



## RESEARCH CONFERENCES

ESF-ZiF-Bielefeld Conference

### **Environmental Change and Migration: From Vulnerabilities to Capabilities**

**5-9 December 2010**

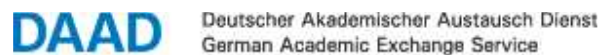
**Best Western Hotel Bad Salzuflen, Germany**

**Chaired by Prof. Thomas Faist, Bielefeld University, DE**



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## Conference Highlights

*Please provide a brief summary of the conference and its highlights in non-specialist terms (especially for highly technical subjects) for communication and publicity purposes. (ca. 400-500 words)*

The conference focused on how environmental change impacts the nexus between vulnerabilities on the one hand and capabilities on the other hand, and how this relationship affects mobility patterns. It served as a platform to facilitate intensive discussions on open questions and methodological challenges. The researchers invited represented a wide range of disciplines, such as sociology, ethnology, social anthropology, migration, conflict, cultural, gender and development studies, geography, international relations, political science, international law, geology, and climate and environmental science. The conference brought together junior and senior scientists from all over the world, as well as practitioners from sectors concerned with environmental change and migration, such as experts in development cooperation and members of conflict mediation NGOs and concerned international organisations. Jointly they participated in discussions of research results, and considered possible consequences for policy formulation and the role of scientists within current political processes.

The conference drew an exceptional range of international scholars and assembled participants from ten European states, including Russia, from seven Asian countries, including Central, South, and South-East Asia, and from six African states, as well as four nations from North and Central America, and Australia. Apart from Germans (14), Ugandans (9) were the most well represented group. In total, 71 persons participated. Of those 44 percent were female, and there were slightly more junior than senior researchers. In a nutshell, the conference was well balanced in terms of geographic origin, gender, and academic status of the participants. The event took place in a truly interdisciplinary and a highly open and constructive atmosphere. All of the presenters took great care to communicate in a language accessible for those from other disciplines.

The conference organizers chose to include all kinds of environmental change and types of migration. However, climate change figured prominently among the advanced submissions to the conference. Therefore, it was a stated aim of the organizers to bring together the perspectives from climate change, vulnerability, and migration studies, and to draw conclusions about the political implications of the knowledge scientists currently have available. Toward that goal, the conference was structured along three pillars, each of which was dealt with at one of the three days of the conference. The first day concentrated on climate change and the vulnerability of certain regions and groups. It covered case studies as well as different approaches for making climate change projections and assessing the likelihood of vulnerability. Papers presented on the second day focused on empirical research on environmentally induced migration from a vulnerabilities perspective, but acknowledged the occasionally strong elements of capability within it. In this way, the aim was to learn about approaches and options to support existing capabilities. The third day was concerned with the opportunities and pitfalls of policy options in dealing with the future challenge of imminent displacement due to climate and environmental change, and with the analysis of dominant public discourses within the field.

Worth mentioning also is the excursion to the technical centre of Schüco, an internationally leading company for the development of renewable energy sources and energy saving components for building construction. Although participants were very impressed by the high energy efficiency, the three guided groups confronted their guides with the question of whether the whole life cycle of those products is sustainable – which is unfortunately (and commonly) not the case.

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# Scientific Report

## Executive Summary

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*(2 pages max)*

The conference focused on how environmental change impacts the interplay between vulnerabilities on the one hand and capabilities on the other hand, and how this relationship affects geographical mobility patterns. It served as a platform to facilitate intensive discussions on open questions and methodological challenges. Invited researchers represented a wide range of disciplines and fields, such as sociology, political science, ethnology, migration, conflict, cultural, gender and development studies, geography, international relations, international law, geology, and climate and environmental science. The conference brought together junior and senior scientists from all over the world, as well as practitioners from all sectors concerned with environmental change and migration, such as development experts, members of conflict mediation NGOs and concerned international organisations. Jointly they participated in discussions of research results, and considered possible consequences for policy formulation and the role of scientists within these political processes. In order to facilitate discussion the conference organizers chose to include all kinds of environmental changes connected to migration. However, as climate change nowadays is a matter of urgent concern to many societies, and as the conference date overlapped with the COP-16 in Cancun, climate change figured prominently in the deliberations. The programme was structured along three pillars, each of which was dealt with on each one of the three conference days.

The focus of the **first** day was on environmental and climate change and on methods for assessing and anticipating such change as well as its impact on vulnerability of affected communities and groups, exemplified with selected case studies. Presentations included, for example, talks on (1) the application of the geographic information system (GIS) to assess the changing quality of soils and the qualification of an area for relocation measures in terms of environmental security; (2) an introduction to the functioning and the advantages of regional climate modelling for users in need for detailed regional climate change information, including up-to-date information on projections; and (3) qualitative and quantitative approaches to assessing social vulnerability to environmental and climate change. The keynote and the final input of the day was intended to draw an explicit link between the issues of migration and climate change by presenting a new approach to the migration-climate nexus and to the modelling of climate change related migration decisions. But unfortunately, due to the unusually heavy snow falls in Europe and particularly in the UK, presenters were delayed and the two inputs had to be postponed to the end of the day and to the next day respectively.

