

## ***Forced migration<sup>1</sup>, environmental risks and conflict***

### **General background information on current and past research work**

Recent research (Lischer, 2005/ Salehyan, and Gleditsch, 2006/ Salehyan 2007, 2008) has shown that refugees, defined by the UNHCR (Office of the United Nations High Commissioner for Refugees) as “someone [...] persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion” (see the 1951 Convention relating to the Status of Refugees) and residing outside the borders of his or her home country, may lead to conflict diffusion. A series of studies have started to assess what mechanisms cause this spread of conflict (see also below).<sup>2</sup>

Leaving one’s normal place of residence may, however, not necessarily lead to refugee status. Displacement may be also due to changes in the environment (drought, flood, etc.) and/or lead to displacement inside one’s home country. In both cases refugee status as defined by the UNHCR is not given. Nevertheless, for some of the suspected mechanisms linking refugee flows to conflict spread, any sort of displacement, whether internal or external, whether related to persecution or environmental reasons, might be relevant. Consequently, the present project wishes to assess if any type of forced migration, whether due to environmental factors or persecution, and whether it leads to internal displacement or refugee status, may generate conditions that may cause conflict and violence.

To investigate how different forms of forced migration might lead to conflict, we take a disaggregated approach, focusing, first, on refugee settlement patterns and how their settlement pattern (location and distribution within a country) could determine the risk level of conflict. In a second step then, we examine how environment-induced migration and internal displaced persons (IDPs) fit into the picture to be able to identify all potential risk factors posed by forced migration, be it because of environmental reasons or conflict. In the following we present the current status of these two strands of research.

#### *Current state of refugee settlement pattern research*

Although the literature on refugee flows is extensive, refugee settlement patterns are rarely mentioned. As Zetter (2003) points out: The “research on refugee shelter and settlement issues has been a neglected field and is poorly documented, lacks coherence and is widely diffused” (Zetter, 2003, p. 31). Most studies that do mention refugee settlement patterns are

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<sup>1</sup> With forced migration, we mean here refugees and internally displaced persons. Forced migration and displaced persons is used here, in addition, interchangeably.

<sup>2</sup> An ongoing research project entitled “Refugee Flows and Transnational Ethnic Linkages” focuses on ethnic kinship between refugees and host communities and is led by Lars-Erik Cederman (ETH Zurich), Simon Hug (University of Geneva), Idean Salehyan (University of North Texas) and Alain Dubois (University of Geneva).

mainly toolkits or good practices reports of practitioners: Non-governmental organisation (NGOs) or international organisations (IOs) (see for example: Chalinder, 1998; NRC/CMP, 2008; or UNHCR: Handbook for Emergencies, 2000) which recommend a certain strategy for refugee settlement patterns to avoid conflict and achieve effective protection. Standards are: Handbook for Emergencies (UNHCR), Humanitarian Charter and Minimum Standards in Disaster Response (Sphere Project 2004) and Corsellis and Vitale (2005). These standard books, however, often miss out on concrete statistical evaluations.

Crisp (1999, p. 19) is one of the few who indicates that the location of refugee camps can be one major source of insecurity. He points out that in cases where states have failed to cooperate to settle refugees at a reasonable distance from their country of origin, the protection of refugees has been jeopardised and "the negative impact of the refugee presence on local, national and regional security has undoubtedly been exacerbated" (Crisp, 2006, p. 9). He also lists problems with camp size and their composition. Looking at the Kakuma and Dadaab refugee camps in Kenya, he asserts that evidence indicates that the insecurity there derives from "the fact [that] a number of different refugee communities have been placed together in two very large camps" (Crisp, 1999, p. 29). However, he does not present any statistical data.

Lischer (2005) and Muggah (2006) also indicate that the location of refugee camps can influence conflict, particular refugee militarization. Lischer speaks of "dangerous sanctuaries". Muggah (2006) particularly emphasizes that the risk for conflict is especially high when camps located near rebel groups and borders. He states: "Foreign guerrilla groups and armed factions located close to an international border can not only rapidly initiate 'lightning raids' across borders, but can just as quickly retreat into the refugee camps. [For, example] Burundian refugee camps in western Tanzanian are located within walking distance of the international border" (Muggah, 2006, p. 148).

Kaiser (2000), furthermore, emphasizes that camps and settlements located close to an international border can have severe security consequences. She demonstrates this with the case of Sudanese refugees in Uganda. By being too close to the country they had fled from (Sudan), they were at risk of being bombed by Sudanese military planes and by attacks of several rebel groups which operate in the area. Merckx (2000) from UNHCR also notes that "borderlands have been the setting for many refugee crises over the last decades" (Merckx, 2000, p. 1). Since these studies, dating from the 1990s and early 2000s, however, not much new literature has been put forward (an exception being, for example, Bariagaber (2006) and Loescher *et al.* (eds.) (2008)). This is surprising because refugee settlement patterns have changed dramatically over the years.

Most of today's refugees no longer live in camps, but in cities and towns. This has many implications for security. In urban areas, refugees might be more scattered, control and protection of them is thus more difficult. They are often also more vulnerable to harassment, detention and forced eviction (Human Rights Watch, 2002, p. 2). UNHCR has, therefore, put forward a new policy (2009) on refugee protection in urban areas (UNHCR, 2009a), but evaluations of them have not yet been made. Quantitative statistical analysis in general is not to be found. Lischer (2005, p. 26) criticizes as well that no generalizable findings on the

significance of refugee settlements exist, except for some evidence from individual case studies.

Weidmann, Kuhn and Nikolic (2007) have tried to investigate the mechanisms of how refugees are linked to conflict and focused on refugee settlements. However, they only focused on one type of settlement: camps, and only on the location of these camps and not on their size and concentration levels, which are essential for assessing the likelihood of conflict. Moreover, they did not consider effects of clusters of settlements and neither analysed the composition of the settlements with regards to ethnicity.

