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Environmental Changes and Migration Flows

Normative Frameworks and Policy Responses

Volume I

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Environmental Changes and Migration Flows

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Acronyms

4AR	Fourth Assessment Report of the Intergovernmental Panel on Climate Change
ACF	Advocacy Coalition Framework
CCEMA	Climate Change, Environment and Migration Alliance
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
CRED	Centre for Research on the Epidemiology of Disasters
CRP	Crisis Relocation Planning
DRR	Disaster Risk Reduction
DUA	Disaster Unemployment Assistance
EACH-FOR	Environmental Changes and Forced Migration Scenarios
ECHO	European Commission Humanitarian Aid Office
EM-DAT	Emergency Events Database
ERMA	Emergency Refugee and Migration Assistance Fund
FAO	Food and Agriculture Organisation
FEMA	Federal Emergency Management Agency
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFDRR	Global Facility for Disaster Reduction and Recovery
IASC	Inter-Agency Standing Committee
IASFM	International Association for the Study of Forced Migration
ICRC	International Committee of the Red Cross
IDPs	Internally-displaced people
IEMS	Integrated Emergency Management System

IFRC	International Federation of Red Cross and Red Crescent Societies
IOM	International Organisation for Migration
IPCC	Intergovernmental Panel on Climate Change
IRO	International Refugee Organisation
IRU	International Relief Union
ISDR	International Strategy for Disaster Reduction
ISO	International Standardisation Organisation
LiSER	Living Space for Environmental Refugees
NGO	Non governmental organisation
OAU	Organisation of African Unity
OCHA	Office for the Coordination of Humanitarian Affairs
OEDC	Organisation for Economic and Development Cooperation
OFDA	Office for Foreign Disaster Assistance
PAC	Pacific Access Category
SCHR	Steering Committee for Humanitarian Response
SME	Small and medium-sized enterprises
T'TTA	Trans-Tasman Travel Arrangement
UNCBD	United Nations Convention on Biological Diversity
UNDP	United Nations Development Programme
UNDRO	United Nations Disaster Relief Organisation
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRRA	United Nations Relief and Rehabilitation Administration

UNRWA	United Nations Relief and Works Agency
UNU-EHS	Institute for Environment and Human Security of the United Nations University
WCED	World Commission on Environment and Development
WFP	World Food Programme
WMO	World Meteorological Organisation

*To my beloved grandmother,
who sadly passed away before she could see this work completed.*

Introduction

The idea for this thesis was born in an elevator. That was in 2001, and I was interning at the UN headquarters in New York, thanks to an arrangement overseen by Dr Marco Martiniello. I got stuck one day in an elevator with a man I had never met, who happened to be H.E. Enele Sopoaga, the freshly-appointed ambassador of Tuvalu to the United Nations. Prior to that moment, I had never heard of Tuvalu; if I had, I might have imagined it was one of those exotic micro-states that seemed designed for honeymooners.

Being stuck in an elevator has many drawbacks, but the one positive thing is that you get to talk with people you might not have had a chance to talk to otherwise. Naturally, I asked my elevator-fellow about his country. And while we were waiting for the operators to fix the elevator, he started telling a story that I found almost incredible: the story of a country so small and so flat that it was at risk of being washed away by rising sea-levels. I told him I found the story compelling. He replied that telling it to as many people as possible was his *raison d'être* in New York. The elevator started working again, and we parted.

Back at the Belgian mission, I told my supervisor, Jean-Paul Charlier, about my encounter in the elevator. And he brought up the topic of ‘environmental refugees’: the massive population displacements that were to happen in the future, the lack of legal status, climate justice, ... All subjects that are now familiar, but which sounded like *terrae incognitae* back then. Our conversation was an eye-opener; and so when Marco Martiniello, himself a specialist of migration, suggested I embark on a PhD a few years later, it seemed only natural for me to choose this topic. The subject was still very marginal at that time, and Tuvalu appeared more a unique case than representative of a wider phenomenon. Marco Martiniello, however, believed the topic was promising, and Dr Catherine de Wenden, another migration specialist whom I had contacted to act as joint supervisor, shared the same opinion. Over the years, I have been struck by the growing importance of the topic in public and scholarly debates, and the overwhelming number of studies, reports, recommendations, proposals and press articles that have been published on the topic.

1. Goal of the Thesis

What then might be my contribution in this emerging field of study? A few scholars had written on the topic already – Richard Black was one of them – but overall it was a largely under-researched area, so there were plenty of avenues to explore. Most of the literature that existed on the topic in 2004-2005 touched upon two distinct aspects:

- A first group of works aimed to conceptualise the topic: how does the environment impact migration? How do people react to environmental stressors? Does environmental migration exist? How can it be defined? How many people will move? These were some of the questions posed, and most of them have not yet been fully answered, to a large extent because of the lack of empirical research.
- A second body of literature was concerned with the protection of people uprooted by environmental changes: it stressed that ‘environmental refugees’ were actually not considered refugees and were not protected by any international convention, and that new instruments of international law were needed, either from refugee law or environmental law.

These two clusters of works reflected, on the whole, the classic ambivalence between fundamental research and policy-oriented research. I thought that it would be interesting to see whether both approaches could be combined, and could inform each other. It seemed that one was the consequence of the other, and that there was a one-way relationship: appropriate policy instruments could be developed only when environmental migration was defined, estimated and identified. Fundamental research would orient policy-making, and more research was needed. The other side of the relationship, however, seemed less explored: could policies also inform concepts, as concepts inform policies?

I was struck, in particular, by the debates surrounding the use of the term ‘refugee’: though the term had a legal as well as a sociological meaning (Suhrke 1994), it seemed that the fact that the term was legally defined was preventing any further use in another context, as if the Geneva Convention had pre-empted all other possible definitions (Castles 2004). Refugees, as

a sociological category, had been defined by the instrument that was designed to protect them. This definition is a classic example of the performative function of law: given its status as an international agreement ratified by Western powers, the Geneva Convention created refugees as a social category at the same time as it defined them legally. This Convention, however, was the product of a specific political context, an outcome of conflicting interests and strategies. Hence the conceptualisation of ‘refugee’, as a sociological category, was determined by a specific normative framework.

Could the same be true for environmental migration? How was the conceptualisation of the term influenced by normative frameworks of, and policy responses to, this social phenomenon? How was the term constructed as a category? Could it correspond to a categorical void in norms and policies? I was interested in the construction of the concept: this is what this work is about.

It could be argued that a discussion of policies is premature, as the debate on the very nature of environmental migration is still ongoing. I contend that discussion of both should go hand in hand, and mutually influence each other. My central argument in this research is that policies play a key role in determining whether displacements occur, and which form they take. As Zolberg has argued with regard to international migration, that ‘it is state actions (...) that determine whether any international migration will take place at all’, and ‘it is the policies of the receivers which determine whether movement can take place, and of what kind’ (Zolberg 1989: 405-406). Waddington makes a similar argument for internal migration (Waddington 2003). In the next section, I will develop one of the main hypotheses of this research concerning the central role of the state in determining patterns of environmental migration: I argue that these patterns are, to a large extent, determined by the policies implemented to address these migrations rather than by the environmental change *per se*.

This research does not aim to map environmental migration or discuss the linkages that exist between environmental change and migration¹, but will rather focus on the policy responses, normative frameworks and institutional arrangements that aim to address these migrations and protect migrants.

¹ The main components of this debate will be presented in the next chapter.

Ultimately, my question relates to the long-debated relationship between research and policy, and their mutual influence. But which policies to choose? From which level of analysis to depart? It seemed that environmental migration was most influenced by environmental and migration policies. Both were understood as broad concepts that encompassed a wide range of interventions: from disaster management to climate policy on the one hand, and from asylum to governance of migration on the other hand. But each of the two fields were concerned by an overarching concept: the changes in the environment in the case of environmental studies, and the movement of people in the case of migration studies. Both concepts were absolutely central to environmental migration, which was born out of the coincidence of these concepts.

My goal is therefore to examine the norms and policies that relate to movements of people triggered by environmental changes, and how they inform the debates on environmental migration and shape its conceptualisation.

How should I proceed to conduct this review? From a methodological point of view, a great source of inspiration has been the work conducted by Dr Francis Deng. In 1992, the UN Secretary-General, Boutros Boutros-Ghali, appointed Deng as his special representative for internally-displaced persons (IDPs). By the early 1990s, the number of IDPs worldwide had surged, and their situation was widely perceived as a major humanitarian crisis, which required the development of new frameworks of protection. Francis Deng was therefore entrusted with the task of creating an ‘appropriate framework’ for addressing the plight of IDPs, and he enjoyed great latitude regarding the possible formats of this framework (Kälin 2001). Deng’s first act was to set up a team of researchers at the Brookings Institution to review all international norms that might apply to IDPs. The researchers focused their investigations on human rights law, humanitarian law and refugee law: they identified protection gaps and key areas, inferences of some rights from certain provisions, and areas where the law should be restated, complemented, or transposed. Overall, they concluded that although neither humanitarian law, nor refugee, nor human rights law alone could provide adequate protection to IDPs, the combination of the three bodies of law had the potential to do so. Their conclusions, summarised in a document entitled ‘Internally Displaced Persons: Compilation and Analysis of Legal Norms’ (Office of the United Nations High Commissioner for Human Rights 1998), showed the complementarities between the different bodies of law, and established the basis for the development of Guiding Principles on Internal Displacements, a

series of key principles aimed at safeguarding human rights in situations of internal displacement, which were adopted in 1998. One of the factors that made the Guiding Principles a successful instrument of protection on the ground was that they were firmly rooted in international law: they did not create any new law, but rather combined norms and principles that already existed but were scattered in different agreements and conventions, uniquely bridging separate, but connected, branches of law.

The intention of this thesis is certainly not to draft a framework for the protection of environmentally displaced people. A number of such attempts have been made: in recent years, an impressive and proliferating number of initiatives have successfully portrayed environmentally displaced people as ‘forgotten migrants’, ‘legal gypsies’ (Conisbee and Simms 2003), those unprotected by any norm of international law. A number of studies, workshops, declarations and projects – some of a legislative nature – have called for the development of new policy instruments and international agreements to address the plight of ‘environmental refugees’. Very recently, a group of legal scholars from the University of Limoges (France) drafted a ‘convention on the international status of environmentally-displaced persons’, which aimed to combine key principles from both environmental law and refugee law, an endeavour that had not previously been undertaken (Prieur et al. 2008).

Hence my approach is inspired by the seminal work of the team set up by Francis Deng – at a more modest level, it goes without saying – but is different in nature: this work is not a legal analysis, and has no pretensions to that field. My aim is different: I have chosen to examine *how social categories and concepts are shaped by law, which itself is the outcome of interactions between political values and interests*. This research revolves around this central question. Thus my goal is not to discuss normative frameworks as such, but rather how these frameworks are political constructs and inform the concept of environmental migration. The process, rather than the outcome, is the fundamental unit of analysis.

There are however, two significant conceptual differences between environmental migration and internal displacement, which ought to be mentioned at this stage. Firstly, internal displacement is more easily conceptualised than environmental migration. Although there is some debate on the definition of the causes of internal displacement,² two elements are

² In particular on the inclusion or not of natural disasters as a root cause of internal displacement (Phuong 2004: 30)

decisive in the conceptualisation of displacement: the absence of crossing an international border, and the coercive character of the movement. Such elements do not appear as clearly in the case of environmental migration, hence no common definition has yet been agreed upon: environmental migration encompasses both internal and international movement, and forced as well as voluntary migration. Secondly, in the definition above, internal displacement is conceived exclusively as the result of forced migration: therefore, the frameworks that address these displacements are primarily concerned with protection and assistance. Environmental migration, in addition to coerced displacements, also encompasses some voluntary movements, where ‘pull’ factors play an important role. Relevant norms and policies are therefore more complex and varied, as they must also address migration management and governance, in addition to protection and assistance. The former, however, are much more developed on the international level, whereas the latter remain confined mostly to domestic policies (Badie et al. 2008; Martiniello 2001). My analysis will therefore primarily focus on frameworks of protection and assistance, as will be explained below. These differences aside, the principal defining feature of my endeavour is the focus on the policy process.

The policy process is examined through the lens of the advocacy coalition framework, an innovative method of policy analysis that considers policy outcomes as products of policy subsystems organised around competing advocacy coalitions (Sabatier 1988). These coalitions revolve around a core system of policy beliefs, and gather a wide range of policy actors: institutions, NGOs, the media, but also university scholars. A core objective of my work is to show the role played by these actors in the policy-making process: I argue that academic research or media reports are not neutral in this process, but underpinned by a series of core values and interests. Thus the model of the advocacy coalition framework (ACF) seemed pertinent, as it allowed the development of the two objectives of this work:

- To show the political construction of the norms and policies that addressed – or not – environmental migration;
- To highlight the relationships between research and policy in this field, and in particular how policy impacted upon research, rather than the other way around.

In particular, I was seeking to explain *how different value systems could explain the emergence of different policy outcomes*. I argue that these outcomes are contingent upon the value system at play in the

policy-making process. My hypothesis was that the policy subsystem of environmental migration was dominated by two advocacy coalitions, led by scholars of migration studies and environmental studies respectively, which I called the sceptical and alarmist coalitions. With regard to policy, the major preoccupation of migration scholars – the sceptical coalition – was to uphold the rights of migrants, whereas environmental scholars – the alarmist coalition – were primarily concerned with raising awareness and prompting action on environmental change, and global warming in particular. Both values were sensible and commendable policy beliefs as such, but I made the hypothesis that they could compete with each other when it came to environmental migration.

I chose to conduct my research in two distinct fields of norms and policy processes: environmental and migrational. What I hope is a major originality of this work is also one of its major limitations, amongst many others: although it aims to highlight the complementarities and parallel developments of environmental and migration policies, only these two fields are considered. Why not consider humanitarian, development and security policies, to name just a few other policy areas that would have been relevant? Though expanding the research into these areas would have been extremely useful, I chose not to enter into these areas (or to do so only marginally), and thus limited the scope and ambition of this thesis. There were several reasons for this limitation. Firstly, I was constrained by time and financial resources. Secondly, I did not have the appropriate training to conduct an investigation in those policy areas. My educational background is in political science, with an emphasis on public law and public administration. A Master's degree in Environmental Studies from the University of Louvain provided me with valuable insights in this policy area; my working environment at CEDEM, as well as an exchange study year spent at New York University, helped familiarise me with migration studies. Finally, a Master's of Research from the London School of Economics allowed me to train in research methods, especially with regard to policy analysis. Thus I could find my way in environmental and migration studies, equipped with the tools to analyse relevant policies, but I was not sufficiently confident to engage with policy areas in which I had received no formal training, even though this imposed a considerable limitation onto my work. Thirdly, I felt that environmental and migration policies related most directly to the two fundamental components of environmental migration: environmental changes, and the movements of people. Other areas touched upon these components more marginally, without capturing their essence. Finally, I assumed that it would be more fruitful to analyse the policy areas that environmental and migration scholars –

the key actors within advocacy coalitions – were most likely to influence, and to assess how their competing values and interests translated into “their” policy fields.

I had fixed upon my subject of study and intended methodology; however the level of analysis still remained to be decided. The Advocacy Coalition Framework takes the most useful unit of analysis to apprehend the policy process to be the policy subsystem, rather than a specific organisation or programme (Sabatier and Jenkins-Smith 1999: 119). The policy subsystem encompasses different levels of policy-making and their interactions, as well as all actors concerned with a policy issue. Hence I will investigate the different policy areas in which environmental migration is addressed, considered as part of the same policy subsystem. International mechanisms play an important role in this subsystem, as most of the extant literature addresses environmental migration as a global issue, which needs to be addressed globally. However, the analysis will not be restricted to the international level, but will examine how these international mechanisms are informed by regional, national and local actors through a bottom-up approach, and how they find concrete applications on the micro-level.

Analysis at the macro-level will be complemented by the study of two cases at the micro-level: the cases of Tuvalu and Katrina. These cases will serve as illustrations of how actual migration has been addressed – or not – by the policy process, and how processes and interactions identified at the international level can also reflect at the local level.

These illustrations deal with migration flows associated with sea-level rise in Tuvalu, and with hurricane Katrina in New Orleans. Although both migration flows have been labelled ‘environmental migration’, they represent very different patterns of migration in different institutional settings, resulting in different policies. One is a proactive, international migration flow triggered by slow-onset environmental change, whereas the other is a brutal, reactive displacement induced by a sudden event. Moreover, the migrations happened in places in the world that could hardly be further apart. These cases, which are apparently very dissimilar, will be used to illustrate the local dimension of the policy subsystem, and how this local dimension reflects the policy processes at play on the macro-level.

