



Networking unit “Paradigm shift”

Prof. Dr. Felicitas Hillmann/Sophie Sommerfeld

Pre-conference-process working group

“Climate change – impact on migration”

Berlin, April, 04, 2022



Authors (in alphabetical order): Christiane Fröhlich, Wiwandari Handayani, Johannes Herbeck, Silja Klepp, Joseph Kofi Teye, Robert McLeman, Harald Sterly, Steven Vertovec, Caroline Zickgraf. **Lead:** Felicitas Hillmann

What is a research brief and what does it stand for?

A research brief is less than a policy note and more than an individual expression of research interest. It brings together the knowledge of this working group. It aims to think outside the box and promotes interdisciplinary thought. It delineates future lines of research and explains why these are relevant to society. The researchers worked together on the different paragraphs of the research brief. It first (a) sketches the main ambivalences within the current discourse, (b) gives insight into the current research of the working group, and (c) reflects upon the “to-dos” of future research as the authors envision them.

About the pre-working group, forthcoming webinars

This pre-conference working group is discussing the implications of global climate changes for internal and international migration. Mobility patterns are changing, and environmental change is intertwined with new coping strategies. How does climate change influence migration decisions, migration trajectories, humanitarian needs and political options? The working group is part of the pre-conference process of the Metropolis-Conference, which will be held in September 2022 in Berlin. This first research brief is a first step toward future cooperation among the members of the group and the mostly academic community. In the coming months the working group is organising webinars, which will be open to the public and that relate to the strands of knowledge outlined in this research brief.

Date	Title	Content	Speakers
28.04.2022 13.00 – 14.00 Berlin time	Climate change and migration: Communicating Complexity	As we face current disasters and a near future of impending climate crisis, the complexities of migration will surely be intensified. Simplistic thinking around migration will likely exacerbate negative effects of many sorts. How can we better facilitate greater “complexity thinking” on climate change and migration among policymakers, the media and general public(s)? A growing consensus with the contemporary field of Migration Studies understands that migration phenomena and processes are, rather, marked by <i>complexity</i> .	Prof. Dr. Robert McLeman , Laurier University, Canada Prof. Dr. Steven Vertovec , Max Planck Institute, Göttingen Prof. Dr. Joseph Kofi Teye , University of Ghana, Accra Dr. Harald Sterly , University of Vienna Dr. Caroline Zickgraf , Hugo Observatory, Liège. Commenting: Marie McAuliffe , IOM Dr. Ninna Nyberg Sørensen , DIIS, Copenhagen Chair: Prof. Dr. Felicitas Hillmann (NUPS)

Link: <https://tu-berlin.zoom.us/j/66103376870?pwd=SmhmVHB6WVhDRGFYQXp3VVZ4bnpyZz09>,
Meeting ID: 661 0337 6870, Passcode: 695568

Date	Title	Content	Speakers
31.05.2022 13.00 – 14.00 h Berlin time	Infrastructures, climate change and new mobilities	The development of green and blue infrastructures and technologies for resilience and for the adaptation of the population interrelates with migration in various way, be it resettlement, expulsion, or climate gentrification. Also, infrastructures can help to keep people in place and sometimes even attract newcomers. The webinar sheds light on the interrelation between large infrastructures and mobilities by focussing on coastal areas (Indonesia, Bangladesh, Northern Germany, the Netherlands)	Prof. Dr. Wiwandari Handayani , Universitas Diponegoro (Semarang, Indonesia) Dr. Johannes Herbeck , Artec University of Bremen Prof. Dr. Simon Richter , Pennsylvania University, USA. Dr. Shahnoor Hasan , Delft Institute for Water Education, The Netherlands/Bangladesh Chair: Prof. Dr. Felicitas Hillmann (NUPS)
Link: https://tu-berlin.zoom.us/j/69004093874?pwd=bUhqRFprZlF1dzFpUms1ZHp2QjBkdz09 , Passcode: 496378, Meeting ID: 690 0409 3874			

