes of climate-related conflicts (Abel et al. 2019; Missirian and Schlenker 2017; Schutte et al. 2019). However, the evidence remains mixed (Millock and Withagen, 2022). There is also an ongoing debate in the *qualitative* research on peace and conflict about the role of climate mobilities in the conflict dynamics. This research stream emphasizes the importance of contextuality (e.g., institutional quality, local geography, temporal factors and more), which could help to explain the diverging quantitative findings (Brzoska 2019; Brzoska and Fröhlich, 2016; von Uexkull and Buhaug 2021).

Given the high complexity of and the lack of clarity on the climate-mobilities-conflict nexus, its comprehensive assessment has been widely suggested (Detges et al. 2020; Koubi, 2019; Millock and Withagen 2022, von Uexkull, and Buhaug, 2021). To this end, breaking silos and creating a dialogue between the different communities, integration of the various disciplines and methodological approaches as well as promoting diversity among researchers and practitioners are key and should be fostered (Ide 2017). A better understanding of these dynamics is also of an immense political relevance. It would allow designing and implementing policies that foster climate security of people, including both conflict-sensitive climate adaptation as well as environmental peacebuilding.

2. Objectives

This is where the **CLON research project** steps in. The CLON research project is an interdisciplinary expert assessment to consolidate the existing evidence and knowledge of the climate-mobilities-conflict nexus across different communities working on (parts of) the nexus. It

aims to address the following research question: *When and how are climate, mobilities and conflicts linked?* Overall, the project should identify, in how far climate, mobilities and conflict are linked, including research gaps. This will give a direction to i) outline pathways for future research, and ii) formulate essential policy recommendations based on what we know so far. The gathered knowledge is then evaluated and summarized in scientific publications (see section 6 of this report).

The project has three phases: In *phase 1*, an online survey with a fixed set of questions is conducted with practitioners and scholars about the climate-mobilities-conflict nexus. **The collected information is then evaluated and summarized to serve as an input to all experts in the expert workshop conducted in *phase 2* of the CLON project. This way, the expert workshop serves to validate the findings and revise the research content and design of the online survey for the *phase 3*.** In the *3rd phase*, a revised online survey is conducted with scholars about the climate-mobilities-conflict nexus building on the insights from the CLON workshop.

This three-day interdisciplinary expert workshop intended to bring together researchers working on climate, mobilities and conflicts (or parts of the nexus) across different communities and support a topical exchange and transfer of existing knowledge. It aimed to break the silos gathering a diverse group of scholars in terms of disciplines (e.g., economics, geography, climate sciences, peace, and conflict studies), methods (qualitative researchers and quantitative researchers), gender, level of seniority and geography who work on the nexus or its parts. By inviting researchers who address the topic at different geographical scales, the expert workshop also intended to offer a way to carve out the regional aspect of conflict around human mobilities in a warming climate. In doing so, it intended to systematically expand our understanding from a regional to a global level. By focusing on climate mobilities in the study of conflict, we aimed to enrich the academic debate from a policy perspective towards advancing methods and knowledge.

3. The workshop

The CLON workshop took place at PIK between 14 and 16 December 2022. Since a few invited participants were not able to join in person, the workshop was held in a hybrid format enabling

participants to join via Zoom. The concept of the expert workshop was primarily prepared by the two project leads Dr. Barbora Šedová from the FutureLab Security, Ethnic Conflicts and Migration at PIK and Dr. Lisa Thalheimer from the School of Public and International Affairs at the Princeton University, under the supervision of the leading climate scientist working on climate migration, Professor Michael Oppenheimer from Princeton University. The work has been further supported by the student assistant Ms. Sarah Lohr at PIK before, during and after the workshop. As outlined in the previous section, the workshop pursued two main goals: i) to validate the findings from the *phase 1* of the CLON research project, and ii) to revise the research content and design of the online survey for the *phase 3* of the project.

The first two days of the workshop were dedicated to the first goal. To this end, the structure (blocks) of the workshop mirrored the three guiding themes of the online survey (*phase 1*): i) climate-sensitivity of human mobility drivers, ii) conflict-sensitivity of human mobility drivers, and iii) security implications of human mobility. In each of the three blocks, the facilitators first presented the evidence emerging from the online survey (*phase 1*). This was followed by a series of impulse presentations focusing on a given guiding theme by the participants with the respective expertise in order to elaborate on the plausibility of the evidence emerging from the online survey (*phase 1*). Table 1 provides an overview of the participants by guiding theme they contributed to with a presentation. Afterwards, two slots of small group discussions followed. The first slot focused on the emerging evidence from the online survey, whereby each group developed a brief written perspective on a given guiding theme. The second slot focused on identifying research gaps of a given guiding theme. To this end, each group developed a brief written summary. At the end of each block focusing on one of the three guiding themes, a discussion with all participants followed, where each small group first presented the synthesis of their discussions and then the whole group provided a respective reflection. At the end of days 1 and 2, the facilitators summarized the emerging evidence and provided concluding remarks.