Overall, the thesis hopes to make an original contribution in three ways:

1. In demonstrating how environmental migration, as a social category, is a political construct. In doing so, I do not seek to deny or diminish the reality and (growing) importance of environmental factors as migration drivers, but rather to show that the establishment of environmental migration as a specific type of migration is the result of a political process, involving coalitions pursuing different and conflicting interests.
2. In connecting research and policy in an innovative fashion. In contrast to the common assumption that research informs policy-making, I argue that policy-making also informs research, and shapes the conceptualisation of environmental migration. I shall examine in particular two areas of policy-making: migration and environmental policies. Although both areas have been considered separately with regard to environmental migration, they have not yet been considered together, in their potential complementarities and discrepancies.
3. In highlighting the role played by scholars in the policy-making process. I argue that scholars are not neutral, policy-independent agents, but rather policy entrepreneurs, whose perception of their topic is shaped by a series of policy objectives and fundamental values. The model of the advocacy coalition framework is used in my analysis, through the identification of two funding coalitions, led by environmental and migration scholars respectively. After a thorough review of the literature of both coalitions, the subsequent chapters aim to demonstrate how their policy beliefs have translated into actual norms and policies.

2. Thesis Outline

The thesis is divided into four parts: Part 1 lays the conceptual foundation of the research and details its methodology. Part 2 discusses the components of the environment-migration nexus. Part 3 reviews environmental norms and policies, and their relevance to environmental migration, while Part 4 conducts a similar exercise for migration policies.

The thesis does not use a typical concatenationist format, but rather follows a sequential three-step approach: Parts 3 and 4 can be read irrespective of their order.

Chapter 1 presents the theoretical scaffolding for my research. It shows where and how this thesis contributes to existing literature on the subject, and how it relates other works in the field. The relevance of the constructivist approach is explained, as well as the main objectives of the thesis. A subsequent section is devoted to a discussion of the principal theoretical models that will be used in the thesis. Those drawn from environmental studies include the principles of environmental economics, as well as theories on climate change and vulnerability. Concerning migration studies, the section seeks to show how classical theories of migration can address environmental migration, and what their insufficiencies are. Chapter 2 is methodological, and discusses the investigative techniques and methods used in the research. The model of the advocacy coalition framework, the main method of analysis, makes up most of this section, but the relevance and methodology of the case studies are also addressed.

Chapter 3 opens with an extensive review of the literature on environmental migration, from early texts in the field to current policy proposals, and aims to show the origin and evolution of the opposition between a sceptical and an alarmist perspective. Chapter 4 addresses different aspects of the environment-migration nexus, which include the issues of definition, estimates and predictions, as well as the different drivers and patterns of migration. A final section attempts to propose a three-dimensional theory of environmental migration, and clarifies the terms and concepts that will be used in the remaining chapters.

Part 3 is devoted to environmental policies. Chapter 5 begins with an examination of international normative frameworks in the fields of disaster management, and some of their policy applications. It examines how states and the international community have responded to disasters, from early responses in the seventeenth century – with the Great Fire of London and the Lisbon Earthquake – to the recent internationalisation and institutionalisation of disaster responses. Chapter 6 looks at the different principles developed in environmental law to address environmental changes, and how these principles might apply to environmental migration. It describes how climate change became a matter of international concern, and the initiatives that have been taken thus far to address its impact, particularly through adaptation strategies.

Part 4 conducts a similar exercise for migration, and two areas are considered: the international refugee regime and asylum & mobility policies. Chapter 7 reflects on different instantiations of the protection of refugees, including the role of the UNHCR, and aims to highlight the reasons why environmental factors have never really been considered as a root cause of refugee movements. Chapter 8 examines the different applications of refugee law in Europe, as well as the frameworks for protection of the internally-displaced people.

* * *

I met Enele Sopoaga again in July 2007, fewer than six years after our first encounter in a Manhattan elevator. This time we were both in Funafuti, the small capital atoll of Tuvalu. I was there to conduct fieldwork on his country, and he was returning home after six years spent at the United Nations as a plenipotentiary ambassador. I was standing next to the runway when the small Air Chathams' Convair 580 that was bringing him home landed. I joined the group of friends greeting him and his family upon their arrival in the tiny, packed airport.

A few days later, we spent a delightful evening at his home, talking about sea-level rise and drinking terrible tea. His teenage children were speaking flawless English, with a strong American accent. He told me that he remembered me and our conversation in the elevator perfectly. I didn't dare to ask him whether this was a white lie or not. He was now a career diplomat, after all.

Part 1

Theories and methods

“My view of the matter, for what it is worth, is that there is no such thing as a logical method of having new ideas or a logical reconstruction of this process.”

Karl Popper, *The Logic of Scientific Discovery* (2002 (1934): 8).

Introduction

Many theories and models have struggled to describe and explain environmental changes and migration flows over the years. When dealing with environmental migration, an immediate temptation is to consider environmental change as the independent variable, and migration as the dependent variable. In the analysis of the policy process I plan to conduct, however, I intend to consider both variables as social constructs, constituted by the policies created to address them.

In Part 1 of the thesis I present the principal theories and methods used in this research. Chapter 1 addresses the design of the research, outlining the theories it relies on, the approach it will use, and the scholarly contribution it hopes to make.

In the first section, I show the relevance of my research to existing literature, and outline the contribution it intends to make to the field on the conceptual level. The second framework outlines the theoretical framework in which the thesis is constructed. I describe and justify the constructivist perspective underpinning this work, and explain how the concept of environmental migration can be considered as a social construct, and the implications this holds for my research methodology. The third section turns to address the main theories and models, both from environmental and migration studies, which constitute the theoretical basis of my reflections. Although the research deals with a policy-driven conceptualisation of the environment-migration nexus, it seemed important, as a first step, to show how both components of the nexus were conceptualised separately in the literature. In particular, following Piguet (2008), I try to demonstrate how environmental factors have been neglected in mainstream migration theories, and the importance of vulnerabilities to discussion of the impacts of environmental changes. Finally, in this section I also discuss the linkages between research and policy, and the mutual interactions that exist between scientists and policy-makers.

Chapter 2 discusses the different methods used to conduct my work, and in particular the Advocacy Coalition Framework, which is the key model for my analysis of the policy process. Although different scholars have used the model for analysing environmental policies, in particular forestry policies and pollution control (Burnett and Davis 1999; Grant 1995; Sewell

1999), I am not aware of any attempt to apply the model to migration policies, let alone the combination of environmental and migration policies.

After a brief description of different theories of the policy process, I turn to the Advocacy Coalition Framework (ACF) and explain the reasons for my choice of this model. Furthermore, the key methods and data used to conduct this research, including its fieldwork component, will be detailed in this chapter.

Chapter 1

Research Design

“One of the major problems the world is going to face in future years is what you might call ecological refugees. It’s a question of national security for the U.S.”

*E. Curtis Bohlen,
US Assistant Secretary of State, Chief Negotiator at the Rio Earth Summit, 1992³.*

Introduction

This chapter aims to delineate the main theoretical underpinnings of this research. Section 1.1 situates the research within the extant literature on environmental migration, and attempts to show the contributions it makes to academic and policy debates. Section 1.2 discusses the nature of these contributions, and outlines the main goals of this work. The conceptual framework is detailed in Section 1.3. The implications of the constructivist approach as a conceptual choice are explained and discussed. The next cluster of the section discusses the mode of selection of the theoretical framework of the research: which theories, which models are to be used in order to develop the analysis? This research lies at the crossroads of environmental and migration studies: models and theories germane to both fields are discussed, and the choices that have been made are justified. Finally, the linkages between research and policy are discussed in a final segment.

³ Interview with E. Diringer, *The Road from Rio Looks More Promising*, published in the San Francisco Chronicle, 15 June 1992, p. A1.

1. Relevance of the Topic

As suggested in the Introduction, the existing literature on the linkages between environment and migration has mostly concentrated on a central debate between an alarmist, or maximalist (Suhrke 1993), perspective, and a more sceptical approach, espoused by many migration scholars (Kibreab 1997; Black 2001; Castles 2002). This debate considers the environmental causes and impacts of migration, and their two-way relationship. Many authors address both clusters of the environment-migration nexus (Suhrke 1993; Hugo 1996; Kibreab 1997; Black 1998; Klot 2004). Fewer authors address the environmental impacts of migration specifically (Homer-Dixon 1991; Locke et al. 2000b), and the debate has now shifted to focus on the causal relationship between environmental change and migration, and in particular forced migration. The increased attention given to climate change and its impacts on populations played a major role in this shift. In a similar fashion, literature and debates on climate change have also increasingly devoted more space to the issues of adaptation to the impacts of climate change, and not only to the mitigation of the latter (Adger et al. 2006b). This evolution will be discussed in the section devoted to climate change (Chapter 3).

As the shift towards a focus on environmental migration became more marked, the controversy between alarmists and sceptics slowly faded. I argue that the fundamental causes of this controversy were twofold: firstly, the lack of comprehensive research – particularly on the empirical side – was fertile soil for the development of different research agendas; secondly, the disciplinary divide between migration and environment scholars paved the way for studies evolving in different directions. In recent years, various initiatives have attempted to bridge this divide – for example, environmental and migration specialists have been brought together in numerous workshops and conferences⁴ – and as the first impacts of climate change became manifest viewpoints have become more aligned. It is noteworthy that recently published work has largely been collective work, often a product of researchers from different disciplines (Kniveton et al. 2008; Boano et al. 2007; Renaud et al. 2007).

⁴ For instance, the Research Workshop on Migration and the Environment held in Munich on 16-18 April 2008 by UNU-EHS and IOM, the workshop on Climate Change, Environmental Degradation and Migration: Preparing for the Future, held in New York on 8-9 May 2008 by UNITAR, or the expert seminar on Environment and Migration held in Bangkok on 22-23 February 2007 by IOM, to name but a few.

The gradual disappearance of this controversy can also be linked to climate change and an increased number of disasters, which have shed new light on the relationship between environmental change and migration flows. There is today a wide consensus that environmental drivers play an important and increasing role in the migration decision of a growing number of migrants (Renaud et al. 2007; Brown 2008; Boncour 2008). Conceptualisation of the environment–migration nexus remains, however, the subject of ongoing debates and discussions: many scholars insist that migration is only one possible response to environmental change (Kniveton et al. 2008), and argue that there is no single direct causality between the two, but rather a combination of economic, social, cultural and environmental factors (Kliot 2004; Hugo 1996; Boano et al. 2007).

The view that environmental changes, and climate change in particular, are increasingly important migration drivers is now shared by growing numbers of migration scholars and environmental scholars alike, but also by international organisations (IPCC 2007; Office of the United Nations High Commissioner for Refugees 2006). In an interview with *The Guardian* on 17 June 2008, the UN High Commissioner for Refugees, Antonio Guterres, stressed the importance of climate change as a driver of forced migration, and also the multi-causality of such displacements: ‘Climate change is today one of the main drivers of forced migration, both directly through impact on environment – not allowing people to live any more in the areas where they were traditionally living – and as a trigger of extreme poverty and conflict’ (Borger 2008). This perspective also dominates much of the media and political discourses. Some authors, however, warned that this linkage between environmental change and migration was yet to be empirically proven, and that empirical research thus far had yielded mixed results: in some cases, environmental changes such as droughts resulted in a decline, and not an increase, of migration movements (Black 2001; Van Der Geest 2009).

The lack of empirical data is certainly one of the major impediments to the current research stream on environmental migrations. Many seminars and workshops in recent years have called for more empirical research, repeating the call formulated in 1996 in a report on the fifth meeting of the International Research and Advisory Panel for Forced Migration (Koser 1996: 357). The lack of empirical research has fuelled the debate on the conceptualisation of environmental migration, and particularly on the definition and numerical estimation of such migrants. Thus far, no unanimous definition of environmental migration has emerged, while predictions of the number of environmental migrants range from a few millions to a billion

people by 2050 (Christian Aid 2007). These two issues are closely related, of course, since ‘broad categorizations invite large numbers’, as noted by Suhrke (1993: 6). Though recent progress has been with some proposals and models for the improvement of methodologies to estimate flows of environmental migrants (Kniveton et al. 2008; Afifi and Warner 2007), debates remain fierce regarding the definitional issue, and even the very point of such a definition. These issues and developments shall be discussed in further details in Chapter 3.

Some initiatives have recently been taken to address the lack of empirical research. The most significant is undoubtedly the EACH-FOR project⁵, funded by the European Commission over the period 2007-2009. The project aims to examine the impacts of environmental changes on migration patterns in 23 case studies throughout the world. It is the first project of its kind to study these impacts on a global scale, in a comparative and empirical perspective. Its preliminary results hint at a close connection between environmental change, environment and migration, or at least temporary relocation. They also stress the difficulty of disentangling environmental factors from other factors influencing migration decisions, such as poverty, land tenure, or government planning. It appears that the form of migration movement most commonly linked with environmental factors is internal flows, except when patterns of international migration pre-exist between two countries (Entzinger 2008). The project should be pursued further, however, in order to yield more comprehensive results.

This thesis does not seek to weigh the evidence of the linkages between environmental disruptions and migration, nor to provide new empirical evidence. Such a task would have required extensive fieldwork in multiple locations, or a statistical analysis of data that were not readily available. More fundamentally perhaps, any discussion based on such empirical evidence(s) is presented with several major obstacles:

- Firstly, much of the discussion dealing with environmental migration is directly contingent upon the effects of climate change. Although the global impacts of climate change are well-known, thanks to the work of the IPCC, their future unfolding on a regional level continues to be uncertainties. As of the current state of science, it is difficult to forecast precisely how a given area will be affected.

⁵ The acronym stands for ‘Environmental Change and Forced Migration Scenarios’. More information on the project can be obtained from <http://www.each-for.eu>.

- The implications of these impacts at a social level are difficult to predict. How people respond to environmental stressors depends on many variables, which include their livelihoods, adaptive capacities, social networks, etc. As will be shown in Part 2, Chapter 3, the multi-causality of migration makes it difficult to identify empirical cases of environmental migration, let alone to predict new flows.
- Finally, any empirical evidence would not be generalisable. How environmental stress impacts upon migration is contingent upon national, regional and local contexts: adaptive capacities, levels of resilience and policies vary, hence migration patterns observed in one case cannot be transposed as such to another case.

For these reasons, my research will not seek to discuss the empirical linkages underpinning the environment-migration nexus, but rather its policy connections. I argue that these policy connections are fuelled by discursive and ideational linkages that have emerged in recent years. These linkages reflect and serve a wide range of strategies and interests, which will be called ‘policy beliefs’ in the Advocacy Coalition Framework. My goal is therefore to show how these interests shape the connection between environment and migration on the policy level, and how the emergence of this connection, in turn, shapes the conceptualisation of environmental migration. Zetter has flagged the risk that ‘evidence-based policy making’ might be replaced by ‘policy-based evidence making’ (Hietanen 2009): from my perspective therefore it seemed important to study policy developments in the field, their emergence and interactions, as well as the factors and interests driving the policy connections between environment and migration.

Despite the lack of material evidence, many authors have stressed the need for the development of protection mechanisms and normative frameworks for those uprooted by environmental changes, in diverse and sometimes conflicting directions. Brown notes that ‘forced climate migrants fall through the cracks of international refugee and immigration policy’ and sees a ‘collective, and rather successful, attempt to ignore the scale of the problem’ (Brown 2008: 36). Already in 1995, Dacyl advocated a new protection system in Europe for the ‘refugees’ who were not recognised by the 1951 Geneva Convention, and stressed that most asylum-seekers in Europe were ‘fleeing various forms of so-called generalised violence (...), massive and persistent patterns of human rights violation, economic emergency, and environmental deprivation; or they are forced from their places of origin by natural

catastrophes or man-made disasters' (Dacyl 1995: 580). Since then, many authors have pointed to a policy gap in the matter of environmental migration, especially for those displaced abroad (Zetter 2008; Conisbee and Simms 2003; Boncour 2008; Suhrke 1994; Hugo 1996). In a recent academic conference held at the European Parliament, participants called for 'legal protection for the victims of climate disruption and of possible displaced persons (current or future) who do not benefit today from any recognition' ("Declaration on climate migrations" 2008).

Several attempts have been made to fill in this gap, most of them in the field of legal protection and status. In 1999, Magniny examined the legal possibilities of granting refugee status to those uprooted by environmental disasters, in what she called 'a legal hypothesis to address an ecological threat' (Magniny 1999). Other notable works in this area include those of Cournil and Mazzega, (2007, 2006), Chemillier-Gendreau (2006) and Falstrom (2001). Following Magniny, Cournil and Mazegga also reflect on the prospect of legal protection of 'ecological refugees', Chemillier-Gendreau concluded that an international legal status was a necessity, while Falstrom proposed the creation of a new convention, built on the model of the UN Convention Against Torture. In March 2009, a group of environmental law scholars from the University of Limoges presented a draft convention on the status of 'environmentally-displaced persons', which they hope to promote at the international level (Prieur et al. 2008).