In sum, the current state of refugee settlement pattern research is still very rudimentary. Although several case studies exist that mention problems of refugees location, their numbers and concentrations for security (ex. Crisp 1999/ Kaiser 2000), no statistical analysis has been carried out so far that investigates more closely the different elements of refugee settlement patterns such as location and concentration levels. By using new available data through our own data collection, the effects of refugee composition for security will be analysed. Moreover, while earlier work has only focused on refugee militarization (ex. Lischer 2005/ Muggah 2006), we will also look at other types of refugee related conflict, such as conflict over resources. Furthermore, we will take into account conflict on the country level as well as conflict on the settlement level. In addition, we will not solely consider refugees in camps, as has been mainly done until now, but will also look at refugees in urban settlements.

#### *Current research on environment-induced migration and IDPs*

Research on environment-induced migration and its link to conflict and how it differentiates to conflict-induced migration has not been done yet. Salehyan (2005) is one of the very few that addresses the issue. He argues that there is a vital difference between these two sets of displaced persons; however, he does not present any statistical data supporting his claim. He claims that environment-induced migrants do not resort to organized violence, although they may resort to situational or sporadic violence (Salehyan, 2005, p. 12). Some other authors (see for example: Ferris 2011) also have addressed the issue, but also do not provide a systematic approach to it.

The link between IDPs and conflict also has not been analysed yet. IDPs in general have received very little attention in the scientific literature so far. Some case studies on the IDP-security nexus has been done by the Brookings Institution (see, for example: Koser, 2008). How environmental stress is linked to conflict has been taken up by Raleigh and Urdal (2007) and several others (ex. Theisen, 2006/ Hauge and Ellingsen, 1998), but all those did not take forced migration into account. Therefore, with our focus on IDPs and environment-induced migration, we present a very innovative aspect to the discussion of the displaced-conflict nexus.

#### **National and international context, contemplated, planned or existing collaborative work**

The proposed project will build on existing national research collaborations, among them in the ongoing project on “Refugee Flows and Transnational Ethnic Linkages” in which

two of the team members (Hug and Saleyhan) are also involved. In this project a close collaboration with Prof. Lars-Erik Cederman at ETH Zurich and the geographer Alain Dubois (University of Geneva) is already well established. In addition the project also draws on existing close contacts with the research unit of UNHCR in Geneva. This links will be expanded and contacts with UNEP in Geneva will also be established.

At the international level two of the members (Hug and Raleigh) belong to working groups of the Centre for the Study of Civil Wars at the Peace Research Institute Oslo (PRIO). In this context close collaborations also exist with Prof. Kristian Skedre Gleditsch at the University of Essex. The proposed project will be profiting from these existing collaborations and also make it possible to intensify them.

### **Scientific objectives of the research project**

The main objective of the proposed research project is to gain a more solid understanding of how forced migration may lead to conflict and violence. While some initial studies have shown that refugees may under some circumstances contribute to the spread of violence for instance from the country of origin to the host country, these studies are limited by the notion of refugee. More precisely these studies only consider forced migration when the migrants cross the border to another country and, in addition, do so because of persecution in their home countries. Increasingly, however, forced migration leads to internally displaced persons (IDPs) as individuals flee their homes but remain inside the borders of their country. Similarly, persecution is only one reason for migration. Increasingly, again, migration is also caused by environmental conditions. While some observers argue that conflict related to water resources is likely to occur, systematic studies have found little solid evidence (Bernauer and Kalbhenn, 2010).

The focus of much research so far has been on conflict-induced migration and to a much lesser extent on environment-induced migration which, however, through climate change and other environmental risks will increase dramatically in the next coming years. Although recent studies have acknowledged the importance of environment-induced migration, they have not made an explicit link to conflict and contrasted environment- to conflict-induced migration (apart from some discussions by Salehyan, 2007/ Clark 2007/ Ferris 2011, but without a systematic study approach). It is the aim of our research project to fill this gap and contribute to a better understanding of the risks related to environmental effects and displaced persons. Moreover, we take a disaggregated approach towards forced migration looking at their settlement patterns to identify particular risk zones for conflict spread. In that way, we have a strong interdisciplinary aspect in our work combining geographical factors with political ones, considering conflict theory, forced migration and settlement issues, as well as environmental concerns. We, thus, not only contribute to risk identification, but also to risk prevention.

In the following, we first present our proposed project by presenting the main mechanisms linking refugees and conflict, focusing on refugee settlement patterns. In a second

step, we present our ideas for analysing IDPs and environment-induced migration and their linkage with conflict diffusion.

Civil conflicts often produce large numbers of displaced persons which can have severe security risks for the surrounding regions (Salehyan, 2008, p. 787/ Lischer, 2005). This has been seen, for example, in the Rwandan refugee crisis, in Sudan with its neighbouring countries such as Chad and Uganda, and potentially could happen in the Libyan and Ivory Coast cases. These examples, as well as recent research, have shown that those displaced people can not only be victims of war, but also active actors who can directly or indirectly cause conflict diffusion (Salehyan and Gleditsch, 2006/ Lischer, 2007). The mechanisms behind this diffusion effect, however, are still not very clear. As Markakis (1998) notes: "Population movement and conflict are obviously related, but the nature of the relationship is not obvious" (Markakis, 1998, p. 22).

The main weaknesses of earlier studies have been their limitations to country-level measures and their misconception of refugees as one "undifferentiated mass" (Lischer, 2007, p. 143). But refugees are composed of different ethnicities and "are not distributed equally across a country" (Salehyan and Gleditsch, 2006) and, thus, their effects might vary from region to region. Their different ethnicity can produce, for example, ethnic rivalries and might change through their numbers the ethnic power balance in their host country which then might lead to conflict. Salehyan and Gleditsch (2006) explain: Larger refugee flows can spark demographic change which:

"can lead some groups to feel threatened in their social status. Competition among locals and ethnically different foreigners may lead to conflict, especially if refugees are of a similar ethnicity as one or more local groups. Majority groups in receiving areas may perceive a threat to their dominant status if refugees are similar to domestic minorities" (Salehyan and Gleditsch, 2006, p. 343).