Guiding theme	Participants providing impulse presentations
Climate-sensitivity of human mobility drivers	Helene Benveniste, Roman Hoffmann, Fanny Thornton, A.R. Siders, Jacob Schewe, Kees van der Geest

Conflict-sensitivity of human mobility drivers	Michael Brzoska, Fabien Cottier, Jesus Crespo Cuaresma, Jürgen Scheffran, Himani Upadhyay and Kira Vinke
Security implications of human mobility	Halvard Buhaug, Tobias Ide, Vally Koubi, Kristina Petrova, Nina von Uexkull and Solomon Zena Walelign

Table 1 Overview of participants by their contribution to a given guiding theme based on their expertise

The third day of the workshop lasted only until the lunch break and was dedicated to the second goal of the workshop, i.e., to the revision of the research concept (e.g., guiding themes, research questions) of the whole CLON project based on the discussion of the first two days. The discussions were held in a large group and their outcomes helped to prepare a revised version of the online survey for the *phase 3* of the CLON project. Moreover, the participants discussed the planned outputs in the form of scientific peer-reviewed publications (see section 6).

The expert workshop was further guided by three keynote presentations from renowned social and natural scientists. Prof. Dr. Vally Koubi, (Professor of Economics at University of Bern) has extensive experience in researching the social consequences of climate change. As a director of the Center for Comparative and International Studies (CIS) at ETH Zurich, her research aims at understanding the effects of extreme climate events on migration and conflict mainly in the low- and middle-income countries. In her presentation, she focused on the evidence of climate migration and related security risks. Prof. Dr. Michael Oppenheimer (Albert G. Milbank Professor of Geosciences and International Affairs at the Princeton School of Public and International Affairs and the Department of Geosciences, Princeton University) is a long-time participant in the Intergovernmental Panel on Climate Change (IPCC) and represents the cross-discipline policy angle of the topic climate change, conflict and mobilities. In his keynote presentation, he focused on quantitative climate migration modeling. Dr. Katja Frieler is a leading climate scientist at PIK, where she heads the Research Department 3 "Transformation Pathways". She is IPCC lead author for Chapter 16 on "Key Risks Across Sectors and Regions" in the 6th Assessment Report of Working Group 2. She also leads the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP) and the open climate impact encyclopedia. In her keynote presentation, she focused on the biophysical impacts of climate change and the ISIMIP data.

During each of the three workshop days, coffee breaks were held, and the participants had lunch in the PIK canteen. In addition, the first day ended with a small reception at PIK and the second day with a dinner at the Restaurant Maison Charlotte in Potsdam.

4. Workshop participants

In addition to the project leads (Dr. Thalheimer and Dr. Šedová) and the student assistant (Ms. Lohr), the workshop counted 19 participants from the fields such as peace research, climate change impacts and economics. The participants addressed the relationship between climate, mobilities, and conflict from a variety of disciplinary perspectives (peace and conflict studies, political science, geography, economics, and others), drawing on multiple methodologies (qualitative, theoretical, and quantitative). The research scales of the researchers range from larger scale macro to a more detailed, micro foci. The expert workshop managed to gather a diverse group of researchers in terms of gender, career stage, methods, and affiliation: 8 female researchers (42%), 8 early career academics (42%), 9 scholars using qualitative (47%) methods, 12 (63%) international participants and 13 (68%) participants from international institutions. These inclusion criteria were central to break the existing silos between different communities and more strongly include underrepresented voices. Given the unequal distribution of impacts of climate change and risks of conflict on gender, we particularly sought to have a strong representation of female researchers. Overall, the expert workshop provided a productive framework for knowledge exchange, while offering an opportunity for both qualitative researchers and quantitative researchers from various disciplines to engage in conversation.

5. Summary of workshop discussions and outcomes

Overall, the CLON workshop helped to assess the plausibility of the evidence emerging from *phase 1* of the CLON research project, aiming to understand how far climate, mobilities and conflict are linked. This effort has been largely appreciated by all participants. Yet, several major issues have been identified regarding the emerging evidence from the online survey (*phase 1* of the CLON project) as well as research design. The respondents provided a broad range of

quantifiable responses in the online survey (e.g., on the role of climate in migration dynamics). Based on the discussions, it became clear that the research questions included in the online survey were interpreted differently by the respondents, because of the different interpretation of various terms and partial lack of clarity of the included questions. This has explained the lack of convergence of survey answers. Moreover, the scope of the project with its three guiding themes has been perceived as too broad rendering the research effort hardly manageable. To address these issues, the participants worked together towards, for instance, narrowing down the research scope of the project, formulating a set of overarching research questions and clarifying the terminology and various definitions, e.g., for *conflict*.