An introduction: A daunting task or: Speaking about climate change and migration

At present, the debate on climate-related migration seems to be characterized at least by five major ambivalences that frame an open discourse in various ways. First, we lack data on the impact of climate change on the environment, especially so in the regions that are most prone to the ongoing changes. These regions are mostly located in the Global South and the attention of the scientific community has been directed toward them for many years. In consequence, the public discourse that follows the academic debate sees the dangers of climate change for migration mainly located in the countries of the Global South, while the effects of climate change on many places in the Global North are still viewed as exceptional and transient. Beyond a lack of data, we also observe that climate change is only taken seriously and **turned into** action when many people die or must relocate, meaning that slow-onset processes are often overlooked and are certainly underestimated. Even more, wealthy countries have the resources to compensate for climate change with technologies and financial aid for victims of disaster. Here, the numbers of injuries due to climate-change related disaster have even decreased over the past decade. Not only are we missing data on the impact of climate change, we also lack data on migratory movements. One challenge for data collection is the fact that various forms of migration are entangled and, due to new sociotechnical systems, increasingly interrelated.

The lack of data on migration is, second, tied to a missing standardized definition of migration in the international community, making comparison difficult and its corresponding findings unreliable. All research must take into account that most statistical data on migration is produced for specific national purposes and that very often only census data is available.

Third, we lack a normative compass, a standpoint within the highly politicized debate: what are the boundaries of global solidarity, human rights, and responsibilities for ongoing changes? Here, we see a debate evolving that asks for climate justice, seeking to attribute the regional effects of climate change to the countries causing climate change over the past century and to recompensate the damages that have been created in these countries. This approach has been put forward in the past three years or so by the research on world weather attribution. An additional difficulty lays in the fact that worldwide national law only rarely reflects environmental issues – and that nearly all global efforts for governance in this field are non-binding agreements, whose prioritisation come under pressure as soon new challenges emerge. This constellation creates a situation in which there is no global agreement on whose health and wealth should be protected under deteriorating environmental conditions,

and whose institutions should have the decision-making power to set the benchmarks. By now, a broad spectrum of involved NGOs and semi-official players, often coming hand in hand with unclear legitimation processes, has proliferated. This presence of very heterogeneous actors contributes to a cacophonous debate that in some respect ignores common ground and offers little transparency on the motives and purposes of the involved actors.

Fourth, the current discourse is split into disciplinary silos and in need of interdisciplinary discourse. It seems as if the complexity of the relationship between climate change and migration would lead to an even more restrictive discourse with many emerging subfields. However, only in rare cases do technicians speak to social scientists or migration researchers, and climate change research tends not to integrate knowledge on mobilities or immobilities. The other way around, migration researchers are not actively approaching the changes made in the field of technology, nor research results on climate stress and/or climate adaptation. By now, it is especially the area-based analytical approaches that are promising in overcoming this silo-thinking – as presented for a long time by geographers and their tradition of combining social research with natural sciences by concentrating on the spatial aspects of transformation processes. Still, only in exceptional cases has such area-based research become a starting point for more in-depth research across the different disciplines.

Finally, there is little comparative research that tackles the issue of climate change and migration in a methodologically proper way and thus is able to generalize from the findings made in different areas. In addition to comparative research, research on the role of the diaspora or other transnational forms of migrant organisation are yet to come. Researchers only started to consider the importance of migrant-led agency to better understand the impact of climate change on human development in general. In addition to the five ambivalences outlined above, the working group discussed four more specific topics that are already in the focus of some of its members. Those topics are: climate justice and scenarios of a new order, multiple complexities, infrastructures and vulnerabilities, and climate-related mobilities and immobilities.

Literature:

Hillmann, Felicitas (2022): Forschungsstand im Themenfeld „Klimawandel, Migration und Sozialpolitik, Expertise für das DIFIS, online available:

Hillmann, F., M. Pahl, H. Sterly und B. Rafflenbeul (eds.) (2016): Environmental Change, adaptation and Migration – bringing in the region, Ed. MacMillan/Palgrave.