Through their composition and numbers, refugees might, thus, change the ethnic balance in the country and lead to conflict diffusion. Yet the fact that refugees are not spread out evenly within a country and, thus, their effects might vary, has not been considered up until now. The ethnic composition is not the only mechanism that might link refugees and conflict. Location considerations of refugees and their numbers and concentration levels could matter as well.

Salehyan and Gleditsch (2006), being the first authors who have taken a quantitative approach toward the issue of refugees and conflict, found out that one reason for conflict could be the size of the refugee population in a country. Their results demonstrate that the greater the number of refugees from a neighbouring country, the more likely this country is to experience civil war (Salehyan and Gleditsch, 2006, p. 348). This has indeed been observed in several cases. Crisp (1999, p. 30), for example, states that the level of violence in Kenya's refugee camps is explained by the sheer size of those settlements. "Overcrowding has exacerbated insecurity and incidences of crimes among refugees in the camps. Somali refugees report that

as the number of people living in camps increases, so do incidents of theft and sexual abuse" (AI, 2010, p. 9).

Other cases, however, have demonstrated that large refugee numbers alone cannot explain conflict outbreak. The arrival or presence of refugees on its own does not necessarily lead directly to the onset of conflict. Although Tanzania, for example, received a large influx of Rwandan refugees in 1994, it stayed quite peaceful as opposed to its neighbouring country Congo (Whitaker, 2003, p. 1, see also Lischer, 2005). Numbers seem to be an indicator, but they cannot alone explain conflict outbreak. Other factors or mechanism have, thus, to be considered.

We argue that the geographical distribution of refugees, which is created through their settlement pattern, is one of the underlying factors that explain why it comes to refugee related conflict in some cases and why in others it does not. With refugee settlement pattern, we mean here, on the one hand, the pattern within a country and, on the other hand, the pattern within one settlement. In other words, we will analyse the geographical distribution of refugee settlements within a country (where these settlements are located (for example: near a border or not) and how close they are to each other), as well as the pattern or layout of each settlement (how many refugees are there per settlement, how concentrated (close by) they live together). We claim that where and in what way refugees are settled determines the risk level of conflict outbreak. Consequently, we will show that settlement policies by host governments and other stakeholders are crucial for refugee protection and overall security and that through correct and timely responses risk mitigation could be achieved.

Settlement patterns in general have been argued to be "strong determinants of conflict" (Hegre and Raleigh, 2006/ Weidmann, 2007, p. 14). The main assumptions behind is that settlement patterns define the way in which groups are geographically distributed in an area and this distribution determines possibilities for interactions and control. Large populations are generally more difficult to control (Fearon and Laitin, 2003), include more aggrieved groups (Collier and Hoeffler, 2004), put more pressure on resources and provide a larger recruitment pool for rebel groups (Hegre and Raleigh, 2006, p. 4). Concentrated groups can also mean facilitating interaction between their members making collective organization for violence more likely (Weidmann, 2009, p. 526). There is, hence, a general agreement that the geographical distribution of groups, their concentration and their location, determines to some part the likelihood of conflict outbreak (see also Christin and Hug, forthcoming). Particularly Weidmann (2006/ 2007 and 2009) has argued in this direction. As Cederman and Gleditsch (2009, p. 493) clearly express: "Without assuming a deterministic impact [...] the actors locations matters for patterns of political violence" (Cederman and Gleditsch, 2009, p. 493).

However, although a general agreement in the conflict literature exists that group concentrations and, thus, settlement patterns matter because they define interaction opportunities for group members, the impact of refugee settlements on conflict outbreak has not been considered explicitly so far. But refugees may through their numbers and their composition also influence group concentration levels and thereby heighten the risk of conflict in a country. We, therefore, want to analyse more closely how refugee settlement patterns

influence the risk of conflict. This includes not only looking at their geographical distribution (numbers per settlements), but also their exact location (near borders or rebel groups) which again can have severe security implications. Our first leading research question, consequently, will be:

*Do refugee settlement patterns have an impact on the risk of conflict? And if yes, what configuration or type of settlement pattern is most likely to result in conflict and which is not?*

Conflict is understood here as conflict caused indirectly or directly by refugees. It can be conflict among refugees or between refugees and the local population. Moreover, it will be analysed on the country level, as well as on the settlement level.

To identify and assess these risks of refugee related-conflict, we rely on data by UNHCR. However, their definition of refugee is restricted to persons fleeing because of conflict, in the following referred to as conflict-induced refugees. Article 1 of the 1951 *Convention Relating to the Status of Refugees* states: A refugee is a person who:

"owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country".

But people also might flee due to other reasons beside those mentioned above. The main reason for flight in recent years in fact has not been because of conflict but of environmental reasons. In 2008, it was estimated "that approximately 50 million people around the world are displaced by hurricanes, tsunamis, earthquakes, landslides and flooding" (UN News Service, 2008) while only 42 million were displaced by conflict (IDMC, 2009).<sup>3</sup> Ferris and Petz (2011), consequently, state that: "People who are displaced because of natural disasters constitute one of the major challenges for both national authorities and international agencies" (Ferris and Petz, 2011, p. 3). The question arises, whether these environment-induced displaced persons have the same effects as conflict-induced displaced persons? Could they also indirectly or directly contribute to conflict diffusion? And if, in what way? The same way as conflict-induced displaced persons? In other words, does the reason for flight matter for conflict spread?<sup>4</sup>

Evans (2010) indicates that "as concern over both climate change and resource scarcity has increased in recent years, so speculation has grown that they will lead to increase or

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<sup>3</sup> For all possible types of environmental-related phenomenon that may lead to migration, see: Jakobsson (2010, p. 23). Here, we want to differentiate between environment and conflict induced migration; therefore, we leave out those displaced persons that are caused because of environmental conflicts.