Fewer works have addressed issues of governance. Biermann and Boas outlined a blueprint 'for a global governance architecture for the protection and voluntary resettlement of climate refugees' (2007: ii). They argued for a new legal instrument under the United Nations Framework Convention on Climate Change (UNFCCC), and a dedicated funding mechanism. King (2006) also makes the case for a new policy instrument, and proposes the creation of an International Coordination Mechanism for Environmental Displacement (ICMED). Overall, most works addressing the governance aspects of the debate do so within the framework of climate change as a security issue. Recent research conducted by the German Advisory Council on Climate Change advocates a multilateral umbrella convention on environmentally induced migration, which is considered a possible conflict trigger (2008: 187).

This attention to policy responses is recent: most research on these aspects has been conducted only in recent years, and has been geared primarily towards future flows of

migrants induced by the impacts of climate change. Therefore, these works are anchored in a prospective framework, and look at the development of future mechanisms and legal instruments, rather than at current policies and regulations. This tendency is rooted in the expectation that movements triggered by environmental change will be more important in the future than they are now, and that new policies and instruments should therefore be developed to deal with these future displacements. Little research has been conducted on current policies and instruments that exist already to deal with contemporary displacements associated with environmental changes. Only Bell discussed the current situation from a philosophical stance, concluding that neither John Rawls' 'Law of Peoples' approach of justice⁶ nor Charles Beitz's 'cosmopolitanism' approach were appropriate (Bell 2004), and that a new ethics was needed to deal with the issue.

It is crucial to examine the different instruments used by states and by the international community to deal with current displacements associated with environmental changes, since these may lay the basis for the development of future instruments, or, on the contrary, reveal that the development of such instruments is not needed. As said above, I argue that these instruments and policies inform the debate on the conceptualisation of environmental migration, and thus the way the issue will be addressed.

The aim of this research is to describe these instruments and examine the interests that fuelled their development, as well as their interactions with each other. In other words, I will look at how the growing ideational linkage between environment and migration is reflected in policy developments, and how these developments, in turn, fuel the conceptual debate.

The approach of this work will thus be descriptive and analytical rather than prescriptive, however that is not to say that it will ignore population displacements that may arise in the future: on the contrary, it is hoped that the analysis of current mechanisms can lay the basis for the development of adequate responses to address future migration flows, both on the conceptual and policy levels.

⁶ Though Bell does not discuss this, the inadequacy of Rawls' theory might be explained by the fact that it was not conceived to apply in an international setting (Rawls 1993).

2. Intended contribution

The primary contribution this thesis intends to make is to be found on the theoretical level. Until now, the linkages between environment and migration have not been studied as a policy process, but rather as a material one. Furthermore, most discussion on policies is geared towards the development of new mechanisms and protection instruments, rather than of actual normative frameworks. This thesis aspires to fill this double gap in the literature.

In order to do so, it will examine how migration and environment have been linked in two areas of policy-making: environmental and migration policies. The analysis will focus primarily on international normative frameworks, but will also incorporate some relevant elements of national policies, considered as part of a single policy subsystem. The analysis will be complemented by empirical illustrations from Katrina and Tuvalu. Results and findings from both sets of fieldwork will serve to illustrate different applications of these frameworks and policies in different settings. It is hoped that a key originality of the work lies in the combination of these two bodies of policy-making, and their interactions with each other at different levels of government.

The analysis, however, will not be conducted from a legal point of view, but from a political one. It will seek to analyse the emergence of the ideational linkage between environment and migration in the policy process, as well as the interests, values and strategies that drove this development. Hence the object of the analysis is the policy process and the different actors that govern it. These actors are not limited to policy-makers *stricto sensu*, but include members of civil society: journalists, researchers and NGOs.

To the best of my knowledge, this is the first such analysis of its kind. I argue that the policy process is driven by interests that weigh on the conceptualisation of environmental migration, and therefore on the empirical evidence labelled as ‘environmental migration’. Although most works so far have assumed the existence of empirical evidence to call for the development of new instruments, this thesis aims to study existing instruments in order to question the discursive connection established between environment and migration.

In subsequent chapters, I endeavour to show how policy responses to environmental migration contribute to shaping the concept of environmental migration. I will not discuss

the impacts of environmental degradation and climate change on population movements: these impacts are at the same time increasingly obvious and heavily discussed. As explained in the first section of this chapter, this discussion is driven, to a large extent, by the lack of empirical research. Discussing these impacts would have involved a great deal of comparative empirical research, and my resources were limited. Furthermore, this work is conducted in political science, not in geography or social anthropology, and I shall therefore focus on the way different policy-makers responded to those displacements. My point is not to deny an essential reality to environmental migration, but to look at it from a perspective that I call ‘political constructivism’. In other words, I intend to describe how environmental migration, as a political and social event, is constituted by the political response it triggers, and is not an obvious and inevitable consequence of environmental changes. The point is not to deny the impact of these changes on population, but to show how the concept of environmental migration is also a political construct: in other words, to add a constructivist perspective to a field that has until now been characterised by an essentialist position.

Although empirical observations from fieldwork will be used to illustrate the applications of the policy process, I do not aim to provide additional empirical evidence, nor to test the validity of the concept of ‘environmental migration’. My contribution is limited to showing the interests and processes shaping the linkages at play in the environment-migration nexus.

On a more practical level, it is hoped that the thesis will contribute to both academic and policy debates:

- On the academic level, I hope that the analysis of the policy process can inform the logic of the conceptualisation of environmental migration, since I argue that this conceptualisation is dependent, to a large extent, upon the responses, discourses and attitudes of those who are supposed to address these flows, i.e. states⁷, intergovernmental agencies and organisations, and non-governmental organisations.
- On the policy level, I believe that a discussion of existing mechanisms can inform the debate on future, new instruments. Environmental migration is largely perceived as a

⁷ The receiving states appear to be the first respondents, but sending states will also be considered.

‘new’ phenomenon⁸, and many argue that new policy and legal instruments are called for (Boncour 2008; Brown 2008; Biermann and Boas 2007; Cournil and Mazzega 2006). I propose to review the current instruments and assess how they reflect and address the linkages between environment and migration.

3. Conceptual Framework

This section aims to provide an overview of the main theories and models that form the conceptual framework of this research. This research deals with a phenomenon that bears on environmental change and migratory movements. Therefore, it touches upon theories of environmental disruption, climate change, and social vulnerability, but also upon theories of migration choice and internal displacement. Before examining these theories, which shape the objects of the policy-process, I will develop the constructivist approach underpinning this research, according to which the policy object is considered as a social construct. Finally, a final section will be devoted to the relationships between science and policy (and between scientists and policy-makers). In this section I explain how I intend to consider researchers as part of the policy-process.

3.1. *A Constructivist Approach*

This research is built on a heavily constructivist posture, which postulates that environmental migration, as a social phenomenon, develops in a specific political context. In contrast, many works on the topic are rooted in an essentialist or deterministic perspective that assumes that population movements are a logical by-product of environmental change. This approach has been championed by Myers, who contends that the growing number of people who can no

⁸ The source of this perception is to be found in climate change and an increased number of disasters. What is new, in reality, is not the phenomenon itself, but its extent and the important human responsibility of its origin. This point will be developed in Chapters 3 and 4.

longer gain secure livelihoods in their homelands because of environmental problems feel that ‘they [had] no alternative but to seek sanctuary elsewhere, however hazardous the attempt’, further asserting that there were ‘at least 25 million environmental refugees today’ (Myers 1997: 167). This approach has been followed by many other scholars, including Westing (1992), Hermsmeyer (2005), Brown – who claims that ‘climate change will cause population movements by making certain parts of the world much less viable places to live’ (Brown 2008: 16) –, Byravan and Rajan, who assert that ‘several million people living in coastal areas and small islands will inevitably be displaced by the middle of the century’ (Byravan and Rajan 2006: 247).

Though many scholars have stressed that the term ‘environmental refugees’ is misleading (Hugo 1996), fewer have addressed the very notion of environmental migration as an artificial construct. Among the latter, the most frequently cited include Black, Castles and Kibreab. Black notes that the ‘conceptualisation (of environmental factors) as a primary cause of forced displacement is unhelpful and unsound intellectually, and unnecessary in practical terms’ (Black 2001: 2); Castles acknowledges that ‘environmental and disaster displaces’ are a category of forced migrants, but also that ‘the emphasis on environmental factors is a distraction from central issues of development, inequality, and conflict resolution’ (Castles 2004); whereas Kibreab cautions that ‘the term “environmental refugee” was... invented at least in part to depoliticise the cause of displacement’ (Kibreab 1997: 21). Such views represent a minority of academic works on the topic, but have had a profound impact on the burgeoning field of research: most of the available literature now recognises and emphasises the multi-causality of displacements.

To a great extent, the opposition between those who insist on the inevitability of displacement and those who insist that environmental migration is a social and political construct – the opposition between ‘alarmists’ and ‘sceptics’ outlined in the introduction – matches the opposition between an essentialist and constructivist approach to the issue.

Although constructivism is typically associated with epistemology or psychology, its influence in social sciences has also been significant. The breakthrough of constructivism in social sciences is usually credited to Antonio Gramsci. In his famous theory of hegemony, Gramsci suggested that capitalism maintained its domination over society through ideological and cultural hegemony, more so than violence and economic domination. This process allowed

bourgeoisie to inculcate its values - normalised as common sense – to the working classes. The capitalist state was therefore a social construct that allowed the bourgeoisie to maintain social order and prevent revolt (Gramsci 1971). Wendt later applied constructivist theory to international relations, and showed that many of its core aspects were socially constructed, rather than imposed by a supposed international order (Wendt 1992).

The influence of social constructivism in environmental science and disaster studies is less widespread, but will be used as the starting point of my reflection. An abundant body of research on natural disasters has shown how natural hazards, such as earthquakes or hurricanes, become disasters when they meet certain social patterns and structures that put populations at risk. This approach is exemplified by the seminal book aptly entitled *Catastrophe and Culture* by Oliver-Smith and Hoffman, which demonstrates that natural disasters are not natural phenomena, but by-products of human decisions (Oliver-Smith and Hoffman 2002). The importance of social structures has been emphasised since the early days of natural hazard research in the 1940s (White 1974), and has since developed constantly. The social, economic and political forces that mediate the impact of a natural hazard upon a population have been categorised as *social vulnerability*, a concept that has been explored by different fields of the social sciences. Bolin and Stanford have defined it as the ‘unequal exposure to risk coupled with unequal access to resources’ (Bolin and Stanford 1998: 3), while Cutter has characterised it as the ‘conditions that reduce the ability of people and places to respond to environmental threats’ (Cutter 2003: 6). Laska and Morrow add that ‘social vulnerability factors are not mutually exclusive, but tend to be clustered in patterns of vulnerability that place some communities and households at particular high risk’ (Laska and Morrow 2006: 7).

The perspective taken by the social sciences on natural disasters is, by nature, deeply constructivist. Blaikie *et al.* assert that beginning an analysis of disasters from the starting point of natural hazards produces environmental determinism: the disaster is assumed to be caused solely by external forces, external to society, and therefore the sole responsibility for the disaster is also borne by nature. Yet only social and political factors can explain why the number of ‘natural disasters’ has grown constantly during the twentieth century, while the number of natural hazards has remained constant (Bolin and Stanford 1998: 2). Likewise, only social and political factors can explain why the number of casualties resulting from cyclone Nargis, which hit Burma on May 2, 2008, was fifteen times higher than the number of

victims of cyclone Sidr, which hit neighbouring Bangladesh six months earlier, on November 15, 2007⁹. As expressed by Oliver-Smith, ‘a disaster is an unfolding process, beginning with socially constructed conditions of vulnerability in which a community lives’ (2001: 111).

Furthermore, the environment itself is a social construct. In ‘The Construction of Social Reality’, Searle stressed the importance of ‘collective intentionality’ in the construction of institutional facts, which he distinguished from crude facts (Searle 1995). A similar distinction is usually made between nature and environment, and Larrère and Larrère also argue that environmental problems are, by their very nature, social constructs, thus environmental knowledge is itself a social product. Furthermore, they add that the legitimisation process of these problems in the public sphere also interferes with economic, social and political contexts (Larrère and Larrère 1997: 224). As in the case of natural disasters, environmental changes and risks are social constructs, and need to be distinguished from environmental hazards or events.

I intend to apply this constructivist perspective to the process of environmental migration. Social science research has shown how natural disasters and environmental risks are the results of social, economic and political factors and structures. I argue that this argument can also be applied to environmental changes at large, and their impacts, which include population displacements. I intend to focus on the political responses addressing these impacts, with the belief that such an analysis can help to better understand the process leading to the displacements of people, and the patterns of these displacements. Domenach and Picouet have rightly noted that the concept of environmental migration remained highly controversial, not only because of the ongoing academic debates, but also because of its political and ideological implications (Domenach and Picouët 1995). It is precisely these implications that I propose to address, by describing and assessing their history to this point.

⁹ Cyclone Sidr claimed an estimated 5,000 – 10,000 victims, while cyclone Nargis resulted in 130,000 victims at a minimum; despite the fact that Sidr was slightly stronger than Nargis, and both caused landfalls in neighbouring and highly populated countries.

3.2. *Theories of Environmental Change*

Current theories of the environment descend from a long tradition of academic debates on the relationship between man and nature. Since Antiquity, essentialist nature, *natura naturans*, has been described in opposition opposed to the nature created by man: *natura naturata* (Larrère and Larrère 1997). In the modern era, a philosophical tradition beginning with Kant has described nature as a human artefact (Kant 2004 (1786)), and evolutionary thinkers beginning with Darwin posited a long-standing opposition between a nature that would exist by itself and have an intrinsic value, where the frontier between humans and animals would be blurred (Rolston III 1975).

This opposition translated into different philosophical perspectives: a naturalist, or biocentric, perspective envisioned nature as an external entity, while a sociocentric perspective considered nature to be embedded in society. This perspective, in a way, presupposes the end of nature and its replacement by the environment – nature considered in its relationships with human beings (Larrère and Larrère 1997). Later, these conflicting perspectives also induced different policy options, as will be shown later.

The perspective of this research is sociocentric, as it deals with the impacts of environmental change on human societies. Environment is thus considered to be an independent variable in its relationship with migration flows and the induced policy responses. More precisely, I shall focus here on environmental changes, including climate change and natural disasters, and the vulnerabilities of populations to these changes.

3.2.1. *Environmental Economics*

There are diverse theories to describe and explain environmental changes. A distinction is made here between environmental changes with natural and those with human causes. Many theories provide explanatory frameworks for environmental changes occasioned by *natural* causes: earthquakes and landslides can be explained by tectonics, volcano eruptions by theories of volcanic activity, etc. Such theoretical frameworks are drawn from geology, meteorology or oceanography, and are beyond the scope of a work in the social sciences.

Instead, I focus on theories that explain the impacts of these changes on populations and societies, which will be developed in the section 3.2.3.

Environmental changes with *human* causes require different explanatory frameworks. These frameworks are to be found in environmental economics, the subfield of economic theory concerned with environmental problems. Environmental economics is organised and structured around the concept of market failure (Cornes and Sandler 1996). The fundamental assumption is that human-induced environmental changes result from a failure of the market to allocate resources efficiently, in order to protect the environment and its resources. The most common forms of market failure include the impossibility of barring an individual from using a common resource (non-excludability), the fact that the consumption of a good by an individual does not affect the consumption of the same good by other individuals (non-rivalry), and externalities, or external costs (or benefits) of an economic decision that are not accounted for in the market price.

I shall describe here the application of these market failures to environmental problems, and elaborate upon three major concepts of environmental economics related to these failures: global commons, public goods and externalities.

3.2.1.1. Global Commons

In a famous, concise essay published in 1968, Garrett Hardin developed the ‘Tragedy of the Commons’ theory (Hardin 1968), which has been widely used since to characterise many environmental changes induced by inappropriate or excessive use of a common resource. To introduce the theory, Hardin uses the example of a common pasture used by local herders. Access to the pastures is unrestricted and free, and each herder is assumed to seek to maximise his gains and thus ‘keep as many cattle as possible on the commons’. The utility of each additional animal, however, has a positive and a negative component:

The positive component is a function of the increment of one animal. Since the herdsman receives all the proceeds from the sale of the additional animal, the positive utility is nearly +1.

The negative component is a function of the additional overgrazing created by one more animal. Since, however, the effects of overgrazing are shared by all the herdsmen, the negative utility for any particular decision-making herdsman is only a fraction of 1. (1968: 1244)

As one can easily see, the fundamental problem of the Tragedy of the Commons lies in unequal distribution of benefits and costs: the benefits are individual, the costs are collective. Hardin describes the herder as a rational individual, whose logical behaviour would be to keep adding extra animals to the commons. He sees them as 'locked into a system that compel[s] them] to increase [their] herd[s] without limit – in a world that is limited', and concludes that 'freedom in a commons brings ruin to all'. He sees this as a tragedy, in the sense of a 'remorseless working of things' (1968: *ibid.*).