Papers presented on the **second** day focused on empirical research on environmentally induced migration. The last panel in particular strove to overcome the dominant perspective of migration as an expression of vulnerability. It shifted the focus to aspects of capability and the enabling socio-political structures which play a role for mobility in times of environmental crisis. The empirical examples covered all continents as well as different modes of mobility and forced migration. Noteworthy, for example, were studies on (1) the interrelation between the environment, out- and in-migration, and ostensibly stable population growth in remote areas of Canada; (2) decreasing mobility of pastoralists and their herds in Ethiopia; and (3) the role of governmental policies for rural-to-urban migration after the catastrophic fires in Russia. The second day also included an executive summary and conclusions of the EACH-FOR results (Environmental Change and Forced Migration Scenarios, financed by EU-FP6). As intriguing as each single case study was, however, it also became obvious that research on the environment/climate-migration nexus still lacks

systematic methodological tools. What is more, the approaches used are usually far more influenced by methodologies of vulnerability assessment than by the specific perspectives and insights of migration studies. The widely used terminology of circular, short-, or long-term migration, and sudden or slow on-set environmental changes, cannot substitute for the much-needed integration of substantive insights from migration studies.

The focus of the **third** day was clearly on the political dimensions and challenges of environmentally induced migration. This day was particularly captivating with respect to (1) the likely challenges if climate change and imminent displacement are proceeding quasi-simultaneously. The analyses presented included the search for policy frames that guarantee carefully decided, planned and implemented resettlement measures (the case of the Carteret Islands, for example, showed the associated difficulties in detail), or the advancement of existing law to allow for dealing humanely with persons already displaced. (2) The discussion of policies was complemented by reflections on the political and scientific discourses which currently frame the issue in the public sphere, and contributors expressed concern that the securitization of the debate may reinforce public policies driven by fear and resentment which are certainly not in the interest of those affected.

Questions that arose continually and throughout the conference included access to central resources, in particular to land, and the implementation and enforcement of human rights as a means to guard against societal conditions that undermine peoples' capacities to respond to climate change and other environmental, as well as socioeconomic or political, challenges. There was broad consensus that the politics and implementation of human rights have a major role in crafting socio-political solutions that lessen vulnerabilities and enhance capabilities in cases of environmentally enforced migration, and that we have to go beyond purely technical adaptation measures and humanitarian aid. Several contributors emphasized that much policy analysis already exists, but that the analysis of the politics of climate change and migration has still to be strengthened.

Such insights, however, apply not only to displacement, resettlement, and other forms of forced migration, but also to any kind of marginalization and impoverishment. More work has to be done to approach the issue of climate/environmental change more systematically from the vantage point of migration studies. The use of typologies, such as "circular" vs. "long-term", or "voluntary" vs. "impelled" and "forced" migration, falls short of constituting a specific migration theory-based approach to the subject. Until now there have been only a few attempts to develop such a perspective. One way ahead is to consider more explicitly macro-level phenomena, i.e., the impact of climate/environmental change on existing migration flows and their underlying conditions. The other is to look at the micro-level, i.e., at migration decisions with regard to climate/environmental change and approaches to modelling them. Attempts to both approaches were presented. But what has not yet been studied is the nexus to the meso-level, i.e., the role of social networks and intermediate institutions in facilitating climate/environmentally induced migration and the degree to which those social structures and relations are vulnerable to climate/environmental change.

## Scientific Content of the Conference

(1 page min.)

- Summary of the conference sessions focusing on the scientific highlights
- Assessment of the results and their potential impact on future research or applications

Franz **Mauelshagen** from the Institute for Advanced Study in the Humanities (KWI, Essen/Germany) opened the conference on the evening of December 5, 2010, with a welcome address he had prepared with Claus **Leggewie**. He presented his and his co-author's reflections on the human dimensions of global environmental change and the historical antecedents of

environmental migration. In a broad historical sweep covering the past 1000 years, he showed how previous civilizations have encountered severe environmental challenges which they have co-produced themselves. One example discussed at length was that of the Mayans whose own modes of agricultural production may have led to a depletion of soils and water supplies. The next day was opened with a presentation by the chair of the conference, Thomas **Faist** from Bielefeld University, who introduced some central concepts – such as vulnerabilities, capabilities, and social inequalities – as well as thoughts on “double uncertainties” concerning quantitative estimates of climate-induced migration due to the combined uncertainties of climate change projections and predictions of migration flows. He reminded the participants of the problematic issue of climate determinism, which occludes the active role of human beings in interacting with the environment. Following these introductory thoughts, Thomas Faist developed a framework of the “transnational social question”, suggesting that the impacts of global climate change are expected to be unequally distributed across socioeconomic groups as well as across geographical and political spaces. Another key element of his presentation focused on the delimitation of migration, mobility, and immobility as well as on the question around the necessity for a new typology of environmentally-induced migration. He emphasized that the field of migration studies has developed very sophisticated concepts and methodologies to deal with factors endogenous to migration flows, for instance chain migration through migrant networks, and the principle of cumulative causation, but has paid less attention to how exogenous factors like environmental degradation may strengthen or alter migration flows. This state of the art poses a challenge for further research. In a final remark, Thomas Faist pointed out that the main objective of research in this field – and of the ESF conference – should be to arrive at explanations and understandings of social mechanisms underlying actually occurring environmentally-related migratory processes. The conference was structured along three pillars, dealt with on each of the three conference days. The first day concentrated on climate change and the vulnerability of certain regions and groups. It covered case studies as well as different approaches to making climate change projections and assessing vulnerability to climate change. The second day focused on empirical studies of environmentally induced migration, and struck a balance between examining vulnerabilities and acknowledging the occasionally strong elements of capability expressed in migration, and ultimately learning about approaches and options to support those capabilities. The third day was concerned with the opportunities and pitfalls of policy options dealing with the future challenge of imminent displacement due to climate and environmental change, and with the analysis of the dominant public and politicized discourses within the field. The conference had a total of eight panels, three panels on the first and second days, and two panels on the last day.