<sup>4</sup> While there is ongoing research to differentiate between flight from ethnic or non-ethnic conflict (Seraina Rügger, ETH Zurich), no differentiation between conflict- and environmental-induced forced migration has been done yet (except the speculative discussion by Salehyan, 2005 and short reference made by Ferris, 2011, p. 12).

incidence of violent conflict" (Evans, 2010, p. 5). Ban Ki-moon in 2007 also states that "changes in our environment and the resulting upheavals - from droughts to inundated coastal areas to loss of arable lands - are likely to become a major driver of war and conflict" (Ban Ki-Moon, 2007) and UNEP even claims that "environmental stresses can be implicated in all phases of the conflict cycle, from contributing to the outbreak and perpetuation of violence to undermining prospects for peace" (UNEP, 2009).

But although these grave concerns of environmental effects in the international community exist and there has been a dramatic increase in studies on the climate change-security debate, there have been surprisingly relatively few statistical studies that link environmental stress to conflict (Melander and Sunberg, 2011, p. 3). Moreover, these studies have come to divergent results. As Clark (2007) points out "the literature on environmental security and conflict does not have any broad consensus" (Clark, 2007, p. 2). Raleigh and Urdal (2007) are one of the few that focus on climate change, environmental degradation and conflict. Their results demonstrate a weak link between climate change (measured as land degradation and water scarcity) and armed conflict. However, Melander and Sundberg (2011) find out that with very high levels of population density, extreme levels of solid degradation increase the risk of conflict and, thus, that environmental stress might heighten conflict.<sup>5</sup> Therefore, concentration levels of populations seem to have to be taken into account when considering the effects of climate change and other environmental risks.

Yet both of these studies and no other paper so far have looked at how concentration levels and, thus, settlement patterns of displaced persons might affect the nexus between environmental risks and conflict. The link has been made between how environmental factors produce forced migrants, but not how environment-induced forced migration might lead to conflict. "Only very limited research [in general] exists that suggests that migration itself can lead to conflict" (Clark, 2007, p. 2). The focus so far has been limited to conflict-induced forced migration. However, as Raleigh, Jordan and Salehyan (2009) point out also "environmental migrants may burden the economic and resource base of the receiving area and [...] [promote] contest over resources" (Raleigh, Jordan and Salehyan, 2009, p. 35) which might eventually lead to conflict. Also USAID (2009) writes: "The scenario of environmentally induced migration [could] result[...] in violent conflict through the low capacity of relevant institutions and governance structures, shifts in ethnic composition, and competition for resources" (USAID, 2009, p. 19).

We, therefore, want to fill this gap, analysing how those displaced by environmental factors might increase the risk of conflict and how they might differentiate between conflict-induced displaced persons. As Salehyan (2005) underlines: "While migration has the potential to provoke violent reactions, there are likely to be important differences between conflict patterns stemming from 'environmental' versus 'classic' refugees" (Salehyan, 2005, p. 12) meaning those produced by conflict. Environmental migrants often do not have a political agenda and do not regard themselves "as victims of persecution deserving justice" (Salehyan, 2005, p. 13) in contrast to conflict-induced migrants who make political demands and, thus,

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<sup>5</sup> Note here that they use different measures of conflict.



possibly have a higher likelihood for engaging in violence than environment-induced migrants. Our second set of leading research questions, thus, will be:

*Does environment-induced migration lead to conflict? And does it differ to conflict-induced migration?*

We acknowledge that a clear-cut distinction regarding why people flee is often difficult and that it is, in fact, not always only one reason why people escape, but that instead multiple reasons are possible. Environmental impacts could be "channelled through social, economic and political factors" (Clark, 2007, p. 15) and, thus, not clearly be identified. This could be particularly true when considering slow environmental effects, for example, such as soil degradation. We also recognize that because of this, the term "climate refugees" is to be taken with caution, particularly also because it is not internationally recognized. Therefore, we rather speak of environment-induced migration.

However, although we recognize these difficulties, we still believe that environment- and conflict-induced migration can be differentiated in several cases, specifically when focusing on forced migrants produced by sudden onset disasters such as floods. In these cases, a sudden flow of forced migrants is to be observed and, therefore, more clearly to be identified. Also, international agencies have started to collect data on environmentally-displaced persons (see: OCHA/IDMC/NRC, 2009), although clearly large gaps exist. Possibly, this study also could help to outline the necessity for increasing data collection in this area. Moreover, because some regions might be more affected by conflict- and others more by environment-induced migration, these regions could be compared to each other and, thus, conclusions could be drawn on their different effects. For an overview of conflict- and environment-induced migrants see, for example, the map attached.

In addition, no study so far has looked on how environmental pressures might increase the risk level of refugee or IDP related conflict. Raleigh and Urdal (2007), as some other studies such as Hauge and Ellingsen (1998) and Theisen (2006) have already focused on how environmental risks link to armed conflict, but not how these effect conflict among displaced persons or between forced migrants and the local population at the settlement level. New data available from the UNHCR and a data set on conflict in and around settlements of displaced persons created by ourselves will make it possible to analyse also this type of conflict. For an overview of the regions that are particular vulnerable to environmental risks, see map attached.

While most research so far has only concentrated on refugee related conflict, no systematic study exists that focuses on IDP related conflict. This is a first-ever study that takes IDPs into account when speaking of the migration – conflict nexus. Although there are currently more IDPs than refugees, IDPs surprisingly have often been ignored in the conflict debate. There are currently 27.5 million IDPs in more than 50 countries" (Brookings, 2011) in comparison to 10.5 million refugees (UNHCR, 2009b). Furthermore, of those displaced by environmental factors are mainly IDPs and not refugees. Therefore, particular in the environment versus conflict debate we will focus on IDPs. We, therefore, will analyse both

groups of forced migrants bringing about a very new aspect of risk identification which has been missing in the scientific literature so far.

### **Value of research project: Patents, intellectual rights**

The value of the project lies essentially in its practical relevance. Understanding the conditions under which forced migration either due to persecution or environmental conditions may result in conflict and violence is of tantamount importance, especially as environmental conditions are likely to lead more frequently to displacements in the future. Consequently, getting a better grasp of what settlement patterns for displaced persons may mitigate or increase conflict risk is of great value for practitioners and scholars alike.