Hardin's example was inspired by Malthus' *Principle of Population*, which predicted population crisis on the basis that demographic growth was exponential whereas the amount of available resources could only grow arithmetically (Malthus 1999 (1798)). Malthus' principle soon became an explanatory framework to explain how common resources could be destroyed by excessive, unrestricted use.

Theories and models about the commons were not new¹⁰, but Hardin was the first to formalise the concept and to develop the notion of the 'tragedy'. His model had a significant impact on policy design, most notably in resource management¹¹, but also received important criticism, prompting Hardin himself to conduct six revisions of his paper (Hardin 1998). It was argued that his analysis was too vague, did not consider herding costs, institutional arrangements or cultural factors (Feeny et al. 1990; Wijkmans 1982). Fundamentally, Hardin's theory was widely seen as a case for state control and surveillance (what Hardin calls 'bigbrotherism'), while various alternative management arrangements could indeed result in sustainable use of the commons, rather than the tragedy predicted by Hardin (Wijkmans 1982).

Despite these criticisms, the Tragedy of the Commons saw multiple applications as an explanatory framework for environmental changes: for example, deforestation, the depletion of fish stocks, or the degradation of the ozone layer. It also led to the development of many

¹⁰ The concept was already present in the work of Thucydides and Aristotle.

¹¹ The best known example of such an application is in fishing stock management (Wijkmans 1982: 512).

environmental policies, and directly inspired the conception of sustainable development as a 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs', as coined by the United Nations (World Commission on Environment and Development 1987: chapter 10).

Hardin's model can also serve as an explanatory theory for environmental change leading to migration. A typical example can be found in the programme launched by the Chinese government in 2001 aimed to relocate approximately 700,000 herders from the provinces of Inner Mongolia, Xinjiang and Tibet. The goal of the programme is to restore natural ecosystems in fragile areas of Inner Mongolia (Rogers and Wang 2006). Over the years, the grasslands of Inner Mongolia have slowly deteriorated into arid and areas and desert, and this transformation is, to a large extent, the result of overgrazing. Consequently, the Chinese government has initiated a policy to close the grasslands and relocate the herders to towns and cities, in order to stop desertification and restore the original environment. Even though social and political factors also count in the decision to displace the nomadic herders, the grasslands can certainly be considered as commons where a 'tragedy' of excessive and inappropriate use (overgrazing in this case) occurred.

3.2.1.2. Public Goods

Hardin's model also laid the ground for the development of revised theories of public goods, espoused in an important book edited by Kaul, Grunberg and Stern (Kaul et al. 1999b). Classical, liberal economists such as Adam Smith and David Hume recognised the need for state intervention in order to provide some types of goods that could not be provided by the market: public goods. Samuelson performed a systematic and rigorous analysis of these goods, which have since been defined by their two essential properties: non-excludability and non-rivalry. In the words of Samuelson, these were 'goods that all enjoy in common in the sense that each individual's consumption of such a good leads to no subtractions from any other individual's consumption of that good' (1954: 387).

Since it was widely acknowledged that these goods could not be produced by the market, the question of the provision of these goods naturally arose. Olson (1965), as well as Buchanan

and Kafoglis (1963), developed models of collective action for the provision of such goods, usually based on the intervention of the state, sometimes with some exclusion mechanisms (the goods were therefore no longer pure public goods, but *club goods*). Without a mechanism of collective action, these goods were at risk of being underproduced, thus undermining their collective benefits (Kaul et al. 1999a: xx).

Hardin's model had demonstrated the problems caused by the exploitation of open access and common property resources: the study of this problem has a very similar structure to the problem of the provision of public goods (Cornes and Sandler 1996). Environmental goods based on open access and common property, such as the pasture described in the Theory of the Commons, are considered to be quintessential public goods (Heal 1999). Kaul *et al.* have rightly observed that global public goods, such as the ozone layer or a stable climate, whose benefits reach across borders and generations, 'tend to suffer from underprovision' (Kaul et al. 1999a: xxi). A root cause of environmental changes is therefore the underprovision of global public goods. This theory applies particularly well to climate change: the atmosphere is a classic example of global commons, and the current amount of greenhouse gas emissions represents an excessive use of it. In order to avoid dangerous climate change, a global public good has to be provided: the protection of climate, through massive reductions of greenhouse gas emissions. Many environmental problems, such as climate change or pollution, are the consequence of an insufficient provision of global public goods, which can be likened to insufficient management of the commons, leading to Hardin's tragedy.

What is the reason for such a gross underproduction of global public goods, and environmental goods in particular? Kaul *et al.* point to the role of externalities, whose importance is increased by globalisation: 'at the international level, this collective action problem is compounded by the gap between externalities that are becoming more and more international in reach, and the fact that the main policy-making unit remains the nation-state' (1999a: *ibid.*). I shall elaborate in a moment upon the concept of externalities. For now, let us assume that externalities are the effects of an economic decision that are not borne by the decision-maker – negative effects in this case. In this case, we are confronted with a typical problem of multi-level governance, impeding the production of environmental goods: while

pollution or climate change affect all countries, the decision to pollute is still largely self-interested¹² – hence the tragedy of the commons.

The accumulation and internationalisation of environmental problems in recent years has prompted important debates upon the provision of environmental (public) goods. In the traditional model, public goods are produced by the public sector: the state or international organisations. Since the impacts of decision-making at the national level (the externalities) were increasingly felt across borders, however, some authors stressed that states were no longer the right agents for the production of environmental goods, and that these ought to be increasingly produced by the private sector. Using the example of climate change and greenhouse gas emissions, Heal argued that the emissions were the result of ‘billions of decentralized and independent decisions by private households [...] and by corporations [...], all outside the government’s sphere’ (1999: 222-223). Therefore, emission reductions (considered as a global public good) had to be provided by a large spectrum of agents, and not only by the state, since this situation had led to an underprovision of the good.

Theories of public goods and global commons have had a deep impact upon environmental policies, as I will show in Chapter 2. However, I shall first describe the problem of externalities, which is intrinsically related to the problem of public goods.

3.2.1.3. Externalities

Dominant theories of human-induced environmental change explain these changes as failures of the market to provide environmental goods, or ‘manage the commons’. Therefore, they call for public policies to address these failures. Among the diverse theories of market failures, the most pertinent for environmental changes is certainly the theory of externalities. At this point, I wish to stress that externalities and global commons are not conflicting theories: the latter derives from the former. The problem of the provision of public goods is a particular, prominent case of the problem of externalities, which provide a broader explanatory framework. In the words of Cornes and Sander:

¹² These decisions are, to a large extent, taken at the national level, and international relations theories generally assume that states are self-interested.

Externalities and public goods are helpfully viewed as incentive structures, rather than being inherently associated with certain activities [...], and [...] public goods can be thought of as special cases of externalities – special cases that lend themselves easily to analysis. Viewed in this light, externalities represent not simply a further source of market failure, but a much broader family of market failures of which public goods constitute a member. (1996: 6)

In the previous section, I have argued that the internationalisation of externalities has undermined the provision of externalities. Defining externalities, however, is not an easy task: it is a source of controversy in economic theory, and many authors have tried to define externalities in terms of what they do, instead of what they are. In the previous section, I have summarised defined externalities as the effects of an economic decision that were not borne by the decision-maker. This definition is a simplification of the definition proposed by Meade and Hjertansson, which remains that most commonly used today: ‘an external economy (diseconomy) is an event which confers an appreciable benefit (inflicts an appreciable damage) on some person or persons who were not fully consenting parties in reaching the decision or decisions which led directly or indirectly to the event in question’ (1973: 15). This definition, however, is very broad, and encompasses a wide variety of situations that have different implications, both for theory and policy responses. Indeed, such a definition can apply to externalities as diverse as smoking, pollution, urban noise, or traffic congestion.

Following the pioneering work of Ronald Coase (1960), economists started to distinguish between different types of externalities. Two principal distinctions emerged: the first one between private and public externalities, which Baumol and Oates call depletable and undepletable externalities (1975: 19); the second one between technological and pecuniary externalities.

Two examples can help us distinguish between public and private externalities. If the air in a city is polluted, all residents of the city are affected, not just a few individuals. This externality is undepletable: the air breathed by one resident leaves the quantity and quality of the air available to others unaffected, and the externality is thus public. Air pollution is clearly a public ‘bad’. Examples of depletable externalities are more difficult to find, but here is one: it is common for a private wireless internet network to be unprotected, simply because the owner of the network forgot (did not care, or did not know how) to protect it with a

password. If an internet user is in the vicinity of the network, he may therefore be able to connect to the internet for free. However, if too many users connect at the same time, the network will be slowed down, which may prompt its owner to restrict access to the network. This externality is depletable, since the ‘consumption’ of the network by an additional user reduces the availability of the network for other users: unprotected wireless networks are private externalities. Baumol and Oates argue that ‘in the case of public externalities, taxation of those who generate externalities with neither compensation nor taxation of the victims (beneficiaries) is necessary for optimal resource allocation, but for private externalities, taxation of the generators and compensation of the victims [...] is normally required’ (1975: 15).

A further distinction is made between technological – or real – externalities, and pecuniary externalities. Pecuniary externalities are often described as ‘fake’ externalities, since they refer to a situation in which the activity of one individual affects the financial circumstances of other individuals. This type of externality operates through prices, and not through real shifts in the allocation of resources. For example, a sharp increase in the demand for biofuels might raise the price of corn or sugar cane, and thus affect the price of food, hitting the welfare of consumers worldwide. Most economists, however, consider that such externalities are driven by other market mechanisms, and are not real, technological externalities.

Finally, even though this might seem obvious, a distinction also needs to be made between positive and negative externalities. Negative externalities result in social costs, while positive externalities result in social benefits. Hence the ideal equilibrium of the market will vary accordingly, as shown in Fig. 1. In both cases, if the equilibrium of the market takes externalities into account, prices will rise (PS1 and PS2), but quantities will decrease in the case of higher social costs (QS1), and increase in the case of higher social demand (social benefits, QS2).

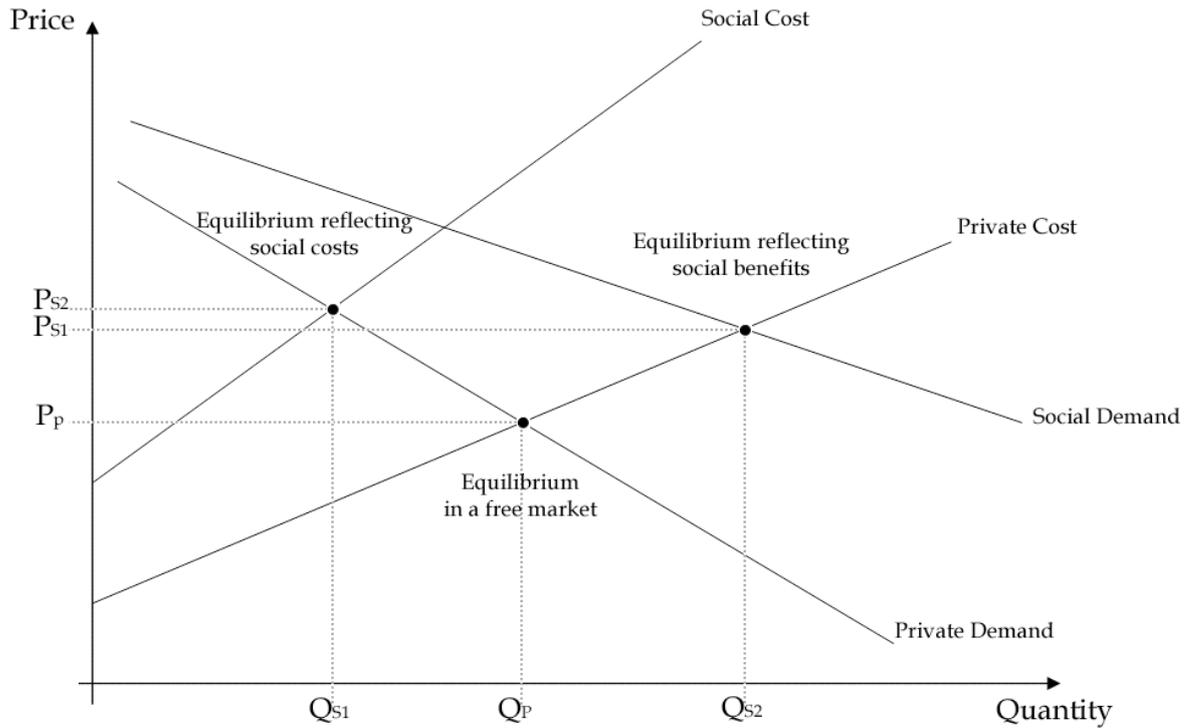


Fig. 1 – A model for supply and demand with externalities

In the case of environmental changes that induce migration, I shall focus on negative, public and real externalities. I have shown the relevance of the theory of public goods and global commons to the analysis of human-induced environmental changes, as a prominent case of public externality. The changes considered are real, and not related to price fluctuations. Finally, these environmental changes, most of the time, impact communities and livelihoods adversely¹³.

The range of policy options that can address such externalities is wide open. These can include prohibition, government supply, or compensations and taxes (called pigouvian taxes, after economist Arthur Cecil Pigou). In his famous theorem, Coase showed that externalities do not necessarily require state action, and can instead be solved through the market, provided that property rights are well-defined, people act rationally and transaction costs are minimal (Coase 1960). The flexible mechanism of the carbon market under the Kyoto Protocol is an

¹³ If we consider the cases where environmental changes are a ‘pull’ factor for migration, we will naturally consider positive externalities; nonetheless, the structure of the analysis remains the same, even though responses might differ.

illustration of the theorem. Overall, as shown in the previous section, market mechanisms bear an increasing importance in the provision of environmental public goods.

3.2.2. *Climate Change*

The scientific basis for anthropogenic climate change is now well-established, largely thanks to the comprehensive assessment reports generated by the Intergovernmental Panel on Climate Change (IPCC). These findings, well popularised by the media, remain disputed by a small number of researchers, often dubbed ‘climate sceptics’. At the other end of the scientific spectrum, a larger number of researchers, point out that IPCC findings, though highly authoritative, are also very conservative, since they are designed to be ‘internationally palatable’ (Spicer 2008). Indeed, IPCC reports are the outcome of a compromise between more than 2,000 scientists, and the short versions of the reports (or summaries for policy-makers) are edited by government representatives in negotiation sessions. Furthermore, it is widely acknowledged that research on climate change is still impeded by uncertainties, especially about the regional impacts (Webster et al. 2003; Stainforth et al. 2005). One of the core tasks of the IPCC is to delimit these uncertainties and define ranges of probabilities for the possible impacts of climate change.

In spite of these limitations (or perhaps because of them), IPCC reports are widely regarded as the most authoritative scientific works on climate change, and are also the most widely distributed. The Fourth Assessment Report (4AR), issued in 2007, asserts that ‘warming of the climate system is unequivocal’ and ‘many natural systems are being affected by regional climate changes’ (Intergovernmental Panel on Climate Change 2007d: 2). The causes of this warming are very likely¹⁴ to be found in the ‘observed increase in greenhouse gas concentrations’: ‘global greenhouse gas emissions due to human activities have grown since pre-industrial times, with an increase of 70 per cent between 1970 and 2004’ (2007d: 5). For the purposes of this research, both the reality of climate change and its anthropogenic origin are considered scientific facts, as evinced by the findings of the IPCC.

¹⁴ In IPCC reports, the expression ‘very likely’ denotes a probability of the occurrence above 90 per cent.

Climate change is expected to encompass a wide range of environmental changes, ranging from droughts to sea-level rise. As will be demonstrated in Chapter 5, the IPCC also sheds a new light on the relationship between environment and migration, and was largely instrumental in setting the agenda for environmental migration, which received only marginal attention before worldwide attention was focused on global warming. It is therefore important to review the scientific basis for climate change, as underlined by the IPCC, before relating the phenomenon to the concepts delineated above.

3.2.2.1. The Scientific Basis of Climate Change

Climate change, as such, does not represent a single environmental change within ecosystems, but rather a wide variety of impacts that interact with people and their livelihoods. 'People and society are not and never will be affected by climate change; rather their lives and livelihoods are impacted by manifestations of the climate system, such as a lack of rain or a heat wave' (Kniveton et al. 2008: 11). Climate change is not environmental change *per se*, but a driver of wide-ranging environmental changes. The nature of climate change induced hazards are no different from other environmental changes, and therefore the framework of analysis developed above remains valid for the analysis of climate change, as I will demonstrate.