Panel 1 “The Challenges of Environmental Change to Livelihoods“ revolved around the question of how climate change, disasters, and environmental degradation are affecting livelihoods at the local and regional levels. Focusing on the cases of Mongolia and Jordan, Ines **Dombrowski** from the German Development Institute (Bonn) made the case that the impacts of climate change fall disproportionately on poor countries and poor communities which are also the least responsible for it. In both cases it became obvious that societal changes and conditions in the regions themselves contribute to increased vulnerability. For example, in Mongolia livestock ownership was privatized but no changes in landownership occurred. Privatization under continuing communal land ownership led to overgrazing. In Jordan, similar vulnerability was experienced because of extremely high water prices for the poor resulting from lack of access to the public water grid. In sum, social conditions, such as the provision of collective or public goods, may reinforce vulnerabilities for certain population categories and eventually result in disasters. Only sustainable livelihoods may increase resilience and capacity to cope with the impacts of climate change. Dombrowski concluded that mitigation needs to be addressed at the global level, while at the local

level developing increased resilience through improved livelihoods is necessary. Maria Zita **Butardo-Toribio** (Development Alternative Inc., Philippines) posed the question of how the constraints of poverty, landlessness, and livelihood affected communities' resilience to climate change. Based on a field study in Bayawan City she presented a range of adaptation measures, such as individual and organized relocation to inland areas, (mainly temporal) migration of family members, income diversification, but also involvement in environmental projects at the local level. She concluded that there are variations in vulnerability caused by socioeconomic conditions and that good governance is essential to arrive at adequate responses to climate change. Likewise, Nirmal **Kumar** from Kathmandu University (Nepal) pointed out differences in vulnerability due to social status, especially in the case of women and low-caste groups, such as the *dalits*. Formal and informal institutional barriers, as well as social exclusion, increase their vulnerability to the impacts of climate change, and this also leads to higher food insecurity. Caste and gender are also major determinants in access to land ownership and to market places (with women and *dalits* usually excluded from both), which increases vulnerability to reduced harvest yields. Furthermore, residential segregation pushes low-caste groups into insecure locations. Finally, Raiyan **Al-Mansur** from Khulna University (Bangladesh) presented an assessment of social protection as a form of enhancing capabilities to reduce climate change vulnerabilities. He pointed out that existing programmes lack long-term adaptive elements and that transformative measures, based on human rights, are missing. Initiatives should also include employment opportunities for environmental migrants and displaced persons. The general discussion that followed raised the important point that definitions of vulnerability are inconsistent within the IPCC Report (2007) – which defines vulnerability simply as exposure to natural hazards but does not point out its socioeconomic impacts – and that there is a difference between coping capacity and adaptive capacity, where coping is in the immediate aftermath while adaptation is rather a long-term process. Other remarks focused on the issue of land tenure. Land tenure can severely impact vulnerability if lack of access undermines options for subsistence and small scale farming for the poor. Climate change mitigation might even intensify that problem due to evictions for the sake of biofuel crops, which equally leads to displacement and migration. Contributors also argued that private land ownership may hinder people from adapting by encouraging movement to more favourable places. However, such attachment to the land, particularly in many developing countries, goes beyond its market value and resource function and often has a non-monetary, spiritual dimension. Finally the chair of the session, Gudrun Lachenmann, remarked that the transnational dimension has to be integrated more systematically into the debate; for example, by taking into account the cross-border resource flows induced by international migrants.

Panel 3 “Assessing Vulnerabilities” was rescheduled and followed directly upon Panel 1 because some panellists of Panel 2 were delayed in arriving. The change in schedule made sense because this panel was also concerned with vulnerabilities. Reporting the results of a study on forest dependent communities in the North-East Region (NER) of India, Neha **Pahuja** from the Energy and Resources Institute (New Delhi) showed that the forest is the most vulnerable ecosystem in that region. NER has 70 percent forest cover of which 30 percent is under pressure, due mainly to exceptionally high population growth (21,5%), and caused primarily by in-migration from Bangladesh. This immigration has its roots in political unrest in Bangladesh. A nexus between that unrest and climate change is not clear. However, climate change in the sending area as well as in NER could potentially be an additional stressor, even though no impacts on the latter have yet been observed. An interesting point of the presentation was the fact that regional adaptation strategies include the development of a repository of indigenous knowledge, emphasizing a livelihood focus, and recognizing synergies with conservation and developmental policies. In the following presentation Tanvir **Uddin** from the University of New South Wales (Australia) reported

on his qualitative study of the 1998 floods and the interaction between household characteristics and flood exposure in Bangladesh. The sampled data sets thereby covered several years after the floods. The results showed that household characteristics have significant influence on short- or long-term capacities, and on the ability to cope with and recover from those floods. In particular, the population's average level of education seems to be decisive for long-term recovery. From this finding it would follow that the design of dedicated adaptation/development programmes have to consider the short- and long-term effects of certain instruments. For example, high micro credit availability may lead to high rates of indebtedness. Focusing on the African least developed countries, Kenel **Delusca** from the University of Montreal presented an overview on vulnerability and adaptation assessments carried out for the United Nations Framework Convention on Climate Change (UNFCCC), showing that all analyzed countries are using a top-down approach, bypassing civil society. He highlighted the importance of including stakeholders in the process in order to convey what is important to them and to ensure their positions are taken into account in the national communications of those countries to the UNFCCC. The general discussion focused on several research gaps: who is vulnerable, what makes certain categories vulnerable, and what explains the level of vulnerability? Different time scales and frequency of hazards should equally be factored in when reactions to such hazards are studied. In addition, the question was raised as to how to disaggregate data within households to consider differences in vulnerability between household members.