Supported by:



Gefördert durch:



Climate justice, scenarios of new order

The topic of migration and environmental change is deeply rooted in discourses on a spectrum oscillating between a classification of migration as part of “loss and damages” (see Cancun agreement) or as adaptation strategies based on the right to free movement. These different understandings indicate that all discourses about climate change contain a highly politicized dimension. On this spectrum, research and policy discourse are moving between alarmist and securitizing perspectives on the one hand, and reductionist and depoliticized views on the other. For example, from a Eurocentric perspective climate-related migration can be framed as a threat to European security, thereby provoking responses that work in a logic of law and order. Only by exception is the rhetorical powerplay underlying climate negotiations and climate policymaking on the local, national, and international scale, discussed adequately.

Within this context, human mobility has attracted more and more attention in recent years, as climate change is understood to lead to an increase in climate-related migration, especially in conflict-prone areas such as East Africa and Syria. Generally, the labels that are given to people on the move (climate refugees, climate migrants, irregular, etc.) are pivotal for the governance of migration. At times the varying terminology also creates the illusion of fixed categories, which veils the complex and fluid situation and can contribute to a victimising perspective on the issue. What is more, such terminology also indicates a series of “second-order effects” (Klepp & Fröhlich 2020). For example, new configurations of North-South interactions and international cooperation projects are mirrored in new tools of governance that recreate inequalities in different world regions. As a consequence we see power-laden glocal assemblages of climate action arising, with a diverse range of state and non-state actors producing and distributing knowledge according to their interests.

What follows are questions about climate justice, i.e., effective ways of addressing the root causes of climate change and the responsibilities which come with progressing global warming and related migratory movements. This also includes questions linked to the governance of mobilities. Moreover, the framing of migration as “adaptation”, which is at its core a discursive move aimed towards a more migration-friendly approach, often ignores border realities for global migration and puts the onus on the individual to just “manage their situation better” – as if climate change is a temporary difficulty to overcome – without accounting for different positionalities and intersectional vulnerabilities. Local, regional, and global political realities such as borders should be integrated more closely into the discourse and transparent climate change adaptation strategies should be more clearly emphasized. What is needed here is a more holistic and thus interdisciplinary perspective on climate migration governance that enables us to integrate different scales of action and/or conflict, as well as different languages, vulnerabilities, and genders into our research framework. What does the current focus on mobility and migration reveal, and what does it hide?

Literature:

Klepp, S. & H. Fünfgeld (2021): Tackling knowledge and power: an environmental justice perspective on climate change adaptation in Kiribati, *Climate and Development*, DOI: 10.1080/17565529.2021.1984866

Klepp, S. and C. Fröhlich (2020): Migration and Conflict in a Global Warming Era: A Political Understanding of Climate Change. In: *Social Sciences*.

Fröhlich, C. (2020). Drought, flight, conflict: "climate migration" as a driver for conflict? In M. Brzoska, & J. Scheffran (Eds.), *Climate Change, Security Risks, and Violent Conflicts: Essays from Integrated Climate Research in Hamburg* (pp. 175-193). Hamburg: Hamburg University Press. <https://doi.org/10.15460/HUP.208>

Climate change and migration: Communicating Complexity

The science surrounding climate change and its role in triggering and shaping various kinds of EMD (environmental migration and displacement) is very advanced and has, to date, produced a massive volume of literature. Policy debates around future scenarios of climate change and migration are already prolific within forums such as the UN Network on Migration (migrationnetwork.un.org) and Mayors Migration Council (www.mayorsmigrationcouncil.org/), as well as NGOs such as Climate & Migration Coalition (climatemigration.org.uk) and Climate Refugees (www.climate-refugees.org).

This entanglement of the debate with strongly policy-oriented players impacts the way we speak and think about the topic, and we must thus consider the ways in which climate change and migration are framed and understood within the public(s) of political discourse, media, social media, and public debates. This is, after all, a big part of what the International Metropolis “project” is all about: linking research, policy, and public understanding of migration.