First, the participants agreed that the research scope needs to be narrowed down and the overarching research questions sharpened in order to keep the research effort manageable. Originally, the project focused on studying the climate-mobility-conflicts nexus based on the historical evidence. It had three guiding themes: i) climate-sensitivity of human mobility drivers, ii) conflict-sensitivity of human mobility drivers, and iii) security implications of human mobility. The workshop discussions revealed that the focus was too broad and should be sharpened towards studying the role of climate in migration dynamics and the role of climate migration in the conflict dynamics. Moreover, to enhance the projects ‘policy relevance, the focus should not only be on the *past* but also on the *future* dynamics (see Figure 1). Thus, the role of climate-related conflicts as potential migration drivers should not be considered.

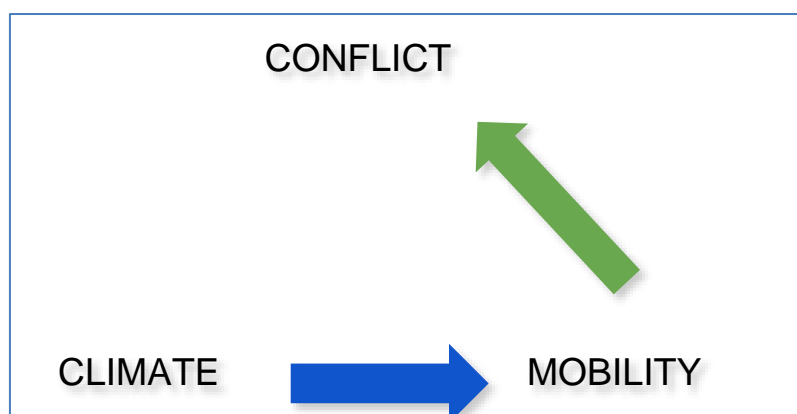


Figure 1: Focus of the CLON research project, incorporating feedback from expert participants

To this end, following two guiding themes and respective research questions were defined:

1. **Climate-migration association:** This theme aims to better understand the role of climate in driving overall past and future migration.
 - *What is the relative importance of migration drivers outlined by Black et al. (2011) framework?*
 - *How relevant have climate-related events been in affecting global migration dynamics in the past?*
 - *How much have climate-related events affected overall migration through the drivers outlined by Black et al. (2011) in the past?*
 - *How will the importance of the migration drivers change in the future (i.e., under 2 °C versus 4 °C warming) only due to climate change impacts?*
 - *How relevant will climate change be in affecting global migration dynamics in the future (i.e., under 2 °C versus 4 °C warming) and through which of the drivers outlined by Black et al. (2011)?*
2. **Climate-related migration-conflict association:** This theme aims to better understand the role of climate-related migration in driving overall past conflicts.
 - *How relevant has climate-related migration been in affecting conflict at the destination in the past?*

Second, the participants jointly decided that it would be necessary to provide a form of glossary in the next phase of the research project (i.e. the online survey as a *phase 3*), to ensure clarity in terminology. Most prominently, there was a broad agreement that it would be more suitable to use the term „climate-related migration“ following the [IOMs 2007 definition](#), rather than the term climate mobilities which might be too broad for the purpose of this project as it includes also non-relevant forms of mobility. Further, the participants decided to follow Mach et al. (2019) in their definition of conflict. Specifically, Mach et al. (2019) use the Uppsala definition of intrastate conflict, yet without specifying a minimum threshold of fatalities, defining conflict as an organized armed conflict within countries (i.e., state-based armed conflict, non-state armed conflict and one-sided violence against civilians). Moreover, the participants also agreed that the climate-related terms should largely follow the definitions by the IPCC and the drivers of migration should be defined following Black et al. (2011).

Third, further conceptual suggestions have been made for the research effort. For instance, it has been suggested that the online survey in *phase 3* should allow the respondents to express the confidence of their answers. Moreover, the respondents should be further allowed to illustrate concrete examples for their responses based on the contexts of their work. To this end, text fields for open responses should be provided.

6. Planned outputs

The gained knowledge from the CLON research project will be distilled in the form of scientific and policy-oriented publications. We plan two types of publications to disseminate the workshop's findings: First, to make the outcomes available to the scientific audience, we plan open access academic journal papers in high-impact interdisciplinary (e.g., *Global Environmental Change*, *PNAS* or *Nature Climate Change*) and/or policy-relevant journals such as *International Migration*. Second, we plan to communicate the findings in a policy brief and a blog post to raise awareness among citizens and decision-makers.

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