The third panel (Panel 2 "Climate Change and Modelling: Challenges and Uncertainties") had a methodological orientation and dealt with different kinds of projections and modelling techniques which provide data frequently used in assessments of vulnerability to climate and environmental change. The panel started with a presentation by Daniela **Jacob** from the Max-Planck-Institute for Meteorology (Hamburg), who gave an overview on climate modelling and its inherent problems, such as the non-linearity of climate change and the limits of taking into account anthropogenic (e.g., future emissions), natural (e.g., major volcanic disruptions), and demographic factors or complex topographic characteristics and changing land-use. Predictions of climate change are thus not possible. Climate models are methods of projections in the sense of "if... then..." statements. The uncertainties of climate change projections can be reduced by clustering multiple models. The internal variability of the models serves as an indicator for the robustness of a projection, i.e., the larger, the less robust. Even though there is a high degree of variability between models, there is no doubt that the climate is changing even more rapidly than was assumed some years ago. Daniela Jacob noted the importance of regional models as these include more precise data than global models. For highly industrialized countries resolutions of 10x10km are now on offer; for Africa 15x15km resolution are partially available. In contrast, global models offer 100x100km resolutions. Vahagn **Muradyan** from Yerevan State University (Armenia) used the geographic information system (GIS) to model the landscape conditions of the mountains of Syunik marz in the southern Caucasus. In his view, the generated maps may help the authorities to relocate people from areas with bad ecological conditions due to mining and land slides to those with better conditions. The presentation by Christopher **Smith**, co-authored with Dominic Kniveton (University of Sussex) had to be postponed to panel 6 because of his weather induced delay. As it also dealt with modelling it is nevertheless included here. In contrast and thus quite complementary to Daniela Jacob's paper, his talk was not about the modelling of climate or environmental conditions, but about modelling human behaviour. Using agent-based modelling for a case study on climate change induced migration in Burkina Faso, this work in progress explored the factors contributing to decision-making processes of migrants which could then be used to develop projections. This approach faces some problems in common with climate modelling such as the non-linearity of the process and the difficulties of including intervening factors, in this case

motivations for decisions to migrate other than climate change. The general discussion pointed to a central problem: There is a difference between the time scales of relatively short-term migration dynamics and long-term climate change, making it difficult to bring the two together.

After these presentations on modelling, Kerstin **Schmidt-Verkerk** from Sussex University (UK) delivered the keynote speech, replacing Richard Black (co-author) due to technical problems with the programmed teleconference that was planned as a substitute for his physical attendance (which was prevented by the weather, too). In the first part of her presentation, Kerstin Schmidt-Verkerk reminded us that even though there are an increasing number of studies on the nexus between climate change and migration, many of these lack a solid empirical basis. She stated that the approaches most in use are conceptually flawed, as most look at existing migration patterns and try to match these with existing projections on climate and/or environmental change. Yet distances, destinations, and directions, as well as capabilities and alternatives to migration, have to be taken into account, too. According to Schmidt-Verkerk, an alternative approach should explore the sensitivity of existing migration flows to climate change. In the ensuing debate, several issues were raised, such as the impossibility of quantifying environmental migration related to climate change and the importance of including the economic context in the global South. Some participants argued that we do not know enough about migration drivers and the role of climate stressors. Yet Thomas Faist objected that migration studies no longer look solely at push factors. Instead of talking about ‘causes’ (linear causality) we should look at triggers (potential causes) and consider their contextuality. In his “wrap up” statement, Peter **Kivisto** (Augustina College, USA) urged that the natural and social sciences be brought together in this field of research. The challenge, however, is that natural science results have to be presented in a language comprehended by social scientists – and vice versa. Even among the various disciplines of the social sciences involved a common language proves difficult to find. Kivisto noted that the term ‘transnationalism’, which was rarely used up until this point in the conference, could play a role in bridging the divide – as it did for the migration-development-nexus debate. He also reminded the participants that the term *policy* has been used frequently during the conference, but the term *politics* – like inequality or power or the role of culture – has been missing and should be included in the discussion. In this connection he raised the questions of ‘who sets research agendas’, ‘who sets the terms’, and ‘what is the level of detachment’ between scholarship and policy.