### **Link with the AXA Research Fund's general theme: The major transformations of the modern world and related risks**

The proposed project draws on two of the proposed research fields. While clearly the main emphasis is on socio-economic risks, and more specifically conflicts and how they relate to forced migration, another additional important link will also be assessed, namely the relationship between environmental risks and forced migration, and thus potentially the former's impact on conflict. This innovation, when it comes to displaced persons, has so far not been dealt with in the scientific literature in a convincing way. This is all the more deplorable as the number of internationally displaced persons (also due to environmental risks) exceeds the number of refugees as defined by the UNHCR to a great extent.

### **Proposed research project for the coming years**

The proposed project will generate new data sets on refugees, displaced persons, their settlement patterns and conflict and violence. While the project aims at analyzing this data with a very specific research question in mind, namely to understand whether environment-induced migration may also cause conflict and violence as refugees are supposed to do, the wealth of information may lead to follow up research projects taking advantage of the collected data. More precisely, location choices of internally displaced persons and refugees might be analyzed in more detail, again under the angle of what induced the displacement (conflict or persecution on the one hand and environmental risks on the other).

### **How you plan to encourage exchanges between AXA and the project team**

We envision two activities to encourage exchanges between the members of the research team and AXA. First, as our empirical results will be forthcoming, we intend to write based on our more scholarly work a series of policy briefs. These policy briefs will present in a short and concise fashion our main results as they relate to practical issues.

Second, toward the end of our project (fall 2014) we plan on organizing a joint workshop bringing together the members of the research team and possibly additional researchers working on the topic of the research project with practitioners both from AXA and international organizations present in Geneva (UNHCR, ICRC, UNEP, etc.). The goal of this workshop is to assess the practical relevance of our research results and to discuss in detail the practical import of our findings.

## References

- Amnesty International (2010): *From Life without Peace to Peace without Life: The Treatment of Somali Refugees and Asylum-Seekers in Kenya*, extracted from: <http://www.amnesty.org/fr/library/info/AFR32/015/2010/en> on the 07.12.2010.
- Ban Ki-moon (2007): *Address to the United Nations International School, UN Conference on "Global Warming: Confronting the Crisis"*, extracted from: [http://www.un.org/apps/news/infocus/sgspeeches/search\\_full.asp?statID=70](http://www.un.org/apps/news/infocus/sgspeeches/search_full.asp?statID=70) on the 15.05.2011.
- Bariagaber, Assefaw (2006): *Conflict and the Refugee Experience: Flight, Exile and Repatriation in the Horn of Africa*, Hampshire/ Burlington: Ashgate.
- Bernauer, Thomas and Kalbhenn, Anna (2010): "The Politics of International Freshwater Resources", in: Denmark, Robert (ed.), *The International Studies Encyclopedia*, Wiley-Blackwell.
- Brookings (2011): Brookings-LSE Project on Internal Displacement, extracted from: <http://www.brookings.edu/projects/iddp/About-Us.aspx>, on the 15.05.2011.
- Cederman, Lars-Erik and Gleditsch, Kristian (2009): "Introduction to Special Issue on 'Disaggregating Civil War'", in: *Journal of Conflict Resolution*, Vol. 53, No. 4, p. 487-495.
- Cederman, Lars-Erik, Gleditsch, Kristian and Simon Hug (forthcoming): "Elections and Ethnic Civil War", in: *Comparative Political Studies*.
- Cederman, Lars-Erik, Rod, Jan Ketil and Weidmann, Nils (2007): *Geo-Referencing of Ethnic Groups: Creating a New Dataset*, ISA Annual Convention, Chicago.
- Chalinder, Andrew (1998): "Temporary Human Settlement Planning for Displaced Populations in Emergencies", in: *Good Practice Review*, Vol. 6, London: Relief and Rehabilitation Network.
- Christin, Thomas and Simon Hug (forthcoming): "Federalism, the geographic location of groups, and conflict", in: *Conflict Management and Peace Science*.
- Clark, William (2007): *Environmentally Induced Migration and Conflict*, Externe Expertise für das WBGU-Hauptgutachten "Welt im Wandel: Sicherheitsrisiko Klimawandel", extracted from: <http://www.migration->

boell.de/downloads/migration/Environmentally\_induced\_Migration\_and\_Conflict.pdf  
on the 15.05.2011.

Collier, Paul and Hoeffler, Anke (2004): "Greed and Grievance in Civil War", in: *Oxford Economic Papers*, Vol. 56, No. 4, p. 563-595.

Corsellis, Tom and Vitale, Antonella. (2005): *Transitional Settlement: Displaced Populations*, Oxford: University of Cambridge/ Oxfam/ Shelter project.

Crisp, Jeff (1999): *A State of Insecurity: The Political Economy of Violence in Refugee-Populated Areas of Kenya*, UNHCR: Geneva.

EM-DAT database, see: <http://www.emdat.be/database>.

Evans, Alex (2010): "Resource Scarcity, Climate Change and the Risk of Violent Conflict", Background Paper for the World Development Report 2011, New York: New York University, Center on International Cooperation.

Fearon, James and Laitin, David (2003): "Ethnicity, Insurgency and Civil War", in: *American Political Science Review*, Vol. 97, No. 1, p. 75-90.

Ferries, Elizabeth (2011): *Climate Change and Internal Displacement: A Contribution to the Discussion*, Paper prepared for UNHCR Bellagio Roundtable, 22-26 February, Bern: Brookings-University of Bern, Project on Internal Displacement.

Ferries, Elizabeth and Petz, Daniel (2011): *A Year of Living Dangerously: A Review of Natural Disasters in 2010*, London: The Brookings Institution-LSE, Project on Internal Displacement.

Gleditsch, Kristian Skrede, Julian Wucherpfennig, Simon Hug and Karina Reigstad (2010): "Polygyny or Misogyny? Reconsidering the 'First Law of Intergroup Conflict'" *Journal of Politics* 73(1): 265-270.

Hauge and Ellingsen (1998): "Beyond Environmental Scarcity: Causal Pathways to Conflict", in: *Journal of Peace Research*, Vol. 35, No. 5, p. 615-637.