Within various public representations, the idea of migration is generally considered to be rather uni-causal (it is widely conceived as a simplistic push-pull trade-off in which wage differentials or poverty lead to “economic migration”, while conflict and oppression lead to “forced migration”), uni-processual (seen especially as large numbers of people physically crossing borders, often “illegally”), and with uni-outcomes measured on a kind of singular scale with “integration” as its goal.

A growing consensus with the contemporary field of Migration Studies understands that migration phenomena and processes are, rather, marked by *complexity*. They are *multi-causal* (combining and compounding economic, political, cultural, social, demographic and environmental drivers), *multi-processual* (with various phases, types, and categories of movement variously “sorting” people based on an array of characteristics including gender, age, skills, national origins, ethnicities) and with *multi-outcomes* (recognizing that there are numerous possible pathways, mixed modes, and types of “integration” that a migrant might follow, each depending on an intersection of factors). Multiple kinds of feedback, adaptation, thresholds, degrees of human agency, and interventions (including policy) at each point may lead to uncertain dynamics and non-linear trajectories. In this way, also, “migration is *multi-directional*: that is, entirely different and opposite migration responses may occur in response to similar types of hazard, or even a single hazard event” (McLeman 2021:24). Especially as we face current disasters and a near future of impending climate crisis, the complexities of migration will surely be intensified. Simplistic thinking around migration will likely exacerbate negative effects of many sorts. How can we better facilitate greater “complexity thinking” on climate change and migration among policymakers, the media and general public(s)? We may not be able to offer lasting answers ourselves, but might use the Berlin conference to kick off a wider discussion of this question.

Literature

McLeman, Robert, David Wrathall, Elisabeth Gilmore, Philip Thornton, Helen Adams and François Gemenne (2021): Conceptual framing to link climate risk assessments and climate-migration scholarship, *Climatic Change* (2021) 165: 24, <https://doi.org/10.1007/s10584-021-03056-6>.

McLeman, Robert (2018): Thresholds in climate migration. In: *Population and Environment*, 39:319–338 <https://doi.org/10.1007/s11111-017-0290-2>

McLeman, R. and Gemenne, F., 2018. Environmental migration research: Evolution and current state of the science. In *Routledge handbook of environmental displacement and migration* (pp. 3-16). Routledge.

Vertovec, Steven (2020): The two cheers for migration studies. In: *Comparative Migration Studies* (2020) 8:38 <https://doi.org/10.1186/s40878-020-00195-0>.

Vertovec, Steven (2021): The social organization of difference, *Ethnic and Racial Studies*, 44:8, 1273-1295, DOI: 10.1080/01419870.2021.1884733

Hillmann, F., R. K. Okine und G. Borri (2020): “Because migration begins from the villages”: environmental change within the narrations of the Ewe-diaspora, *Ethnic and Racial Studies*, 43:16, 39-56, DOI: 10.1080/01419870.2019.166700.

Infrastructures and vulnerabilities

When considering the effects of climate change on migration, we must integrate the impact of material and immaterial infrastructures into our research. Migration and mobility are dependent on technological infrastructure (airports, train stations, connectivity) as well as on knowledge circuits (oral and written communication, schooling systems, academic and expert knowledge). At the same time, we observe a co-production of immaterial infrastructures (such as the discursive processes of constructing and shaping social realities) and material infrastructures related to (or justified by) climate change adaptation (such as dams, sea defences and other technologies of environmental control). Blueprints of such climate-related policies undergo complex trajectories of translation and contribute to what is summarized by scholars as “epistemic mobility”, i.e., the transfer of knowledge from one meaning-making system into another. Today, in many places around the world coastal adaptation processes are characterized by such epistemic mobilities, and the translocal transforming of adaptation policies and practises has become part of SDGs and a green future agenda. The development of green and blue infrastructures and technologies for resilience as well as adaptation of the population interrelates with migration in various way, be it resettlement, expulsion, or climate gentrification. Also, infrastructures can help to keep people in place and in some cases even attract newcomers. For example, coastlines in South-East Asia have been turned into interventionist spaces for hydro-engineering experimentation and, also, for new profit frontiers. These developments are nurtured by visions such as ‘blue urbanism’ as an answer to predicted sea-level rise, extreme weather events, coastal erosion, salinization, and land subsidence. Often, the adopted planning perspective implies a flattening of prevalent socio-cultural differentiation in land-ocean urban imaginaries and ignores local knowledge and livelihood needs. In consequence, spatial planning is in the focus when it comes to the challenges of climate change adaption strategies and their respective local situations concerning population movements. Local knowledge and strategies thus become crucial when it comes to coping with climate-related vulnerabilities.