The next day put studies on the climate/environment-migration nexus centre stage and started with Panel 4 “Migration as an Adaptation Strategy”. Robert **McLeman** (University of Ottawa) shifted perspective in an interesting manner. Instead of just asking why and where people move, he analyzed the interrelation between demographic and environmental change in a single location, the Addington Highlands in Ontario, using a combination of regional modelling, GIS, indigenous knowledge, and census data. According to his findings, it would be far too simple to assume a direct causal relationship between environmental change and out-migration. Both should be seen as aspects of a much more complex system in which these and other factors influence one another. Factors to be taken into consideration include not just the size of demographic change, but also its composition, its impact on social networks, and the (possibly negative) impact of migration on in-situ adaptation options of those left behind. In the case he studied, out-migration of the young and in-migration of external pensioners led to decreasing capacities of the community to deal with extreme weather events. On the basis of a survey among victims of the 2009 cyclone in Bangladesh, Bishawjit **Mallick** from the Institute of Regional Science at Karlsruhe University (Germany) developed a typology of those who had migrated after the disaster and those who had stayed behind. In general, those who did move were younger and more entrepreneurial, while landowners did not move at all. Furthermore, the impacts of the disaster together with the selective



character of out-migration had a negative impact on social equality, economic vitality, and environmental responsibility in the affected region. Soumyadee **Banerjee** from the International Centre for Integrated Mountain Development in Kathmandu (Nepal) conducted a survey among 876 households in a flood-prone area in Nepal. His study shows migration as anticipatory behaviour in situations of environmental threat. This may have negative effects on family life and social cohesion, but it also entails certain advantages such as diversification of income sources and better prospects for development (e.g., via remittances). Rosa **Cordillera Castillo** from the University of the Philippines in Manila conducted participant observation in a remote fishing community composed mainly of immigrants from other parts of the country. As resources became scarce, many fishermen were forced to migrate again, while their family members stayed on the island. This study showed that even modest environmental changes may force people to migrate and thus affect the livelihood of their families, if those changes hit the resource they mostly depend on. All papers made clear that (internal) migration might be a strategy of adaptation, but that it is not necessarily the only one nor always the best one. The selectivity of out-migration in situations of environmental change was also common in all the cases presented (the younger, the male, the better educated, the more entrepreneurial, those with networks, etc.). This selectivity may have both positive (e.g., income diversification, development prospects) and negative effects (e.g., brain-drain, disrupting family lives, greater vulnerability). In the general discussion, it also became clear that more research on the interrelationship of all factors involved in environmentally induced migration is necessary.

The fifth panel on “Varieties of Migration and Mobilities” continued with the nexus between environmental change and migration. The panel started with an overview of the EACH-FOR Project, presented by Jill **Jäger** from the Sustainable Europe Research Institute in Vienna. This EU-funded project covered 23 case-studies on the environment-migration nexus all across the globe. Jäger pointed out that many of those who migrated because of environmental factors did not give this as a reason, but rather mentioned other factors, even though the researchers surmised that the root causes were deeply environmental. The EACH-FOR project also showed that most of the migration processes happen internally, that is, within the borders of national states. Only those who have the resources and access to networks can afford to migrate longer distances and across borders. A study by Jones Lewis **Arthur** from Sunyani Polytechnic (Ghana) examined migration in the context of the 1983/84 bushfires and the 2007 floods in Ghana, based on interviews with people from the affected communities and looking at both the intended and actually implemented adaptation responses. Both disasters, with women and children the most adversely affected, appear as key migration drivers in Ghana. However, according to Jones Lewis Arthur, the management of migration in Ghana remains more of a coping mechanism than an adaptation strategy. An interesting point of his presentation was also the recommendation to use traditional indigenous knowledge. Adisu **Abebe** from the Lay Volunteers International Association (Addis Ababa, Ethiopia) examined the impacts of climate change on pastoralists in the Borena region. His study is based mainly on climate data, but complemented with anecdotal evidence from inhabitants of the affected region. A major temperature increase resulted in a restriction of seasonal mobility for pastoralists, due to the loss of grazing areas. Other factors leading to mobility restriction were ethnic conflicts, privatization of land, and the expansion of ranches. The latter was partly due to former nomads who became sedentary after the loss of their herds. A gender perspective on environmentally-induced migration came from Pryanka **Dutta** from Bangalore University (India). Her study showed that women displaced by the erosion of the river Ganga in West Bengal suffer more than men in terms of food security, health, etc.. Other important institutional and structural factors affecting the migration decision of women are the religion and nature of the household. Nonetheless, the decision to migrate in the aftermath of a disaster often

led to an enabling experience for women as they could become autonomous heads of households. Therefore, migration should be seen not only from a vulnerability perspective, but also from a capability perspective. Angélica Reyna **Bernal** from the Autonomous University of Hidalgo (Mexico) presented findings of her study on territorial mobility in indigenous zones, showing the importance of networks and social capital in mobility strategies. According to her study in rural areas, patterns of migration tend to change radically after floods, both for indigenous and non-indigenous migration, though the changes are hardly comparable. In the general discussion Jill Jäger underlined that environmental triggers of migration should not be limited to the impacts of climate change. Moreover, the role of households in decision-making, gender differences, and the threat of multiple displacements – in particular of households without men – were raised as contributing elements.