Hegre and Raleigh (2006): "Population Size, Concentration and Civil War: A Geographically Disaggregated Analysis", Paper presented to the Meeting in the Environmental Factors in Civil War Working Group on the 21.09.2006, PRIO, Oslo.

Homer-Dixon (1999): *Environment, Scarcity and Violence*, Princeton: Princeton University Press.

- Hug, Simon (2003): "Selection Bias in Comparative Research. The Case of Incomplete Datasets", in: *Political Analysis*, Vol. 11, No. 3 225-274.
- Hug, Simon (2010): "The Effect of Misclassifications in Probit Models. Monte Carlo Simulations and Applications ", in: *Political Analysis*, Vol. 18, No. 1 78-102.
- Human Rights Watch (2002): *Hidden in Plain View: Refugees Living Without Protection in Nairobi and Kampala*, New York: Human Rights Watch.
- IDMC (2009): *Internal Displacement Global Overview of Trends and Developments in 2008*, extracted from:  
<http://www.internaldisplacement.org/idmc/website/resources.nsf/%28httpPublications%29/0605361027488A28C12575A90042305B?OpenDocument> on the 15.05.2011.
- Jakobsson, Elin (2010): *Global Policy Making on Climate Refugees: What is the Problem?*, extracted from: [http://www.pol.gu.se/digitalAssets/1309/1309786\\_vt10-elin-jakobsson.pdf](http://www.pol.gu.se/digitalAssets/1309/1309786_vt10-elin-jakobsson.pdf) on the 15.05.2011.
- Kahl (2006): *States, Scarcity, Civil Strife in the Developing World*, Princeton: Princeton University Press.
- Kaiser, Tania (2000): "The Experience and Consequences of Insecurity in a Refugee Populated Area in Northern Uganda 1996-7", in: *Refugee Survey Quarterly*, Vol. 19, No. 1, p. 38-53.
- Koser, Khlaid (2008): "The Displacement-Peace Nexus", in: *Forced Migration Review*, extracted from: <http://www.fmreview.org/FMRpdfs/FMR3073.pdf> on the 15.05.2011.
- Lischer, Sarah (2005): *Dangerous Sanctuaries: Refugee Camps, Civil War and the Dilemmas of Humanitarian Aid*, Ithaca: Cornell University Press.
- Loescher, Gil, Milner, James, Newman, Edward and Troeller, Gary (eds.) (2008): *Protracted Refugee Situations: Political, Human Rights and Security Implications*, Tokyo/ New York/ Paris: United Nations University.
- Melander, Erik and Sundberg, Ralph (2011): "Climate Change, Environmental Stress, and Violent Conflict - Tests introducing the UCDP Georeferenced Event Dataset", Paper presented at the International Studies Association, March 16-19, Montreal, Canada.

- Merkx, Jozef (2000): "Refugee Identities and Relief in an African Borderland: A Study of Northern Uganda and Southern Sudan", Working Paper, No. 19, *New Issues in Refugee Research*, Geneva: UNHCR.
- Muggah, Robert (ed.) (2006): *No Refuge: The Crisis of Refugee Militarization in Africa*, London/ New York: Zed Books.
- OCHA/ IDMC/NRC (2008): *Monitoring Disaster Displacement in the Context of Climate Change*, extracted from: <http://www.internal-displacement.org/8025708F004CFA06/%28httpPublications%29/451D224B41C04246C12576390031FF63?OpenDocument> on the 15.05.2011.
- Raleigh, Clionadh, Jordan, Lisa and Salehyan, Idean (2009): *Assessing the Impact of Climate Change on Migration and Conflict*, extracted from: [http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/SDCCWorkingPaper\\_MigrationandConflict.pdf](http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/SDCCWorkingPaper_MigrationandConflict.pdf) on the 15.05.2011.
- Raleigh, Clionadh and Urdal, Henrik (2007): "Climate Change, Environmental Degradation and Armed Conflict", in: *Political Geography*, Vol. 26, p. 674-694.
- Salehyan, Idean (2005): "Refugees, Climate Change and Instability", Paper presented at International Workshop in Oslo, 21-23 June on Human Security and Climate Change.
- Salehyan, Idean and Gleditsch, Kristian (2006): Refugees and the Spread of Civil War, in: *International Organization*, Vol. 60, p. 335-366.
- Salehyan, Idean (2007): "Refugees and the Study of Civil War", in: *Civil Wars*, Vol. 9, No. 2, p.127–141.
- Salehyan, Idean (2008): "The Externalities of Civil Strife: Refugees as a Source of International Conflict", in: *American Journal of Political Science*, Vol. 52, No. 4, p. 787–801.
- Salehyan, Idean (2008b): "From Climate Change to Conflict? No Consensus Yet", in: *Journal of Peace Research*, Vol. 45, No. 3, p. 315-326.
- Smith, Dan and Vivekananda, Janani (2009): *Climate Change, Conflict and Fragility: Understanding the Linkages*, Shaping Effective Responses, International Alert, extracted from: [http://www.internationalalert.org/sites/default/files/publications/Climate\\_change\\_conflict\\_and\\_fragility\\_Nov09.pdf](http://www.internationalalert.org/sites/default/files/publications/Climate_change_conflict_and_fragility_Nov09.pdf) on the 15.05.2011.
- Theisen, Ole (2006): "Other Pathways to Conflict? Environmental Scarcities and Domestic

Conflict", Paper presented to the 47<sup>th</sup> Annual Convention of the ISA, San Diego, 22-25 March.

UNEP (2009): *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment*, Geneva: UNEP.

UNHCR (2009a): *Challenges for Persons of Concern to UNHCR in Urban Settings*, Geneva: UNHCR.

UNHCR (2009b): *UNHCR Statistical Yearbook 2009*, Geneva: UNHCR.

UN News Service (2008): UN launches year-long Campaign to highlight, and solve, plight of displaced, extracted from:  
[http://www.un.org/apps/news/story.asp?NewsID=29358&Cr=IDPs&Cr1= on the 15.05.2011](http://www.un.org/apps/news/story.asp?NewsID=29358&Cr=IDPs&Cr1=on+the+15.05.2011).