Literature

Handayani, W., Rudiarto, I., Setyono, J. S., Chigbu, U. E., & Sukmawati, A. M. A. (2017). Vulnerability assessment: A comparison of three different city sizes in the coastal area of Central Java, Indonesia. *Advances in Climate Change Research*, 8(4), 286-296.

Handayani, W., Chigbu, U. E., Rudiarto, I., & Putri, I. H. S. (2020). Urbanization and Increasing Flood Risk in the Northern Coast of Central Java—Indonesia: An Assessment towards Better Land Use Policy and Flood Management. *Land*, 9(10), 343.

Handayani, W., & Kumalasari, N. R. (2015). Migration as future adaptive capacity: the case of Java—Indonesia. In *Environmental Change, Adaptation and Migration* (pp. 117-138). Palgrave Macmillan, London.

Laeni, N., Ovink, H., Busscher, T., Handayani, W., & Brink, M. V. D. (2021). A transformative process for urban climate resilience: The case of Water as Leverage Resilient Cities Asia in Semarang, Indonesia. In *Climate Resilient Urban Areas* (pp. 155-173). Palgrave Macmillan, Cham.

Siriwardane-de Zoysa, R. & J. Herbeck (2018): Futuring 'Blue Urbanisms': Pluralising the Littoral in Urban South-east Asia. ISA-E-symposium for sociology.

Hornidge, A. K., J. Herbeck, R. Siriwardane-de Zoysa und M. Flitner (2020): Epistemic Mobilities: Following Sea-Level Change Adaptation Practices in Southeast Asian Cities. In: American Behavioral Scientist, 2020, Vol. 64(10) 1497–1511.

Rudiarto, I., J. S. Setyono and W. Handayani (2018): A Regional Perspective on Urbanization and Climate-Related Disasters in the Northern Coastal. In: Land. Region of Central Java, Indonesia

Hillmann, F., Handayani, W. und B. Septiarani (2020): Featuring local urban mutations through regeneration – the case of resilient Semarang. In: TOPOS magazine for landscape architecture and Urban Design, Georg-Verlag, München, 2020, S. 58 - 63.

Climate related mobilities and immobilities– featuring a relational approach, focusing on sustainability

For decades, academia has criticized media and policymakers for oversimplified narratives of environment-related migration. However, it is also research and science itself that has contributed to the reproduction of such simplifications, offering binary conceptualizations and readings. Mobility in the face of environmental change tends to be portrayed either as an indicator of loss and failed adaptation (“climate refugees”), or as part of successful adaptation strategies (“migration as adaptation”). Similar dichotomous framings exist for immobilities: Those who stay in place are either seen as successful examples of adaptation *in situ* or as most vulnerable to the adverse effects of climate change and ‘trapped’ in place. Rarely is the analytical link between local sustainability and the manifold organisation of livelihoods taken into consideration.

As the debate advances from such simplistic notions, a number of interesting and fruitful research and policy avenues have opened up. We see four major thematic pathways. First, greater attention is paid to reasons and consequences of environmental mobility, with an increasing focus on the socially and spatially differentiated constellations of needs, aspirations, and capabilities of both mobility and immobility. Research acknowledges the multicausality of migration decisions and considers the impacts of climate change on livelihoods and its direct and indirect consequences for mobility patterns. The consequences of environmental mobility and immobility include the way livelihoods rely on complex and entangled forms of mobilities to ensure their current and future existence. Sustainability aspects of migration and mobility in different dimensions (economic, social, health; environmental, etc.) receive growing attention, for example the importance of long-term environmental resources for the sustainability of households and the role of extractivist practises such as mining.