Panel 6 “From Vulnerabilities to Capabilities” posed the central question of how the debate on “vulnerabilities” could be turned into a debate on strengthening capabilities of those affected by disasters and environmental change. Anne **Dölemeyer** from the University of Leipzig (Germany) focused on the challenges of including (displaced) citizens in planning processes and decision-making for the rebuilding of their townships in the aftermath of hurricane Katrina. Dölemeyer raised the question whether well-intentioned participatory recovery planning really enhances resilience in an equitable manner. The effectiveness and significance of the process was subject to considerable criticism, as those who could not return immediately (mainly African-Americans) were not actively participating while NGOs acting as representatives of marginalized interests exhibited problems of competition and coordination. In particular, the contribution of participatory processes to actual decision-making was identified as insufficient. For example, public housing, although not destroyed, was not reopened, raising the suspicion that this was meant to stratify New Orleans. The second presentation in this panel was given by Nikolai **Bobylev** from Saint Petersburg State Polytechnic University (Russia). He focused on the response of the Russian government to the devastating forest fires in Russia in the summer of 2010 and the impact on urban migration. Bobylev demonstrated how compensation policies of the government were deliberately aimed at encouraging people to abandon smaller settlements and to move to bigger towns and cities. The subsequent discussion emphasized that it very much depends on the specific government policies whether or not urbanization is advanced as a result of natural disasters. In the Greek case, compensation funds were provided for rebuilding houses only in those villages previously affected by forest fires. A labour migration program between Colombia and Spain as adaptation strategy was the topic of a presentation by Nicole **de Moor** from Ghent University (Belgium). The program targets members of vulnerable communities in Colombia, including victims of natural disasters, and is supposed to deliver a triple-win outcome – benefiting migrant workers, the Spanish economy, and communities of origin in Colombia. The ensuing discussion focused on the question of the sustainability of such projects, arguing that these programs are designed for and driven by the demand for unskilled seasonal labour in the target countries rather than the needs of communities affected by natural disasters in the countries of origin. Ronald **Kalyango** from Makerere University (Uganda) presented an overview of the University of Oldenburg’s Fellowship Program 2010 on Migration Studies in Africa, focusing on the return of internally displaced persons (IDPs) and with a special emphasis on gender-based violence as well as collapsed masculinities. Additional mental stress is caused by the question of where “home” is, after living for years or decades in refugee camps and when the homeland has long since been used for other purposes. With respect to the central topic of this panel (“from vulnerabilities to capabilities”), Ronald Kalyango explained that he and his colleagues pursue an open capabilities approach. Accordingly, another next step is needed in the discourse: from capabilities to ‘functioning’, i.e., to actual agency. The subsequent discussion, including inputs from Christopher Smith, led into a more general debate on the topic of

the conference at large. Perhaps the most basic question asked was: What is gained – from an epistemological and scholarly perspective – from framing the issue at stake as “environmental migration”, given that it all depends on the definitions of “environment” and “migrant”. The point was made that people weigh various factors differently in decisions about whether to migrate (or not) according to the relevant culture and value systems and other contextual conditions. Another important point in the general discussion was the argument that migration as a means to cope with vulnerabilities and to improve capabilities of vulnerable communities under environmental stress at home is not a “silver bullet”, but rather a trigger of new problems.

On the third and last day Panel 7 “Migration in Disasters – the Role of Institutional Response” dealt with disaster-induced migration, internal displacement, resettlement, and the role of institutional responses. Volker **Böge** from the University of Queensland (Australia) examined the efforts to resettle citizens of the Carteret Islands (where one island has already completely disappeared due to the rising sea level) to Bougainville (both in Papua New Guinea) in the context of an “Integrated Relocation Program”. Although settling and host communities were relatively homogeneous in terms of ethnicity, he identified five central challenges: (1) the cultural and spiritual dimension of land acquisition on both sides (recipient and relocated communities), (2) the weak relations between settlers and recipient communities, resulting in (3) conflict in the local context after relocation, (4) the lack or weakness of governance (e.g., “lost” funds), and (5) the problem of sharing the financial burden. The case also showed that even with high rates of ownership and well elaborated inclusive plans, this autonomous relocation initiative of the community failed because there was not enough governmental support available. The impact of relocation resulting from development projects was the topic of a presentation by Nalin Sign **Negi** from the Indian Institute of Technology in Roorkee (India). In India about 21 million people are internally displaced because of development projects such as dam building, mines and industrial development, and national parks. In Negi’s view, tribal groups are the population most negatively affected by internal displacement in India. Beyond the general problem of destroying living patterns and social continuity, there is also the issue of low compensation offered and the dearth of information available for displaced people; many of them become even poorer than before the displacement. The right to participate in political decisions barely exists and often the internally displaced become subject to the violation of their human rights. Finally, he pointed out that women are suffering more from displacement than men as they are marginalized in the labour market. Jeanette **Schade** from Bielefeld University (Germany) presented a human rights approach to resettlement measures, with the objective of enhancing capabilities of the affected persons. She argued that institutional responses to environmental and climatic problems could harm people’s livelihoods. This is the case with some mitigation measures, such as the expansion of biofuel plantation, but also with the option of ordered resettlement. She also pointed out that relocation might be cheaper for some governments than combating those environmental problems that lead to resettlement (2<sup>nd</sup> class adaptation), and that such measures can and have been misused for other (political and economic) reasons. Jeanette Schade highlighted therefore the need to minimize the various risks of resettlement and to design a human rights-based framework which could be developed along the so-called Kothari Guidelines. Megan **Bradly** from Saint Paul University in Ottawa (Canada) touched on the issue of an international framework for protecting environmental migrants. According to her, the challenges to human rights protection include the lack of conceptual and definitional clarity, limited legal protection, and government failure to engage in prevention and protection. In her opinion, a “way forward” could be the recognition of the need for human rights protection, the strengthening of legal protection, limiting vulnerabilities and maximizing capacities, as well as planning responses to statelessness (when nations disappear). Finally, she posed the question of whether the so-called R2P (responsibility to protect) should be revisited. In the general

discussion, the necessity or rather the problem of clearly distinguishing between “classical” IDPs (due to war, conflict) and “environmental” IDPs was highlighted. In some cases, IDPs of the latter type have no expectation of returning home, especially in the case of sinking islands. The Kampala Convention for IDPs was mentioned as a good starting point, even though it has not yet been fully ratified. Others pointed out that those who are left behind should not be overlooked, especially as these are the most poor and vulnerable. Even though it does not necessarily make a difference whether people are resettled due to the sudden or slow onset events, the implications for planning are significant. It was also mentioned that a clear distinction between resettlement (as a long-term planning issue) and displacement (as a short-term reaction) should be made. Finally, the point was raised that power relations should be linked to human rights issues.