Climate change is an extremely complex phenomenon, involving many uncertainties, whose causes can include solar variations, volcanic eruptions, El-Niño oscillations, and high concentrations of greenhouse gas in the atmosphere (Hansen et al. 2006). It is not, however, a new phenomenon: climate changes occurred in prehistoric times, and even led to mass population displacements. Approximately 25,000 years BC, at the peak of the last ice age, a major wave of migration occurred: the climate of the Northern hemisphere became extreme, and populations moved southwards, circumventing the ice-caps (Beniston 2004). The beginning of the Holocene period, around 11,000 years BC, was marked by the melting of the large continental glaciers, resulting in a sea-level rise of about 100 metres. Many parts of the globe were completely flooded, and populations started to settle and became sedentary, developing new agricultural and farming techniques (Beniston 2004: 7). A comprehensive collection of papers edited by Scott, Alekseev and Zaitseva (2004) details the impact of environment on human migration in the Eurasian steppe belt during that period. One paper

in particular concludes that the massive displacements that led to the colonisation of Northern Eurasia were ‘triggered by environmental stress, and coincided with the coldest stages of the Last Ice Age, when the conditions for livelihood were less severe in Eastern Europe and Siberia’ (Dolukhanov 2004: 225). Many studies show that population settlements and migration have been highly influenced by climatic changes in pre-historical times. Tyson et al. (2002) have shown this to be the case in Southern Africa, while Smit and Cai (1996) have explained that long-term patterns of population movements in China, especially by herdsman, were related to climatic changes.

The present day period corresponds to an exceptionally cool period of the earth’s history, if we compare the current temperatures to the temperatures of the last 500 million years (Spicer 2008). In this way, the current global warming is only returning the Earth to its usual condition – but human society has never experienced this usual condition, which occurred well before human life appeared on Earth. Contemporary climate change is different from previous climate changes for at least two key reasons:

- It is occurring at an unprecedented pace, leaving very little time for biological and societal adaptation;
- It is human-induced, resulting from a higher-than-usual greenhouse gas concentration in the atmosphere, due to unprecedented levels of carbon emissions.

Thus the current climate change is fundamentally different from other climate changes that occurred during other periods of history, because of its exceptionally rapid pace, and its anthropogenic origins.

Most of the current warming is the result of human activities: the atmospheric concentration of carbon dioxide, the most important greenhouse gas (GHG) has risen sharply from 280 parts per million (ppm) in 1850 – a figure that has been relatively stable for the last 700,000 years – to 380 ppm currently. This rise is mostly caused by the burning of fossil fuels, and a smaller contribution (of about one fifth of the total concentration) is induced by deforestation. As a result, global surface temperature has increased at a rate of approximately 0.2°C per decade over the last 30 years (Hansen et al. 2006).

Building upon these observations, the IPCC has developed different predictive models and scenarios for the evolution of climate in the coming years. These scenarios are classified into four groups:

- The A1 scenarios describe a future world of very rapid economic growth, a global population that peaks in mid-century and declines thereafter, and the rapid introduction of new and more efficient technologies. The major theme of these scenarios is the convergence amongst regions, towards a more homogeneous world.
- The A2 scenarios rely on a very heterogeneous world, where self-reliance and preservation of local identities prevail. The scenarios are also marked by a continuous population growth, and a regionally-oriented economic development.
- The B1 scenarios are based on a convergent world, with many similar patterns to A1 scenarios. The main differences are in patterns of economic growth, based on a shift towards a service and information economy and the introduction of clean and resource efficient technologies.
- Finally, the B2 scenarios assume an economy based on local solutions to economic, social and environmental sustainability.

These scenarios allow IPCC to construct models of temperature and related sea-level variation. Without entering into details of the way these models are designed, it is important to keep in mind the latest estimates contained in IPCC's *Fourth Assessment Report* (Intergovernmental Panel on Climate Change 2007a):

- Over the course of a century, global average temperatures will rise by 1.8° C in a 'best-case scenario', and by 4.0° C in a 'worst-case scenario'. For the next two decades, the rise is estimated at 0.2°C per decade.
- For the same period, sea levels are expected to rise between 18 and 38 cm in the 'best-case scenario', and between 26 and 59 cm in the 'worst-case scenario'. It should be noted, however, that these predictions are based solely on the thermic expansion of the ocean (thought to be responsible of about 75 per cent of sea-level rise), and do not include the impacts of the melting of glaciers and ice caps. If these impacts are included, it is estimated that sea-levels could rise by approximately one metre by the end of the century. Some authors, such as Hansen, argue that 'scientific reticence' is

inhibiting the communication of this figure, as well as of the threat of potentially larger sea-level rises (Hansen 2007).

These changes will translate into different impacts, identified by the Working Group II of the IPCC¹⁵:

- Warmer and fewer cold days and nights, and warmer and more frequent hot days and nights;
- Warm spells and heat waves over most areas;
- Heavy precipitation events;
- Droughts;
- Intense tropical cyclone activity;
- Extremely high sea levels.

For these last three types of impacts, the IPCC foresees a potential for large population displacements. Furthermore, some authors also distinguish between climate events and climate processes (Brown 2008): climate processes are slow-onset changes, such as sea-level rise, while climate events are sudden, brutal hazards such as hurricanes and droughts. Even though this distinction has not yet reached a scientific consensus, it is clear that not all impacts of climate change produce similar migration patterns.

3.2.2.2. An Economic Model for Climate Change

From an economic point of view, climate change poses a major problem of resource allocation: though industrialised countries emit most of the emissions (both per capita and in total) and thus bear most of the current and historical responsibility for climate change, the countries that will be most affected by the impacts of climate change are developing countries, with the least responsibility. Furthermore, although these countries can have high adaptive capacities, they often lack the financial resources to develop ambitious adaptation strategies. If the increase of carbon emissions continues at the same pace, it is widely acknowledged that climate will reach a tipping point, resulting in catastrophic impacts – hence the problem of

¹⁵ The IPCC is made up of three Working Groups: Working Group I studies the scientific evidence of climate change, Working Group II is concerned with the impacts and adaptation strategies, and Working Group III investigates the different mitigation mechanisms.

resource allocation. In this section, I shall delineate how this problem unfolds, using the three key concepts of environmental economics.

The climate system represents a particular type of public good. Most public goods – such as national defence or poverty reduction – are produced through state intervention. The production of such goods has a cost, usually shared by all beneficiaries or supported by an external entity. The problem of the production of these goods lies in a fair allocation of the costs, and the deterrence to free-riders. The climate system, though it obviously shares the properties of non-rivalry and non-excludability, is different from other public goods: it existed prior to human intervention, but can be degraded by individual human actions. Climate change is thus a global public *bad*, affecting all countries and future generations: greenhouse gases mix easily, remain in the atmosphere for several decades after emission, and their concentration is quite uniform throughout the world. As said earlier, these emissions are the results of zillions of individual decisions, hence there is a very strong incentive to free-ride when it comes to emission reductions.

Because people depend on the climate system for their physical wellbeing, Baer has qualified the climate system as a ‘life-support commons’ (2006: 134), which he describes as a global commons with a different moral structure. In this case, the climate system is a commons where the *right not to be harmed* is prime. Even though the economic structure of the resource allocation problem is similar to other public goods, ethics and law also need to be considered in solving the problem, and not purely economic considerations. This is the approach I adopt when dealing with climate change and climate responsibility: the right not to be harmed is pertinent when one considers the possible population displacements induced by climate change.

Climate change, as stated above, is a by-product of human activities since the industrial revolution. Externalities are therefore relevant to the issue, since carbon emissions bear a social cost not included in the market production cost. Climate change, as a global public bad, is an extreme case of negative externalities. These externalities are global, even though they are unequally shared, and market mechanisms are unable to provide a fair level of allocation for the carbon emissions. Given their global impact, adjustment by national policies or domestic markets is unable to achieve a significant level of reduction, and international cooperation mechanisms are needed. For global public goods (or bads), there’s no market

mechanism or government system that allows for an efficient solution of the provision problem (Nordhaus 1999).

Climate change has long been identified as a market failure, because of the externalities involved, but it was not until 2006 that a comprehensive assessment of its economic impacts was conducted, through a study commissioned by the UK Treasury, placed under the responsibility of economist Nicholas Stern (Stern 2007). The study evaluates and compares the costs of mitigation of and adaptation to climate change, and concludes that the cost of inaction is much bigger than the cost of an immediate action, estimated at around 1 per cent of the world's global GDP. The study, however, does not include the costs of migration in the assessment, though massive displacements are presented as an unavoidable consequence of climate change: the estimate of 200 millions permanent displaced by 2050 is mentioned, but not further discussed (Stern 2007: 56). In this thesis, I argue that the costs of migration associated with climate change should be included in this assessment, and be can considered through the lens of externalities. Only a few authors include the costs of displacements in their economic analysis of climate change¹⁶ (Cline 1992; Fankhauser 1994; Tol 1995), though these are widely presented as a consequence of climate change. These costs are estimated between 0.5 and 1 billion US\$ for a doubling of carbon dioxide concentration, relative to 1990 levels. The right not to be harmed, in a life-support commons, certainly includes the right to retain in one's livelihood. Externalities associated with climate change generally include consequences such as reduced agricultural yields or infrastructure damage: I argue that migration movements are also part of these externalities, as are the problems faced by those who cannot leave.

Some authors have made the case for preventive migration strategies as adaptive mechanisms to climate change (McLeman and Smit 2006). Such strategic displacements could alleviate the environmental burden, and reduce adaptation costs: in these cases, migration would result in positive externalities. These externalities would include a reduced pressure on resources, such as decreased demand for water, a reduction in associated diseases, and more sustainable livelihoods overall.

¹⁶ For a doubling of carbon dioxide concentrations, relative to 1990 levels, Cline estimates these costs at 0.5 billion US\$, Fankhauser at 0.6 billion US\$ and Tol at 1 billion US\$ (Fankhauser and Tol 1997: 390).

When analysing the normative frameworks that address climate change, I consider displacements to be an indirect externality of carbon emissions. Acknowledging this posture is important, since it bears important meanings for the debates on adaptation to climate change, and particularly for the issues of fairness and responsibility, which will be developed later. Yet I argue against the idea that forced displacements are an automatic and unavoidable consequence of climate change. In order to understand the relationship between environmental change (including the impacts of climate change) and migration, the variable of vulnerability must be incorporated in the analysis.

3.2.3. *Vulnerability*

Even though this research deals with environmental policies, I am not interested in environmental changes *per se*, but in their impacts on populations. In my examination of the policies implemented to deal with climate change, I shall focus not on policies aimed at mitigating climate change, but rather on policies aimed at adapting to it.

The link between environment and people is often predicated upon vulnerability. It was typically assumed that natural hazards necessarily provoked natural disasters. It is now widely acknowledged that natural hazards only result in disasters when they meet patterns of vulnerability (Blaikie et al. 1994), as will be exemplified in the case of hurricane Katrina (Chapter 6). Similar hazards, at different locations or different times, will not result in the same damages, as in the abovementioned examples of cyclones Nargis and Sidr. The natural hazard plays the role of a trigger for the natural disaster, but the causes of the latter lie in people's vulnerability.

Vulnerability has often been confused with poverty. Though poverty is certainly an important component of vulnerability, other economic, social and political processes have to be factored in. Most definitions describe vulnerability as the potential to experience loss or harm from a natural hazard, induced by unequal exposure to and inability to cope with the hazard (Kelly and Adger 2000; Ribot 1995; Tol et al. 1998). The core of vulnerability lies in inequality, driven by both socio-economic and biophysical processes (Fraser et al. 2003). The concept of vulnerability is made up of two different aspects: an external aspect, related to the exposure to

risk; and an internal aspect, related to poverty and concerned with the ability to cope with the hazard and recover from the damage. Both aspects are reflected in the model of vulnerability proposed by McLeman and Smit (2006: 34):

$$V_{slit} = f(E_{slit}, AC_{slit})$$

Where V = vulnerability, E = exposure to risk, AC = adaptive capacity, s = a given system or community, l = a given location, i = a given environmental stimulus, and t = a given period of time. The model shows that vulnerabilities are specific to certain communities, environmental changes, times and locations. It also incorporates both the external and internal dimensions of vulnerability: the exposure to risk (external aspect) and the adaptive capacity, which is the ability to cope and recover (internal aspect). Logically, vulnerability is positively related to exposure, but negatively related to adaptive capacity: it increases with the exposure to risk, but decreases when adaptive capacity improves. External variables also have to be factored in: disaster assistance varies greatly according to the types of different disasters, and the regions of the world where they happen (Guha-Sapir et al. 2004).

The theorisation of vulnerability has evolved historically from attempts to explain the occurrence of famines (Watts and Bohle 1993), to a more comprehensive framework linking environmental changes with their impacts upon populations. This thesis will rely primarily on Adger's contribution to this stream.

Sen's entitlement approach (1987) was designed to explain the occurrence of famine and hunger, but proved very influential in research on vulnerability. Sen argued that famines were caused by a failure of coordination of food supplies, rather than by food shortage itself. Sen contended that the crucial determinant in vulnerability was a person's entitlement, defined as a set of commodity bundles (including food items in case of famines). Entitlement to a safe livelihood, according to Sen, is acquired a combination of endowments: those of production, exchanges, and assets. Sen's explanatory theory for famines can easily be transposed to adaptive strategies to environmental changes: vulnerability arises when people face a high risk of entitlement deprivation. Sen's initial theory of entitlements was criticised for placing too much emphasis on entitlement *shifts*, and not enough on structural, historical patterns of entitlement. These flaws have since been corrected by a new stream of research inspired by the entitlement approach (Swift 1989).

Adger's contribution (1999) is empirically rooted, arising from a vulnerability assessment in coastal Vietnam. His most significant contribution to the theorisation of vulnerability is the distinction between collective and individual vulnerability. Individual vulnerability depends on 'access to resources and the diversity of income sources, as well as (the) social status of individuals or households within a community', while collective vulnerability is determined by institutional and market structures, such as the prevalence of informal and formal social security and insurance, and by infrastructure and income' (Adger 1999: 251). This distinction echoes the abovementioned dual dimensions of vulnerability, whereby collective vulnerability corresponds to the external dimension of vulnerability, and individual vulnerability relates to its internal dimension.

In sum, what is the importance of vulnerability to a study on the protection and management mechanisms of environmental migration? Numerous studies have shown that migratory responses (forced or not) to environmental change are heavily dependent upon vulnerability patterns and adaptive capacities (Locke et al. 2000a; McLeman and Smit 2006; Renaud et al. 2007; Gonin and Lassailly-Jacob 2002; Boano et al. 2007). Environmental policies aimed at preventing forced migration should therefore focus on reducing vulnerability, as will be shown in Chapter 3. Furthermore, migration can also be an adaptive strategy, aimed at reducing vulnerability. Interactions between vulnerability and migration are central to debates on environmental policies, and are also a major component of migration theories – these are precisely the topic of the subsequent sections.

3.3. Theories of Migration

In the previous sections, I have attempted to delineate the main theoretical concepts that are used in explanatory frameworks for environmental changes, climate change included, and their impacts on societies. This section will focus on the other side of the problem: What are the main theories that explain migration movements worldwide? Chapters 3 and 4 will focus on the specific interactions between environment and migration. For now, this section aims to

review diverse theories of migratory movements, and to assess their relevance for our discussion. A subsequent section will deal with migration policies.

The first attempt to theorise migration is usually attributed to Ernest Ravenstein, who developed 'Laws of Migration' in 1885. The laws outlined by Ravenstein put a heavy emphasis on the 'push-pull' process, by which unfavourable conditions 'pushed' people out of a place, while more favourable conditions 'pulled' them into another one. Ravenstein also concluded that the primary cause of migration was better economic opportunities, that migration decreased as distance increased, that migration occurred in different stages and was bilateral, and, finally, that social factors and differences influenced a person's mobility (Ravenstein 1885). These laws had a great influence on future theoretical debates, and remain a central focal point in many explanatory frameworks.

Migration theories have proliferated and diversified since the late nineteenth century, as a reflection of increasingly complex migration movements worldwide. In a review of migration theories published in 1993, Massey *et al.* noted that migration theories did not share a common paradigm, but rather offered a variety of viewpoints across disciplines and regions. Brettell and Hollifield also note that migration studies are often spread across disciplines, and do not necessarily relate to each other (2000: 3). Castles and Miller argue that the reason for this variety of theoretical approaches is that 'the study of migration cannot be confined to a single social-scientific domain' (2003: 19). Furthermore, they insist upon the difference between approaches aiming at generalisations and more collectivist and institutional approaches. However, it seems possible to extrapolate some key patterns across theories and disciplines:

- Globalisation of migration: an increasing number of countries and regions, both as origins and destinations, are affected by migration. However, the vast majority of migrants are internal migrants, moving within their own country (World Bank 2008).
- A small majority of the world's migrants are refugees (less than 10%). Furthermore, the majority of people displaced by conflicts and persecutions are internally-displaced people (Office of the United Nations High Commissioner for Refugees 2006).