Second, the spatial and temporal dimensions of mobility and immobility do matter, and there is more emphasis on the varying temporal dimensions of different forms of mobility and migration. For example, environmental change affects mobility on different spatio-temporal scales – linking slow- and sudden-onset hazards and short- or long-term and -distance mobility in context-specific ways. Migration is managed through the nation state in policies that affect different regions within countries, but at

the same time is shaped by individual decisions and experiences, collective action, and community resilience.

The third thematic avenue is of connections and disconnections. On the one hand, this is about how people and places are connected through migration and mobilities and how that affects the scope of their agency, as well as their wellbeing, vulnerability, and adaptation actions. On the other hand, it is about the multiple embeddings and moorings of people at places at origins, places of arrival and in spaces of transit. For example, brokerage networks and existing constraint situations come into focus. In the case of Ghana for example, urban brokers are pivotal for the material and emotional support of fresh migrants arriving from rural areas to the cities. Unequal and power laden networks do not only provide opportunities, but can also lay the ground for exploitive work situations in urban labour markets or can harm livelihoods as they render communities dependent on remittances.

Finally, the political economy of freedom and choice to move and to stay have come into focus, and the role played by different socio-economic endowments and intersectional inequalities (e.g., wealth, income, social status). Power differentials between actors, from the local to the global level, shape these inequalities and the implementation of the SDGs depends upon such structures. These power relations form the root causes of vulnerabilities that underlie many of the structures and dynamics of the first three points and are decisive to whether people become or stay mobile or immobile in the face of environmental change, and how this in turn plays out for them.

Literature

Mantey, P.P.W. and J.K.Teye (2021): Forest Dependence among Rural Households in Southern Ghana: Implications for Conservation and Poverty Reduction. In: Ghana Journal of Geography Vol. 13 (1), 2021 pages 1-24. <https://dx.doi.org/10.4314/gjg.v13i1.1>

Deshingkar, P., M. Awumbila and J. K. Teye (2019): Victims of trafficking and modern slavery or agents of change? Migrants, brokers, and the state in Ghana and Myanmar. In: Journal of the British Academy, 7(s1), 77–106. DOI <https://doi.org/10.5871/jba/007s1.077>

Zickgraf, C. (2021): Climate change, slow onset events and human mobility: reviewing the evidence. In: Environmental sustainability. <https://doi.org/10.1016/j.cosust.2020.11.007>

Franco Gavonel, M., Neil Adger, W. Safra de Campos, R., Boyd, E., Carr, E., Fa' bos, A., Fransen, S., Jolivet, D., Zickgraf, C., Codjoe, S., Abu, M. and T. Siddiqui (2021) The migration-sustainability paradox: transformations in mobile worlds. In: Environmental Sustainability 2021, 49:98–109 <https://doi.org/10.1016/j.cosust.2021.03.013>.

Durand-Delacré, D., Bettini, G., Nash, S. L., Sterly, H., Gioli, G., Hut, E., Boas, I., Farbotko, C., Sakdapolrak, P., de Bruijn, M., Furlong, B. T., van der Geest, K., Lietaer, S., & Hulme, M. (2021). Climate Migration is About People, not Numbers. in S. Böhm, & S. Sullivan (Hrsg.), Negotiating Climate Change in Crisis (S. 63-81). Open Book Publishers. books.openbookpublishers.com/10.11647/obp.0265.06.pdf

Ziegelmayr, U., Herbeck, J. und F. Hillmann (2020): Environmental Studies and Migration. Sage Handbook on International Migration. Hg. Von Christine Inglis, Wei Li and Binod Khadria, Sage Publications, S. 88 – 107.

- The here presented views express the opinion of the authors, responsible in the sense of the law is the Networking Unit Paradigm Shift at TU Berlin -