The final Panel 8 “Rethinking the Political Dimension of Research” was split into two sections, one on the science/knowledge-policy nexus and another on discourse analysis. Francois **Gemenne** from the Institute of Sustainable Development and International Relations (CERI) in Paris opened the panel. Using small island-states as a starting point, he pointed out that policy debates tend to rely on false assumptions and biased representations. Islands are often seen as “laboratories”, not least in the case of climate change. In fact they face quite different problems with regard to climate change than do large nations such as Nigeria. According to Francois Gemenne, these small nations “only matter because they disappear”. He made the point that declining financial support is likely if these countries appear to be doomed. Therefore it is important to focus on capabilities instead of vulnerabilities. Christine **Aghazarm** of the International Organization for Migration in Geneva presented the view of the International Organization for Migration (IOM) regarding research on environmental migration. She proposed that a better evidence-base should be established, including “better” data based on household-surveys, comparative studies, etc. The research community should “get the message out”, i.e., researchers should link their studies with a wider picture and “digest” research for policy-makers. She mentioned examples like national reports and policy tool-kits. Another task of researchers should be awareness-raising of new and emerging issues as well as the shaping of policy agendas. Sam **Wong** (rescheduled from Panel 6 to Panel 8 for technical reasons) from the University of Liverpool then presented a “polycentric approach” for coping with climate change, based on a study in the Volta basin in Ghana. In his study on regional transboundary intervention in eight local communities he identified a tension between agreed and implemented policies, tensions between different levels of government and governance, as well as a tension between good governance on the one hand and livelihoods on the other. The discourse section started with Calum Thomas **Nicholson** from Swansea University (UK), who focused on a critique of the new research field of environmental migration. He argued that no analytically useful definition or unambiguous evidence has been produced to substantiate the climate change-migration nexus. Nicholson concluded that the term of environmental migration stands no chance to be rendered operationalizable as a concept. Chloe **Vlassopoulos** from the University of Picardie in Amiens (France) addressed the issue of policy relevance of environmentally-induced migration. After illustrating three types of political discourse (environmental migration as a multi-causal problem, climate migration as a consequence in an alarmist discourse, and climate migration as a solution), she concluded that different scenarios trigger the political decision-making process.

After this last panel session, ESF-rapporteur Aslihan **Kerç** from Marmara University (Turkey) stated that the aim of the conference was to provide a platform for research in different disciplinary fields and to be a platform for interdisciplinary exchange. She concluded that it is a difficult task to isolate environmental impacts of migration from other aspects. The host of the conference, Thomas **Faist** from Bielefeld University, stressed that the conference yielded many insights into

“vulnerability”, but fewer on “capabilities”. The next step would be to develop a more appropriate and complex conceptual approach. He suggested looking deeper at the local levels, including the “local ways of knowing things”. Furthermore, environmental change should be related to both processes of mobility and immobility. After all, scientists have a public role which consists not only in devising blueprints for policies and advising decision-makers but also in setting agendas, defining the right kinds of questions, and coming up with appropriate lenses and terms to shape public debates. Finally, he remarked that there is also a need to deconstruct the concepts of vulnerabilities and capabilities.

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## Forward Look

(1 page min.)

- *Assessment of the results*
- *Contribution to the future direction of the field – identification of issues in the 5-10 years & timeframe*
- *Identification of emerging topics*

### Assessment of results

The conference delivered several valuable insights that differ from the infant mainstream debate on environmentally induced migration, which focuses on (1) vulnerability to natural disasters and slow-onset degradation that serves as a push factor/root cause for migration; (2) security threats caused by such types of migration; and (3) circular migration and ordered relocation as an adaptation response. Without questioning the threat of climate change the conference confirmed and revealed that:

- (a) All cases showed that it is rarely possible or perhaps even impossible to empirically disaggregate environmental change due to climate change from other impacting environmental factors and from natural resource dependent economic factors as ‘root causes’ for migration. Therefore, no linear causality between climate change and migration can be shown to exist. Empirical research thus has to be more context specific, thinking in terms of ‘triggers’ instead of root causes, and connecting such triggers to existing and new migration dynamics (e.g., using concepts such as chain migration and cumulative causation).
- (b) Vulnerability to environmental/climate change is clearly predefined by already existing vulnerabilities such as lack of access to resources, public facilities and services, political power, and justice. The various empirical examples scrutinized throughout the conference provide clear evidence for this claim; for example the situation of low caste women and Dalits in Nepal, the impoverishment of indigenous people due to dam building in India, or the marginalization of African Americans during and after Katrina in New Orleans.
- (c) This last finding suggests that mainly technical adaptation such as more resistant crops, improved water management, ordered resettlement, and short-term aid programmes will not yield positive results on their own. More ‘old fashioned’ issues of development, such as social inequality and corruption, that point to inherent political struggles and questions of justice are at stake here. Accordingly, we have to go beyond policy analysis into the analysis of politics. This is also true for schemes that are well intentioned and participatory at first sight, but that expose serious problems in realization, such as participation in reconstruction after Katrina, or in climate change adaptation measures in Ghana.