USAID (2009): *Climate Change, Adaptation, and Conflict: A Preliminary Review of the Issues*, extracted from:  
[http://www.usaid.gov/our\\_work/crosscutting\\_programs/conflict/publications/docs/CMMDiscussionPaper1ClimateChangeAdaptationandConflict.pdf](http://www.usaid.gov/our_work/crosscutting_programs/conflict/publications/docs/CMMDiscussionPaper1ClimateChangeAdaptationandConflict.pdf) on the 15.05.2011.

Weidmann, Nils (2009): *Critical Configurations: Settlement Patterns and Ethnic Violence*, Dissertation, ETH Zurich.

Weidmann, Nils (2007): *Geographical Group Fragmentation and Civil Peace*, Paper prepared for the GROW-Net Conference at the University of Essex, November 24-25, 2007.

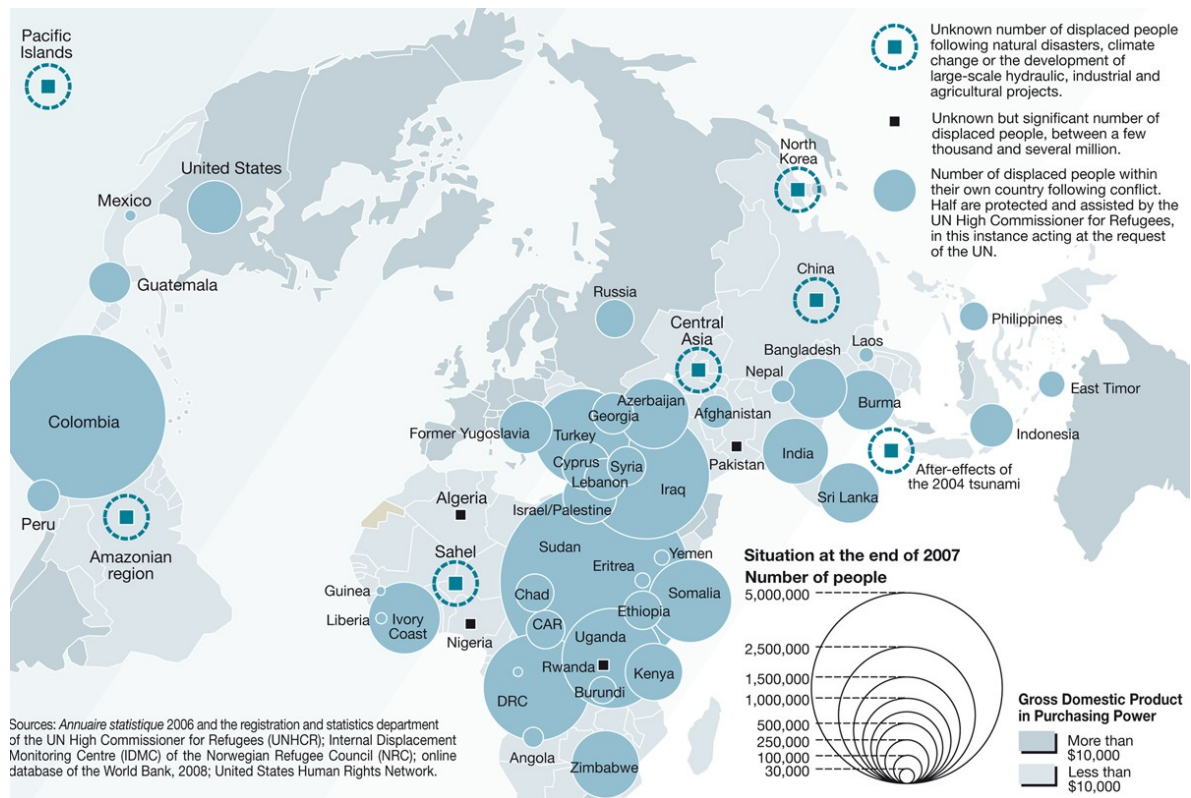
Weidmann, Nils, Kuhn, Patrick and Nikolic, Varja (unpublished) (2007): "Refugees as Local Catalysts of Conflict? A Statistical Assessment", Paper prepared for the International Studies Association 48<sup>th</sup> Annual Convention.

Whitacker, Beth (2003): Refugees and the Spread of Conflict: Contrasting Cases in Central Africa, in: *Journal of Asian and African Studies*, Vol. 38, No. 2-3, p. 211-231.