- Differentiation of migration: different types of migration co-exist in the same place. In particular, the routes and itineraries used by forced migrants are increasingly the same as those used by voluntary migrants (Crisp 2007), hence the line between the two categories of migrants becomes blurred.
- Women now represent about half of the world's international migrants (International Organization for Migration 2008) .

Migration theories have also evolved from an 'individual relocation' perspective to a more collective one, that involves a multiplicity of actors (Zolberg 1989). When trying to apply migration theories to the field of environmental migration, however, one is confronted to a triple difficulty:

- The dominant theories are mostly Western-centred, focusing on migration from South to North, or East to West, from developing countries to developed countries, while most environmental migration happens in developing countries, and over relatively small distances;
- Most theories focus on international migration, while environmental migration involves a border crossing as an exception, not a rule;
- Forced migration as an area of migration has been less studied than voluntary migration: in fact, most migration theories tend to focus on economic migration, though displacement has been addressed by some authors from a theoretical point of view (Zolberg et al. 1989; Richmond 1994). Hence there is a smaller set of explanatory theories for forced migration. Yet literature on environmental migration has a tendency to portray environmental migration mostly as a forced displacement.

The first part of this section will review the main migration theories, and assess their relevance to environmental migration. In particular, I shall examine whether and how they account for environmental drivers. That said, one must keep in mind that these theories mostly focus on Europe and the United States as destinations, and apply primarily to international and voluntary movements. This is the reason why two subsequent parts will discuss theories that specifically address forced and internal migration.

3.3.1. Dominant Theories of Migration

Traditionally, models of migration have been predicated on economic disparities between countries and most of them stress the economic motives of migrants, paying little attention to environmental factors. Traditional models assume that migration is driven by wage and employment differentials: migrants move because they expect a net gain of income, and migration is supposed to result in a wage rise in the departure area and a wage fall in the destination area. These model, however, did not fit real outcomes: on numerous occasions, migration ceased before wages equalised, and economic disparities were not sufficient to account for migration behaviour (Massey et al. 1998: 9-10). The classic Push-Pull model, in which the drivers termed push and pull factors are mostly economic, is an offspring of this model. The model was first developed by Ravenstein (1885), and later refined by Lee (1966), who insisted on the importance of ‘push’ factors, as well as on the obstacles that could impede or prevent migration, such as distance or restrictive migration policies. Lee also noted that a person’s response to push-pull factors was highly dependent upon her age, class, gender, and education or family ties abroad. Overall, the assumption of the model was that migration would help achieve an equilibrium between push and pull factors.

Such models, however, grossly underestimated the importance of migration policies in the regulation of migratory flows (Zolberg 1989). The barriers and constraints imposed by states are now widely acknowledged as a crucial determinant of migration flows, and new theoretical perspectives have attempted to account for this new reality, usually by putting a greater emphasis on the role of migrants as individual decision-makers. Among these new theoretical models, those that pertain to environmental migration are briefly summarised here.

3.3.1.1. Neoclassical Economic Theories

When applied to migration studies, neoclassical economics aims to use rational choice models to explain migration behaviours. These models have been developed both at the macro- and micro-levels, and are rooted in labour market analysis.

At the macro-level, neoclassical economic theories focus on rural to urban migration and are an ‘extension of the simple-wage differential approach commonly found in the literature’ (Todaro 1969: 138). They contend that migration flows are related to the supply and demand of labour markets: these are considered the main drivers of the movement of people, and thus the best way for governments to manage migration is to regulate labour markets.

At the micro-level, neoclassical economic theories argue that migration behaviour is determined by the need – or the desire – to increase one’s economic capital. Migrants are considered rational agents who migrate after a review of the cost-benefits of doing so. Sjaastad (1962) conceptualises migration as a form of investment in human capital, where monetary return is usually expected. Borjas (1989) explains that such a theory assumes that each individual seeks to maximise her/his well-being by selecting the country of her/his choice, given financial constraints and barriers imposed by states. The model emphasises the importance of each migrant’s individual characteristics, which explains why different individuals in the same situation may adopt very different migration behaviours. This aspect of the model bears some relevance for environmental migration: as will be shown in Chapter 4, people faced with environmental change will show different proclivities to migrate.

3.3.1.2. New Economics of Migration Theory

This migration model was expounded by Stark (1991), who argued that migration decisions were not only influenced by the income expectations of the migrants, but also by the willingness of the household to minimise the exposure to risks. Stark’s theory puts greater emphasis on the collective dimension of migration: families, households or communities are the decision-makers, instead of the sole migrant. Decision-making is a collective process, and the variety of expected incomes is considered an insurance against risks (Massey et al. 1998): the goal is to diversify the sources of income, rather than simply to maximise it. The theory highlights the importance of remittances, and sheds new light on the migration-development nexus. The model also accounts for long-term migration and transnational links, which play a fundamental role in the perpetuation of migration (Castles and Miller 2003: 21).

Adger, in his assessment of social vulnerabilities to environmental change in Vietnam, found many examples of applications of the above model, and showed that remittances sent by environmental migrants were a key asset to increase the resilience of their families to floods

and sea-level rise (Adger 1999). Poncelet *et al.* (2008) document the presence of similar practices in Bangladesh, especially for families faced with riverbank erosion, and McLeman and Smit present similar findings for western Sudan and northern Ethiopia (2006). Because it considers migration a risk-reduction and coping strategy, the new economics of migration model can prove a very pertinent model for environmental migration, and will be the dominant model used throughout this research to account for voluntary environmental migration, as will be shown in the findings from the Tuvalu fieldwork.

3.3.1.3. Structural Theory

Other approaches suggest that migration is triggered by structural economic, political and societal forces within a community. This argument holds that migration is structurally constrained, and therefore that migrants cannot really choose when and where they go. Zolberg (1989, 1990) contends that restrictive immigration policies are the main determinant of contemporary migration flows, and that Western states seek to protect their domestic markets and attract cheap labour at the same time. The model has been expanded specifically to apply to forced migration theory, and this aspect is described below.

This thesis argues, from a constructivist perspective, that the concept of environmental migration is shaped by normative frameworks and policy responses: therefore, a model seeking to explain migration flows by structural constraints is also relevant, and many references will be made to this model in addition to the new economics of migration model.

3.3.1.4. World Systems Theory

World systems theory was first developed by Emmanuel Wallerstein (1974), who sought to describe and analyse the expansion of capitalism from the sixteenth century onwards: he classified countries into between 'core' and 'peripheral' nations, the latter being dependent upon the former. The model was not concerned with international migration at first, and it was only after the migration crisis of the 1970s that world systems theory was transposed to international migration (Portes and Walton 1981). According to this theory, migration is not considered a decision taken by individuals or households, but rather as a by-product of market expansion. Applied to international migration, the theory argues that the penetration of

capitalism into non-capitalist economies ('peripheral countries') creates a mobile population, with a high propensity to emigrate. This penetration was first induced by colonialism, and later by globalisation. Sassen's theory of global cities (1991), which considers migration a by-product of capitalism, is an application of the world system theory.

Other theoretical approaches have been inspired by world systems theory, most notably the theory of *migration systems*. This theory is based on the idea that migration flows occur within clusters of countries, organised in a migration system in which different countries, which do not need to be geographically close, exchange migrants with each other, following the structures outlined in the previous paragraph. These countries form a dynamic system, whose variables are economic and political, but also cultural. Migration systems explain the development of transnational spaces, where people, and also goods and communications are exchanged through social networks (Faist 1998). A migration system usually includes different sending countries ('peripheral countries'), and one core receiving country. The theory has been generalised to apply to different migration systems by Kritz *et al.* (1992).

These models have a high explanatory value, since they not only account for economic migration but also for political migration. The question is, can they also apply to environmental migration? I shall discuss in Chapter 4 how environmental migration drivers are intertwined with economic and political migration drivers, and how unequal vulnerabilities to environmental changes reflect global economic inequalities.

These theories and models, despite their significant differences, commonly address international labour migration to western countries. They are rooted in western, Euro- and US-centric concerns for migration flows, which hardly reflect the totality of global migration. Theories of neoclassical economics and the new economics of migration argue that migration is determined by individual or household decisions, whereas structural and world systems theories contend that movements are structurally determined. While the latter position better fit this research's constructivist posture, the former accounts for internal migration as well, an aspect not tackled by structural theories. Overall, it appears that environmental drivers are insufficiently addressed by classical migration theories. Accordingly, this thesis will borrow from different models for its theoretical underpinnings.

Overall, migration theories mostly address patterns of economic migration to developed countries, and do not capture two essential aspects of environmental migration flows: internal migration and forced migration. I shall now try to identify some specificities of these flows in contrast to the mainstream theories of migration.

3.3.2. Internal Migration

Although the two sets of theories presented above were aimed primarily at explaining international migration, they also apply to internal migration. Studies of internal migration have tended to be organised around case studies, and theoretical contributions are less abundant than for international migration. Furthermore, studies focus on voluntary, labour migration from rural to urban areas (Greenwood 1985), whereas internal forced migration, or internal displacement, is often treated as a subset of refugee studies: no specific theoretical body of literature exists for internal displacement.

Internal migration was considered a component of the first ‘Laws of Migration’ elaborated by Ravenstein (1885): one of these laws stated that the propensity to migrate declined as distance travelled increased, a law that seems less relevant today, given the reduced costs of transportation. Modern literature on voluntary internal migration is closely related to the analysis of labour markets, and largely builds upon the model developed by Sjaasted (1962), which emphasises the role of social capital. Todaro (1969) focused on labour markets and urban employment in developing countries, and showed that job prospects were the main driver of internal migration from rural to urban areas in developing countries. Unemployment rate and wage differentials were the main variables of the model, which had considerable influence in academic and political spheres. Todaro, along with Harris, proposed an updated version of the model the following year (Harris and Todaro 1970) and argued that rural-urban migration flows would continue even when urban unemployment was on the rise. They contended that the creation of more urban jobs in developing countries would result in higher, and not lower, unemployment rates, since migration was based on the expected income, rather than on the real income. Todaro’s and Harris’ model contradicted the widely-

held positive view that internal migration was a way to equilibrate labour markets, and their intervention resulted in major policy shifts, since emphasis was put on rural development.

The Harris-Todaro model, however, failed to explain migration differentials, that is, why some individuals were more likely to migrate than others. Beshers and Nishiura (1961) developed different hypotheses¹⁷ to account for migration differentials: they emphasised individual characteristics, and also noted that environmental factors were important variables whereas job prospects were of little concern for the migrant. Over time, the Harris-Todaro model was adapted in order to include human capital variables such as ages, family ties, social networks, etc. At the macro-level, this resulted in the development of a gravity model, in which these different variables were aggregated in order to provide an explanatory framework for empirical research (Alonso 1986; Greenwood 1997). In its standard format, the gravity model aggregates population size and distance (gravity variables), economic variables and labour market variables, and also environmental variables. Andrienko and Guriev (2004) studied the importance of these variables against economic variables for internal migration in Russia, and found that amenities variables related to the infrastructures or the climate were significant migration drivers. However, these variables do not deal with environmental change, but rather with amenities¹⁸.

Literature on internal displacement is more recent, since the plight of peoples uprooted and dispersed within the borders of their country was only recognised as a matter of concern in the 1990s (Mooney 2005). The definition of internally-displaced persons (IDPs) approved by the UN General Assembly in 1998 encompasses migrants who have been forced to leave their homes because of an armed conflict, generalised violence, human rights violation or natural and man-made disasters, but have not crossed an international border (United Nations Commission on Human Rights 1998). Even though this definition differs substantially from the refugee definition provided by the Geneva Convention, no specific theoretical model of internal displacement has emerged in the literature. The traditional view held that internal displacements were the result of inter-group conflicts within states, but many authors have stressed that patterns of displacement are no different regardless of whether the migrants crossed a border or not, and so called for internal population displacement to be considered an integral part of a single general theory of population displacement (Ibeanu 1998). Some

¹⁷ For example, these hypotheses stipulated that young and educated people were more likely to migrate, as were as those who were not farmers.

¹⁸ Such amenities are discussed in further detail in Chapter 3.

authors went even further, and made the case for a common protection regime that would apply both to refugees and IDPs, pleading for a reconsideration of ‘the use of the crossing of international borders as a prerequisite to systematic international protection and assistance of people forcibly displaced from their homes’ (Lee 1996: 27). On the theoretical level, this is already largely the case, and theories of internal displacement are incorporated into broader theories of forced migration, which will now be reviewed.

3.3.3. Forced Migration

Even though it has recently been argued that it is increasingly difficult for states to distinguish between migrants and refugees (Crisp 2007), most theories of forced migration insist on the specificities of refugee (and IDP) movements. Like theories of voluntary migration, models of forced migration pay little attention to environmental factors and constraints. One of the most famous models of forced migration, developed by Gordenker (1989), lists four reasons that can induce forced migration, none of them having anything to do with environmental factors: international war, internal disturbances, changes in the social structure due to political perturbations, and international political tensions.

Zolberg, Suhrke and Aguayo (1989) developed a structural theory of refugee movements on which this research will rely. They argue that refugee movements differ considerably from economic migration: the causes for migration, as well as the motivation of migrants, are fundamentally different. In particular, they stress the ‘intrinsic involuntary character of refugee movements’ and the violence involved. However, the couplet assimilating voluntary economic movement and migrants on the one hand, and involuntary and political movement on the other hand, is problematic: the authors argue against this double, over-simplistic dichotomy, and contend that the ‘the causes of refugee movements are not haphazard but structural, and result from conflicts’. Their structural theory states that refugee movements are created only if underdevelopment or structural violence coincides with actual violence. The authors acknowledge the interconnection of economic and political factors, but affirm the predominance of conflicts in the creation of refugee movements.

Even though environmental factors are not mentioned in the theory, I contend that conflicts can be substituted by sudden environmental change or disaster in the theory, and that a structural theory of environmentally-forced migration can be developed on the same model:

such displacements occur when underdevelopment and/or environmental vulnerability coincide with sudden environmental change. This theoretical approach is also rooted in a constructivist perspective: the precipitating event as such does not create displacement unless it coincides with predisposing factors.

Other scholars have attempted to provide classifications and typologies of refugees to aid discussion of the environment-migration nexus. Joly (2002) proposes a distinction between ‘Odyssean refugees’ and ‘Rubicon refugees’. Odyssean refugees are ‘actors who were not just victims of the structure of conflict in their country of origin but were positively committed to the political struggle and to a project of society in their homeland’, a project that they take with them in exile. On the other hand, Rubicon refugees are at the opposite of this spectrum: they have turned their back on their society of origin and do not retain a commitment to it. Unlike Odyssean refugees, they are unlikely to return. In the case of people uprooted by environmental change, the desire to return will probably be more dependent upon the reversibility of the environmental damage than on any political project.

Kunz argues that ‘it is the reluctance to uproot oneself, and the absence of positive original motivations to settle elsewhere, which characterizes all refugee decisions and distinguishes the refugee from the voluntary migrants’ (1973: 10). He recognizes two ‘kinetic’ types of refugee movements: anticipatory movements involving people before the deterioration of the situation, and acute movements, that are unplanned and *en masse*, where the objective is to reach a haven or safety. Richmond (1994) applies a similar distinction to environmental migration, and considers that the difference between pro-active and reactive migration is more significant than the distinction between forced and voluntary migrants. Such distinctions provide theoretical guidelines for the establishment of a typology of environmental migrants, which I will develop in Chapter 4.

3.3.4. *A Model for Environmental Migration*

Classical models and theories of migration barely address environmental change as a driver for migration. I have tried to show the extent to which extent these models and theories can be adapted and used as conceptual frameworks for our understanding of the relationships between environmental changes and migration, whether forced or voluntary. Literature

addressing specifically environmental migration, however, has produced a specific explanatory model, first proposed by Richmond (1994) and later systematised by Hugo (1996). It is one of the very few models developed specifically to address environmental migration, and is based on the importance of understanding the dynamic and complex interaction of the multiple causes that trigger environmental migration. First, the model acknowledges that some environments and contexts are more likely to generate migration than others. This is the case of fragile environments, areas at risk of natural disaster, or poorer areas/countries where people have less resilience to environmental change, and fewer possibilities to adapt. Therefore, the *predisposing factors* are not solely environmental, but also economic and social. Overall, these predisposing factors are more present in developing countries, and can be understood as variables of social vulnerability.

The second element in the chain of migration is the *precipitating event*, which can be any environmental change, or a series of changes. Richmond insists that the precipitating event and the predisposing factors are not independent from each other: whether or not a precipitating event triggers migration is dependent on the predisposing factors. This argument relates to theories of natural disasters and vulnerability outlined above, and echoes the structural theory of refugee movements (Zolberg et al. 1989): the precipitating event as such does not create a migration flow, unless it coincides with predisposing factors.