## LESSONS LEARNED

- (d) Related topics that appeared continually and throughout the conference were the question of access to resources, in particular to land, and of the implementation and enforcement of human rights as a means to guard against societal conditions that undermine peoples' capacities to respond to climate change and other environmental, as well as socioeconomic or political, challenges. There was broad consensus that human rights have a major role to play in achieving just socio-political solutions that lessen vulnerabilities and enhance capabilities in cases of environmentally enforced migration, and that we must go beyond purely technical adaptation measures and humanitarian aid.
- (e) Moreover, if we look at the relationship between environmental/climate change and migration in a more sophisticated way, it is not enough to consider the impact of environmental change on migration itself, but we must also examine the effect of migration on the adaptation and coping capacities of those who remain. The examples of Ontario and of Bangladesh after the 2009 cyclone (both Panel 4) suggest that those impacts are not necessarily positive, but can have a negative effect on the demographic composition of the places of origin (brain and brawn drain) and inequality.
- (f) These insights put into perspective the overwhelmingly positive appraisal of migration as an adaptation strategy (because of the associated remittances) in many policy accounts. This caveat does not negate the notion that the migration option can increase capabilities—as is the case for the women of Bangalore who reached a greater degree of independence. Yet often—as in the case of labour migration in Nepal—there is a trade-off between income diversification on the one hand and social cohesion on the other hand.

### Contribution to the future direction of the field

- (g) As to linking projections of climate/environmental change with changes in migration patterns much work remains to be done. The main problems here are the different time scales of long-term climate change and the relatively short-term changes in migration patterns, and the non-linearity and complexity of both processes, i.e., the challenge of double uncertainty. The transnational character of both issues might be a way forward.
- (h) More work has to be done to approach the issue of climate/environmental change more systematically from the perspective of migration research. The use of terminology such as 'circular', 'long- and short-term migration', or 'voluntary, impelled, and forced migration' does not yet constitute a specific migration theoretical lens on the subject. Until now there have been few attempts to systematically use migration research to critically dissect the nexus. One way forward is to consider more properly the macro-level, i.e., the impact of climate/environmental change on existing migration flows and their underlying conditions (as proposed by Black/Schmidt-Verkerk). The other is to look at the micro-level, i.e., at migration decisions with regard to climate/environmental change and what approaches can be taken to model them (as proposed by Kniveton/Smith). But what has not been done so far is to approach the meso-level, i.e., the role of social networks and intermediate institutions to facilitate climate/environmentally induced migration and the degree to which these social structures are themselves vulnerable to climate/environmental change.

### Identification of emerging topics

- (i) The conference revealed several methodological challenges: Nearly all case studies showed that the issue of environmentally induced migration is still strongly influenced by

social vulnerability research to climate change, and rarely reflects a migration research perspective. The latter is often reduced to the use of terminology related to migration research.

- (j) The vulnerability perspective itself also presents challenges for including and explaining the various kinds and levels of vulnerability such as differences of vulnerability within households or vulnerability to different types of hazards.
- (k) Political issues such as access to and availability of land and the short- and long-term impacts of adaptation/development measures on coping capacities and capabilities will grow in importance, as will the human rights approach as a normative frame to guard against the threatening impacts of policy measures.
- (l) We also need to uncover more explicitly the links between scientific knowledge on the one hand and the role of scientists in public discourses on the climate change-migration nexus on the other hand. To view scientists' contributions to this debate as enlightening public knowledge and guiding public policies would be naïve indeed. Instead, more attention must be paid to the ways in which scientific concepts guide thinking in the public sphere.

- Is there a need for a foresight-type initiative?
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From a migration research perspective, two presented approaches were particularly interesting and went beyond the usual use of terminologies. Migration research differentiates between the macro-, meso-, and micro-levels of analysis of migration processes. With regard to the first, Schmidt-Verkerk (Black) presented an approach which focuses explicitly on the impact of climate change on the macro conditions of existing migration dynamics. With regard to the last, Smith (Kniveton) applied agenda-based modelling to project individual migration decisions on the micro-level. But no work has yet been done on the impacts of climate change on the meso-level. Therefore, a foresight-type initiative is worth considering.

## Atmosphere and Infrastructure

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▪ *The reaction of the participants to the location and the organization, including networking, and any other relevant comments*

The location was to the satisfaction of all participants and the organizers (rooms, conference facilities, internet access) as well. Minor problems were solved immediately and food and service were of excellent quality. The only technical problem which could not be solved on the spot was a Skype connection that did not work on Monday morning. However, since the co-author of the scheduled presenter was present at the conference, this lecture could be rescheduled later the same day.

Above all, the conference proved to be a solid platform for networking. Two new members for a COST action application were recruited and a German-Canadian application for an academic exchange project on the level of postdoctoral researchers will be launched. Moreover, about a dozen participants agreed to revise their papers to be published as working papers in the series of the Center on Migration, Citizenship and Development (COMCAD).

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**Date & Author:**

**3 February 2011, Thomas Faist**