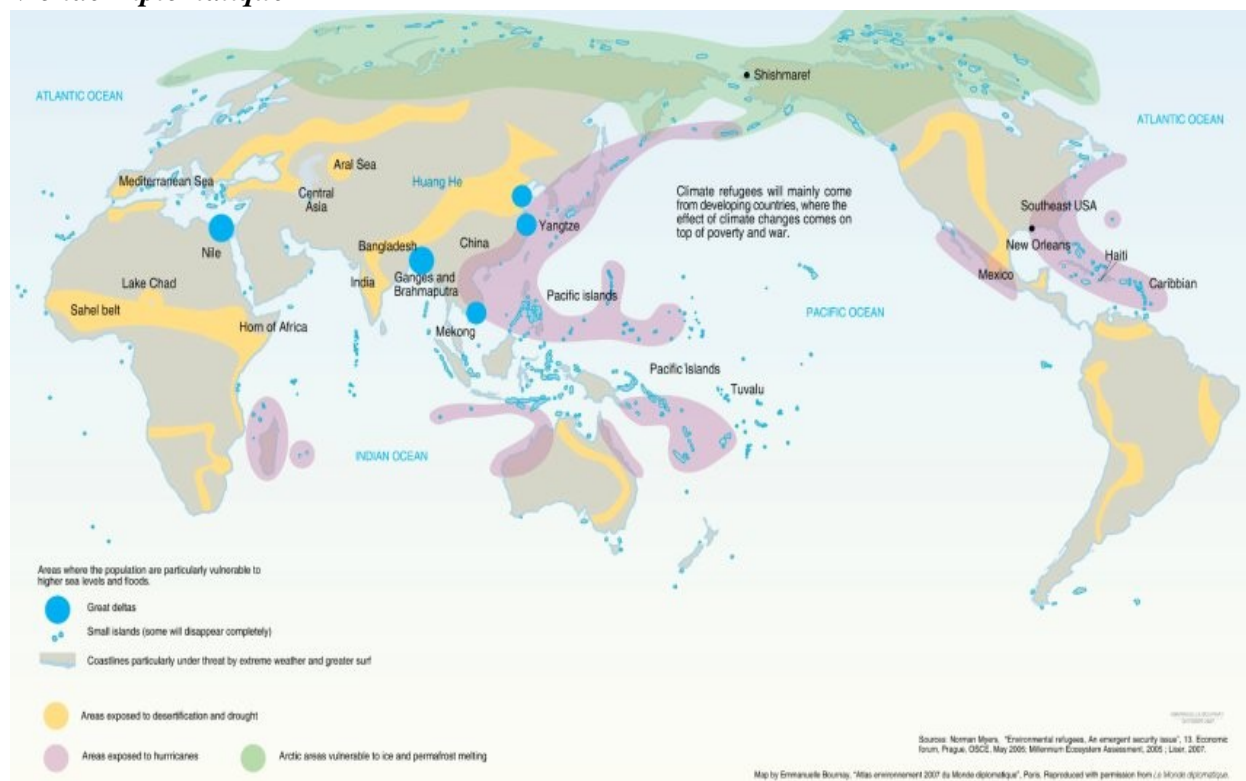
Zetter, Roger (2003): "Shelter Provision and Settlement Policies for Refugees: A State of the Art Review", in: *Studies on Emergencies and Disaster Relief*, No. 2, Sweden: Nordiska Afrikainstitutet.



## Map of conflict and environment induced migration



## Map of regions that are particular vulnerable to environmental risks taken from *Le Monde Diplomatique*



*- Preliminary studies*

Preliminary studies by team members have already assessed various aspects related to the proposed project. Hug has studied how the geographic location of ethnic groups is related to conflict onset in federal countries. Raleigh has explored how environmental risks relate to conflict events, and Saleyhan has carried out several studies on how refugee flows may induce conflict onsets. In an ongoing research project these refugee flows are studied in more detail under the angle of ethnic kinship. In a major data collection effort information on the ethnic background of refugees is being collected to assess whether ethnic tensions might explain at least in part how refugees contribute to the spread of violence. The dataset being established will be expanded upon in the proposed project to cover not only refugees but also displaced persons in general (both internally and environmentally displaced persons).

*- Project plans and duration*

The first year of the proposed project will be almost exclusively devoted to the collection of the relevant data. The research assistant (RA) hired as a doctoral student will create a dataset on the geographical location of refugee settlements, as well as their geographical distribution based on information available through UNHCR. The RA will, moreover, create a new data set on conflict related events in and around refugee settlements. Information for this dataset will be available also through UNHCR, but in addition from reports by USCRI and Human Rights Watch. During the same time the second RA will create a dataset on environment-induced migration, using the OCHA and IDMC report from 2009, UNHCR data and the IDP as well as the EM-DAT database (Emergency-Event database) that provides numbers of people affected by disasters and those homeless. Possibly also the IFRC Disaster Management (DMIS) database can be accessed which provides info on the location of IDPs.

In the second year the two research assistants will analyze these datasets to assess how settlement patterns of refugees and internally displaced persons are related to conflict. This will be done both at an aggregated and a geographically disaggregated level employing GIS techniques. In both cases econometric models will be estimated attempting to assess how conflict risk is related to settlement patterns and other relevant factors. This will lead to at least to scholarly papers. Following this the datasets will be merged in order to cover all types of displaced persons. These tasks will be undertaken mostly by the first research assistant who will be employed full-time. Analyzing these combined datasets will allow to assess much more closely how forced migration of different types interact and affect conflict. These analyses will result in a third scholarly paper.

In both years the RAs will collaborate closely with the team members, both in Geneva and abroad (Dublin, Ireland and Denton, United States). It is likely that the team members will contribute significantly to the scholarly papers discussed above.

*- Planned organization to achieve the specific aims of the project*

To achieve the aims of the project the tasks will be divided among the two RAs. The first RA will be mainly responsible for the first leading research question on the settlement patterns of refugees and IDPs and how these are linked to conflict. The second RA will largely focus on environment induced migration and investigate its link to conflict. These datasets will be created under the guidance of the research team members and in collaboration with several international agencies (see above).

The first RA will be also responsible for the combining the datasets to allow for a joint exploration on how displaced persons and their settlement patterns affect conflict.

*- Research design and methods*

The project will rely strongly on disaggregated data on refugees and IDPs. Geographical information on their settlements will be collected as well. The coverage of the data to be collected will be global as sources permit. Based on this established disaggregated data set, the effect of both refugees and IDPs on conflict and violence will be assessed with econometric tools. The focus hereby will be on environment- and conflict-induced migration. For more information, see also the project plan.

Research Project Summary (max. 4800 characters spaces included)

The project aims at getting a better understanding of how displacement of persons, either due to conflict or environmental risks, may create or spread conflict and violence. Recent research has been able to demonstrate that conflict related refugees may create security risks in their host countries and lead to the onset of violent conflict. But not all displaced persons leave their home countries nor do all migrate because of persecution. Consequently, we wish to assess based on an intensive data collection on displaced persons whether forced migration in general may contribute to conflict and whether environment-induced migration poses the same risks of conflict as persecution leading to refugee status.

To provide such an assessment systematically different datasets are required. First of all information on displaced persons (refugees and IDPs) need to be collected. Second, it is also necessary to have information on the settlement patterns of displaced persons. These data will be related to information on conflict and violent events.

Based on such disaggregated data a precise assessment of how forced migration (due to environmental risks and conflict) affects conflict.