The migration is also influenced by *constraints and/or facilitators*, such as the pre-existence of links and networks, or organised evacuation. These constraints and facilitators will shape the migration flow.

Finally, the *feedback* to the area of origin is of utmost importance for understanding migration flows. This feedback can be produced by the migration itself, alleviating the pressure on natural resources and thus reducing the likelihood of the occurrence of a disaster. The feedback can also take the form of environmental policies implemented after a disaster, which can also influence migration.

The model is, so far, the most comprehensive theoretical model of environmental migration, and has been systematised as follows by Hugo (1996: 111):

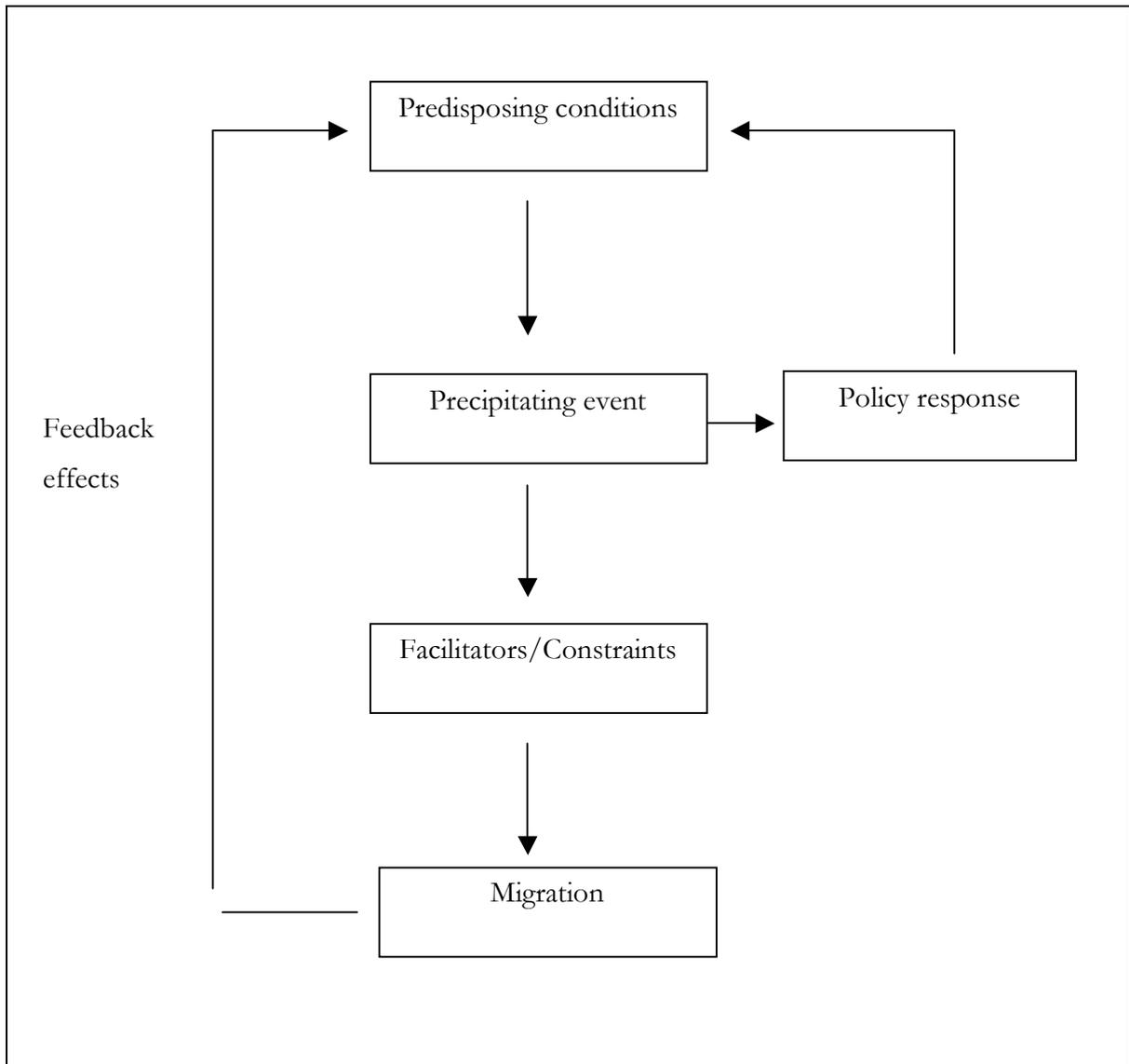


Fig. 2 – A Theoretical Model of Environmental Migration (Hugo 1996)

However, this research is not concerned with the processes of environmental migration, but rather with the normative frameworks and policy responses that address such processes. In that regard, one of my key endeavours is to show how policy responses affect not merely the precipitating conditions, the first step of the process, but the whole process. My goal is to show that policy responses play a far greater role than the one envisioned by Hugo in his model, and act at different levels. The model presented above mentions a specific type of policy response that aims to alleviate the impact of the precipitating event. I argue that policy responses penetrate the whole process, and are the main determinants of the relationship between environmental change and migration.

3.4. Research-Policy Linkage(s)

As explained in the Introduction, a key feature of this work is its emphasis on the importance of researchers to the policy-making process. Before describing the Advocacy Coalition in Chapter 2, I will first review some key theories on the linkages between science and policy, and delineate how I envision the role of researchers as policy-makers.

3.4.1. The Connection between Science and Policy

The topic of the relationship between science and policy is hardly new: the first works on the subject appeared in the late 1930s. Already in 1939, Lynd warned that ‘the scholar-scientist is in acute danger of being caught, in the words of one of Auden's poems, “Lecturing on navigation while the ship is going down”’ (Lynd 1939). Since then, many authors have called for better connections between science and policy, and the matter has been an object of dissatisfaction on the part of both researchers and policy-makers (Weiss 1978). Yet science, and social science in particular, is embedded in social reform and public policy: the use of scientific evidence has long been part of the policy process, although it has taken different forms over time. In turn, a great deal of scientific research (perhaps too little) is publicly funded, either through structural or project-based funding.

The relevance of scientific research for policy-making varies significantly from discipline to discipline and context to context; for example, its impact is very different in environmental and migration studies. I shall discuss here some of its possible uses, following a typology established by Weiss (1978). Firstly, research can be used for problem-solving. The common assumption when discussing the linkages between science and policy is that scientific research provides data that can be used to solve political problems. The application of science, in this case, is linear and directly instrumental. When research is directly used for problem-solving, governments can commission a study on a particular subject in order to get information relevant for policy-making. It is in this same spirit that many scientific advisory committees have been set up in different areas of government, and scientists directly used as advisers of the policy-makers (Smith 1992).

This model, however, assumes that there is an agreement between researchers and policy-makers on the desired policy outcome, which is hardly the case. Scientists will generally favour an outcome based on rationality (Smith 1992), whereas policy-making will be driven by other, additional motives, such as ideology, values and interests. Hence there will often be a discrepancy between the solutions favoured by scientists and those implemented by policy-makers. Furthermore, scientific knowledge will often compete with other types of knowledge, produced by the media, public opinion, interest groups, etc. Florence and Martiniello note that

Academic sociologists and political scientists increasingly face competition with media specialists and non-academic experts. The latter often produce a more seductive discourse, even when it is not scientifically sound. As for academic researchers, they are sometimes accused of not engaging enough in social debates. But when they do so, their discourse tends to be disqualified because it is “disenchanted”, complex and even critical. (2005b: 3)

For these reasons, the linkage between science and policy is hardly one of direct, linear instrumentalisation, and other models will be needed. Policy opportunities can also stem from the developments of fundamental research, and policy can become research-driven. This is the case for new discoveries that can find practical applications (a vaccine, for example), but the same is also the case with the social sciences. Social sciences can make apparent a social issue, or can be used to conceptualise a policy problem. Overall, the social science can deeply affect the way society thinks about a political problem, and therefore impact upon non-scientific discourses. In our case, the interactions between scientific and non-scientific discourses will be of utmost importance in the production of knowledge, as will be evidenced in Chapter 3.

Finally, research can also be used as ammunition by policy-makers, especially when the topic is debated. In this sense, research can be (deliberately) manipulated or used for self-advancement, often at the expense of those who do not have the same access to the scientific data.

Finally, the model I mostly rely upon posits that researchers and policy-makers mutually influence each other, in an interactive model. In this model, the use of scientific research is a complex process that appeals to values, strategies and interests. The influence of policy-makers on research is evident in the funding of policy-oriented research projects, or in the

formulation of certain research questions (Florence and Martiniello 2005a). It can also happen in less apparent ways, however, through mutual interactions, for example when sciences becomes an integral part of the policy process, and policy an integral part of the research process. This is the model that will be favoured by the Advocacy Coalition Framework, in which researchers will be considered along with journalists, NGOs, and traditional policy-makers.

3.4.1.1. Science and Environmental Policies

Environmental policies tend to rely heavily upon the natural sciences. Rosenbaum notes that ‘what often distinguishes environmental policy making from other policy domains is the extraordinary importance of science, and scientific controversy, in the policy process’ (2005: 56). Science, indeed, is often at the centre of policy debates, and its impartiality and objectivity can sometimes be tested. The advice and expertise of scientists can distort or reinforce political conflicts, particularly when scientific evidence and public opinion are divided (Rosenbaum 2005: 57). However, the use of science in policy-making is confronted with a double obstacle:

- Firstly, science can often be used as ammunition in case of policy debates and conflicts. In such cases, its findings can easily be distorted and manipulated so that they fit a policy position. Furthermore, science is not free from political pressures, deliberate or otherwise. Some studies can be commissioned directly – either by the government or interest groups – with the purpose of supporting a policy position. More generally, many scholars deplore that the research agenda is too often policy-driven, and thus fails to address some fundamental questions, or addresses them in a distorted way (Lynn 1978). As noted by Castles¹⁹,

Social scientists often allowed their research agendas to be driven by policy needs and funding, they often asked the wrong questions, relied on short-term empirical approaches without looking at historical and comparative dimensions, and failed to develop adequate theoretical frameworks narrowly [...] Focussed empirical research, often designed to provide an answer to an immediate

¹⁹ Cited in Florence and Martiniello (2005b: 7). In its original context the quoted text refers to the social sciences, but can easily be applied to science at large, in the present context.

bureaucratic problem, tends to follow a circular logic. It accepts the problem definitions built into its terms of reference, and does not look for more fundamental causes, nor for more challenging solutions. (Castles 2003)

- Another obstacle, particularly acute in the natural sciences, is the differences of time frame in problem solving. Science typically favours long-term solutions, whereas governments are often compelled to act swiftly and will look for immediate benefits. Revelle, famous for pioneering research on climate change, observes that

In his search for truth, the scientist is oriented toward the future; the politician's orientation is usually here and now. He desires quick visible pay-offs for which he often seems willing to mortgage the future. (Revelle 1981: 134)

Linkages between natural sciences and environmental policies are particularly apparent in the case of climate change, where an *ad hoc* scientific body, the Intergovernmental Panel on Climate Change (IPCC), has been established by two United Nations agencies²⁰ to review scientific evidence related to global warming, and to assess the associated risks and impacts. Policy-makers participate in the plenary sessions of the IPCC, adopt its work programme, and have a say in the reviewing of reports, although they do not contribute directly to them. Major IPCC reports (the Assessment Reports) have often resulted in policy responses: the First Assessment Report, released in 1990, served as the basis for the drafting of the UN Framework Convention on Climate Change, and the Second Assessment Report, issued in 1996, preceded the adoption of the Kyoto Protocol.

3.4.1.2. Science and Migration Policies

The relationship between science and policy is significantly different in the area of migration policies, and the limited impact of social sciences on policies (and migration policies in particular) is often lamented (Weiss 1978). Why is this the case? Florence and Martiniello (2005b) note that the academic discourse on migration faces increasing competition from the media and other non-academic discourses, which are often preferred to the former; academic

²⁰ The United Nations Environment Programme (UNEP) and the World Meteorological Organisation (WMO).

sources may be disregarded for being too complex and critical, and if they are used, it is merely to legitimate a policy action. Furthermore, research findings on migration often conflict with politicised pre-conceptions of migration, both in public opinion and amongst policy-makers themselves.

The use of pre-determined categories seems particularly problematic, since these categories are rooted in national perspectives and policy agendas. Furthermore, such categories are not only descriptive, but also prescriptive, and so researchers should question the use of such pre-determined categories (Florence and Martiniello 2005b). A similar problem arises with regard to the definition of research questions and paradigms, which are often policy-driven. Castles note that ‘ministers and bureaucrats still see migration as something that can be turned on and off like a tap through laws and policies’, and that they have, to a certain extent, imposed this paradigm on researchers (Castles 2003).

Reflection on the use of categories is a critical component of this thesis. Categories are used to better apprehend social reality, but they also impose a politically-grounded framework upon this social reality. For instance, if environmental migration is considered as a specific category of migration, this implies, one way or another, that such migration flows should be addressed differently than other migration categories. I argue that such categories are always artificial, and rooted in specific political contexts. Hence process of categorisation – in which research and policy mutually influence each other – is a central focus of my work.

3.4.2. Researchers as Policy Actors

From the above, one might conclude that research plays an important role in environmental policy-making and a more limited one in migration policy-making. However, I propose to consider not only the role of research in the policy process, but also the engagement of researchers themselves in the policy process.

It is now widely acknowledged that ideas are an important input of the policy process (Fouilleux 2000); how these ideas become institutionalised in the policy process, however,

remains debated. Researchers are obviously prime providers of ideas, but their integration in the policy process can take different forms.

In some cases, their role in the policy process is institutionalised: for example, when they are affiliated to an advisory committee, think-tank or NGO, or when they are commissioned to conduct policy-oriented research. This is not to say, however, that researchers in such positions are politically biased, but rather that their role in the policy process is officially acknowledged.

In other cases, the role of researchers is more diffuse, as they are not officially involved in the policy process²¹. However, the involvement of scientists in policy debates, to some degree, also reflects their personal convictions. Mazur, for example, notes that ‘experts tend to behave like other people when they engage in a controversy. Coalitions solidify and disagreements become polarized as conflicts become more acrimonious’ (Mazur 1981: 29). For example, although the IPCC is policy-neutral and does not make any policy recommendations, it is fair to assume that IPCC scientists share the view that greenhouse gases emissions should be reduced, even if they disagree on the best way to do so.

In considering researchers to be policy-makers, I am not taking a cynical view of science: I do not claim that all research is policy-oriented or has covert policy goals, but rather that researchers are not policy-neutral, whether intentionally or not. Naturally, my placing researchers within the Advocacy Coalition Framework raises some ethical questions about the status of research, as well as some methodological issues about my personal position as a researcher. These will be addressed in the next chapter.

Conclusion

Research on environmental migration abounds with proposals for the development of new policy instruments to tackle what is framed as a new issue. Although the material linkages between environmental change and migration flows are still under research, the discursive linkage between both aspects has steadily gained currency in recent years. I propose to examine how this discursive connection has been translated onto the policy level, to analyse

²¹ Note that the same researcher can play different roles in the policy process at different times.

policy responses in the fields of environmental and migration policies. In doing so, I hope to shed new light on the conceptualisation of environmental migration – a matter still fiercely debated – despite my awareness that additional empirical evidence will be necessary before the validity of the concept can be established.

My research reviews the different normative frameworks and policy responses that have been developed since the mid-1980s to address the issue, and analyses their parallel evolution and interactions. These frameworks and responses are primarily analysed at the international level, but some local and national policies will also be analysed and used as illustrations of the application of wider frameworks.

My view is that environmental migration is a political construct, shaped by policies upon which research has a significant impact, since I contend that science and policy interact with and mutually shape each other.

This study relies on models of environmental change derived from environmental economics: global commons, public goods and externalities. The impact of environmental change on populations, however, is contingent upon their vulnerability: I will reject the deterministic perspective in favour of a constructionist approach. I will also attempt to show that none of the existing migration models really fits the characteristics of environmental migration, though some insights can be gleaned from the new economics of migration and the structural theory of refugee movements. The prime reason for this is that environmental factors have long been neglected in migration theories and models.

Now that the main theoretical choices have been laid out, the following chapter outlines the key research questions and the methodological choices that have been made in order to answer these questions.

Chapter 2

Methodology

“It is common sense to take a method and try it. If it fails, admit it frankly and try another.
But above all, try something”

Franklin D. Roosevelt.

Introduction

This section aims to delineate the main methodological choices and the techniques of investigation that were adopted for this research. Having described existing theories of environmental changes and migrations flows in the previous chapter, I now turn to discussion of the policy process itself. Different theories and models co-exist, and will be described briefly. Of these models, the Advocacy Coalition Framework (ACF) seemed the most pertinent to the research I intended to conduct. The reasons for this choice, as well the use I make of the model, will be explained.

Although this research is primarily intended as a theoretical contribution to the literature, it also features some empirical illustrations, drawn from fieldworks conducted in Tuvalu and Louisiana. For both kinds of research, my methods, techniques and choices will be explained in Sections 2.1 and 2.2. Section 2.3 will outline the main research questions underpinning this work.

1. Analysing Policy

The policy-making process is a complex one, involving a wide array of actors and interacting elements. Overall, the process is determined by the ‘manner in which problems get conceptualised and brought to government for solution; governmental institutions formulate alternatives and select policy solutions; and those solutions get implemented, evaluated, and revised’ (Sabatier 1999: 3). Given the complex concatenation of intertwined elements at work, theories of the policy process aim to simplify and schematise the process, in order to provide a way of explicating the different steps of the process. The key theories germane to the policy-process are summarised here.

1.1. *Theories of the policy process*

Until the 1990s, the most widely-held and influential framework was the linear, or ‘stages heuristic’, model, which outlines policy-making as ‘a problem-solving process which is rational, balanced, objective and analytical’ (Sutton 1999: 9). The model was the subject of considerable criticism in the late 1980s and 1990s; as a consequence of the widespread acknowledgement of its shortcomings, a formidable period of model development took place in the 1990s with the goal of presenting new ways of understanding the policy process. These models were widely diverse, so much so that some concluded that no theoretical framework would suffice to provide a reasonable, meaningful explanation of the policy process, which could best be described as a ‘chaos of purposes and incidents’ (Sutton 1999: 8). The Advocacy Coalition Framework counts among these ambitious models developed in the early 1990s.

1.1.1. *The Stages Heuristic Model, or Linear Model*

Until the 1990s, the stages heuristic model was the traditional model for apprehending the policy process. The model divided the policy process into a series of separate sequential stages²², and discussed the factors impacting upon each stage of the process (Brewer and deLeon 1983). The model was widely used in the 1970s and the 1980s, but by the 1990s the

²² These stages comprise agenda-setting, policy formulation, implementation, and evaluation.

discrepancies between the model and the reality of the policy process had become increasingly evident. In particular, it was argued that the model was unable to provide a causal theory for the whole process, was too fragmented and descriptively inaccurate, and ignored the intertwining of multiple policy cycles (Sabatier 1999).

1.1.2. Institutional Rational Choice

Theories of Institutional Rational Choice derive from the school of Public Choice. They examine the way in which different institutional rules and constraints affect the behaviour of individuals. These individuals are assumed to act rationally and to pursue their self-interest (Shepsle 1989). Although the model has universal pretensions, it has been applied primarily to analyse the relationships between governmental agencies, parliaments and organisations (Ostrom 1990). The model is widely used, particularly in Anglo-Saxon countries. However, although it is perhaps the most advanced and developed model, for the purposes of my research it seemed overly deterministic.

1.1.3. The Multiple Streams Framework

This framework derives from the classic ‘garbage can’ model of organisational behaviour, and was first developed by Kingdon (1984). Kingdon identified three different streams in the policy process, which are supposed to function independently from each other: the problem stream, the policy stream and the politics stream. The problem stream consists of the characteristics of the political problem, the policy stream contains potential solutions to the problem, and the politics stream gathers the state of politics and public opinion. Each stream contains the various political actors involved in the policy-making, and Kingdon argues that policy changes occur when the three streams converge in a ‘window of opportunity’ (Birkland 2001: 224).

The model offers an interesting metaphor to explain the appearance of new ideas and concepts – such as environmental migration – in the policy arena, but is more concerned with agenda setting than with other aspects of the policy process (Birkland 2001: 224).

1.1.4. *The Punctuated-Equilibrium Framework*

The punctuated-equilibrium framework is an evolutionary framework of the policy process. The proponents of the model, Baumgartner and Jones (1993), argue that the balance of power in the policy process remains relatively stable over long periods of time, punctuated by major, sudden policy changes. Policy changes occur when a group manages to present a political problem differently and alter the public opinion of the problem. A key feature of the model is the concept of a policy monopoly, which is reminiscent of the coalitions developed in the Advocacy Coalition Framework. A policy monopoly is a closed group of important actors in policy-making, who seek to keep the policy system closed, until a group of opponents will overthrow them and form a new policy monopoly.

The framework holds some characteristics in common with the Advocacy Coalition Framework, but is closely related to the US policy system, and could not easily be adapted to other policy contexts.

1.1.5. *Constructivist Frameworks*

A constructivist framework seemed to be an obvious candidate for my research: such frameworks address political problems as social constructions, and emphasise the importance of belief systems (Muller and Surel 1998). Nonetheless, constructivist frameworks do not easily allow ideas to be connected with people and institutions, and ideas are often conceived as ‘free-floating’, as Sabatier correctly observes (1999: 11). Although I intended to adopt a constructivist approach to the issue of environmental migration, the connections between ideas and institutions, between research and policy, were an essential part of my research, and could not be dealt with adequately by a constructivist framework. This was one of the reasons for adopting the Advocacy Coalition Framework, which will now be described.

1.2. The Advocacy Coalition Framework

The Advocacy Coalition Framework (ACF), developed by Sabatier and Jenkins-Smith (1993), aims to be a comprehensive and pertinent framework for contemporary policy analysis. It has been applied to a wide variety of policy sectors, including (but not limited to) energy policy (Jenkins-Smith and St. Clair 1993), airline regulation (Brown and Stewart 1993) and education reform (Mintrom and Vergari 1998).

Research on policy analysis first appeared in the United States in the 1950s, with a managerial orientation at that time: the framework of analysis took a top-down approach to evaluating the implementation of specific policies in a particular context. Under the influence of scholars such as Easton and Laswell, the interactions of the political system with other social bodies was incorporated into the nascent field of policy analysis. This allowed for the development of a bottom-up approach, that could account for the contribution of elements of the social system to policy design: the role of lobbies, in particular, was a prime focus of this approach. The field was long dominated by public choice theories, and the linear model emerged as the most common framework of analysis.

The ACF was developed in an attempt to move beyond the linear model and in order to reconcile the top-down and bottom-up approaches. It was directly inspired by Dahl's milestone work on the pluralistic approach to politics: the ACF attempts to analyse to interactions of multiple actors in complex policy processes. Dahl (1961) drew attention to the multiplicity of stakeholders in the policy process; similarly, the ACF attempts to model how they interact and shape the policy process.

Following Dahl's work on theories of pluralism, the importance of non-state actors in the policy process has been increasingly acknowledged. Dahl's work considered non-state actors in an institutional perspective: only institutions were considered, and non-state actors that were not officially represented were ignored from the process. Over time however, as the analysis of politics was no longer confined to the study of institutions, non-state actors have been considered in a more holistic perspective, which included also those not represented in political institutions and forums. Studies of civil society and interest groups have emerged, along with such concepts as social capital (Gellner 1994; Kaldor 2003). Overall, it has been

recognised that different groups – not limited to institutions and state actors – compete with each other in the policy process. One of the key reasons why the stages heuristic model became obsolete was its inability to account for the emergence of new policy actors such as civil society. The ACF is the outcome of the long-standing trend, which was first acknowledged by Dahl, whereby non-state actors have taken up an increasing role in the policy process.

The ACF revolves around five basic premises (Sabatier and Jenkins-Smith 1999: 118-119):

- Scientific information is an essential part of the policy process;
- The process can only be understood from a long-term perspective; short-term analysis does not permit an analysis of the various strategies pursued by the actors over time;
- The most useful unit of analysis for policy change is not that of a specific organisation or programme, but rather a policy subsystem: ‘actors from a variety of public and private organisations who are actively concerned with a policy problem or issue’;
- These policy subsystems include not only civil servants, officials, legislators and interest groups, but also journalists, researchers, and actors at all levels of government;
- Public policies can be conceptualised as belief systems.

The central element of the ACF is the belief system, around which advocacy coalitions are formed. A belief system consists of fundamental values as well as social representations and perceptions of political reality. In any given policy, different belief systems co-exist, corresponding to different advocacy coalitions. These belief systems are organised around a hierarchical structure, comprising three layers:

- *Deep core beliefs*, which relate to basic normative beliefs, such as the traditional left/right scale.
- *Policy core beliefs*, which represent a coalition’s basic commitments and value priorities in a given policy subsystem, and perceptions about the seriousness of the problem and its causes. In the policy subsystem of climate change, for example, policy core beliefs might focus on the relative importance of environmental protection versus economic development. These policy core beliefs are determinative elements of the coalitions: they represent the coalition’s positions on the policy issue and determine their strategies.

- Finally, *secondary aspects*, which are policy instruments used to pursue the realisation of the policy core beliefs: taxes versus incentives, command-and-control approaches versus market approaches, etc. These secondary aspects are more easily adjusted than policy core beliefs, while deep core beliefs are very resistant to change.

The conflicting strategies of opposing coalitions are mediated by policy brokers, whose role is to find a compromise in order to produce a policy output. Such a hierarchisation of beliefs permits for the development of predictive hypotheses; these hypotheses are organised into three groups, concerning advocacy coalitions, on policy change, and on learning across coalitions.

The first hypothesis concerning coalitions argues that the arrangement of allies and opponents within a subsystem remain stable over long periods of time, given that policy core beliefs are unlikely to change. The second hypothesis states that actors within a coalition will maintain consensus on the policy core beliefs, but are less likely to do so on secondary aspects. A final, related hypothesis stipulates that an actor of a coalition will give up secondary aspects before acknowledging weaknesses in the policy core. These three hypotheses are logical consequences of the hierarchy in place within the belief system. A fourth hypothesis was later added, which contends that within a coalition, administrative agents will tend to adopt a more moderate position than other members of the coalition.

The hypotheses related to policy change make bolder claims: a first contends that the policy core attributes of a governmental programme are unlikely to be revised significantly as long as the coalition that implemented the policy remains in power. In other words, a change of coalition or an external intervention is necessary before a policy change can be implemented. A second hypothesis proposes a similar argument: the policy core attributes of a system are unlikely to be changed in the absence of external perturbations to the subsystem, such as technological breakthrough, public opinion, etc.

A third set of predictive hypotheses concerns the possibility of learning across belief systems, that is, how can coalitions be influenced by each other? The ACF hypothesises that such changes across coalitions are more likely to occur in fields where quantitative data are available, in natural sciences more so than in social sciences, or when there exists a

professional forum with experts from different coalitions participating. Additionally, such changes are also more likely to take place when there is an intermediate level of informed conflict between the coalitions, that is, not a direct normative conflict.

These hypotheses have been tested in an important number of cases²³, and proved empirically valid. However, two difficulties arise in the application of the ACF model to practical situations: firstly, how to identify the actors of a coalition, and secondly, how to delimitate the subsystems?

With regards to the identification of actors, one of the major features of the ACF model is the assumption that no actor is policy-indifferent. All actors are potential and equal members of coalitions, no matter whether they are officials, interest group leaders, legislators, journalists or researchers. The ACF model is particularly interesting for challenging the assumed neutrality of researchers: empirical studies show that researchers are not policy-indifferent, but usually members of a coalition (Zafonte and Sabatier 1998). Furthermore, these studies also show that the number of coalitions within a policy subsystem is higher than expected.

Another problem concerns the delimitation of policy subsystems, which are loosely defined as groups of actors interacting with some regularity in a functional policy domain (Sabatier 1988). Subsequent refinements of the model distinguished between nascent subsystems (in the process of forming), and mature subsystems (of several years' duration) (Sabatier and Jenkins-Smith 1999: 135). Given the recent emergence of the topic of environmental migration, I consider the relevant policy subsystem a nascent one, and thus accept that greater fluidity of the actors is inevitable: nascent subsystems are more loosely defined than mature subsystems. In the words of the proponents of ACF,

Subsystems arising because of concern about a relatively new issue [...] may initially be characterized by rather amorphous situations [...]. But as information develops concerning the seriousness of the problem, its causes, and the costs of remedying the situation, actors tend to coalesce into distinct coalitions [...]. (Sabatier and Jenkins-Smith 1999: 136)

4.1.1. Why choose the ACF Model as an Explanatory Framework?

²³ In 1999, Sabatier and Jenkins-Smith acknowledged at least 34 cases of empirical testing of their model.

There are many different models that could have been used this analysis. It is likely to each of them would have yielded different results, and made the policy process appear in a different way. Thus the ACF Model is far from being the only model that could have been used, and its choice is dependent upon the research objectives laid out in the previous chapter. A key feature of the model is that it seeks to explain the policy process with the policy beliefs of policy-makers. Hence it allows me to highlight the interactions between policy outcomes and values, which is a central aspect of this research. The model, therefore, was not chosen because it was the only one that could be used, but because it could help fulfil a core objective of the research.

Furthermore, different specific reasons prompted me to select the ACF model from among different possible models of policy analysis:

- Firstly, because of the universality of the model, and its high explanatory value. Theories and models of the policy process remain largely influenced by Anglo-Saxon policy processes. Yet the organisation of policy-making and the structures of government tend to be significantly different in developing and developed countries, in the United States and Europe, or at the national and international levels. Unlike other models, the ACF model seems applicable to a wide range of different policy processes in different contexts. The punctuated equilibrium model, for example, also has a high explanatory value, but has been tailored specifically for policy processes in the United States. Furthermore, the model has been thoroughly tested at an empirical level, and has been corrected and refined in order to take into account the results and criticisms resulting from empirical testing. This gives the model a high explanatory value (Bergeron et al. 1998).
- Secondly, the model connects research and policy, and considers researchers to be political actors. Many other policy models, such as the stages heuristic model or the institutional rational choice model, do not allow for such considerations, and restrict themselves to institutions. In my view, the ACF model can shed new light on the scientific controversy between ‘alarmists’ and ‘sceptics’, if we consider these two positions to be parts of advocacy coalitions. In that regard, the model perfectly fits the constructivist approach of this research, since it recognises that the

conceptualisation of the issue is not policy-indifferent, but is shaped by belief systems inherent to the policy process. In a field of study in which the conceptualisation of the problem is so important, it seemed appropriate to choose a model that placed a heavy emphasis on the role of experts and scientific information. Furthermore, the model considers researchers to be *policy entrepreneurs*, or actors who, 'from outside the formal positions of government, introduce, translate, and help implement new ideas into public practice' (Roberts and King 1991: 147). Incorporating researchers as actors in the policy process does not go, however, without raising methodological concerns regarding the position of the researcher towards his/her field of study. Such considerations shall be addressed in the following chapter.

- The ACF considers policy cycles over relatively long time-frames, usually ten years or more. I have shown in Chapter 1, Section 4 how the time-frames of researchers often do not match those of policy-makers. As observed by Sabatier, 'A number of recent studies suggest that time periods of twenty to forty years may be required to obtain a reasonable understanding of the impact of a variety of socioeconomic conditions and the accumulation of scientific knowledge about a problem (1999: 3). By considering policy cycles in the long run, the ACF accounts for the different time-frames of policy actors. Given that I intend to analyse the evolution of policy responses over a relatively long period, from the mid-1980 onwards, the ACF seemed particularly appropriate.
- The ACF uses the policy subsystem as its unit of analysis, rather than a specific programme or policy changes. The policy subsystem is centred around policy actors, and encompasses all actors interacting around the policy issue. A key feature of my analysis is the combination of environmental and migration laws, and the policy subsystem seemed to be the single unit of analysis that would allow for these two policy areas to be examined in tandem. Subsystems can arise out of the emergence of a new policy issue, and I will consider that this to be the case for environmental migration.
- Finally, the ACF was chosen for its emphasis on beliefs, values and interests in the policy process. Other models tend to consider that institutional affiliation is the key determinant of policy behaviour. Following a constructivist approach, I argue that

belief systems are more important, and that reaching beyond one's institutional affiliation, as well as across coalitions, is possible. In many regards, the ACF is the opposite of the Institutional Rational model, which is rooted in a deterministic perspective. In contrast to the Institutional Rational model, I argue that policy behaviours towards environmental migration are dictated primarily by the belief system of each actor: this is the key determinant of his/her belonging to a policy coalition.

4.1.2. Using the ACF in the Context of Environmental Migration

I propose to consider environmental migration as a policy subsystem, in which advocacy coalitions form around core policy beliefs. Policies dealing with environmental migration belong to different policy areas, ranging from disaster management to refugee protection. These shall be detailed in the section below. In my analysis, the spectrum of policy areas comprise a policy subsystem, in which two advocacy coalitions emerge. The first coalition is organised around an 'alarmist' policy core, calling for the development of new legal and policy instruments to address an issue of unseen magnitude. The second coalition revolves around a 'sceptical' policy core, maintaining that environmental migration does not require the development of new policy instruments. Both coalitions form naturally around the principle arguments set forth in academic debates, and include views from researchers, as well as international agencies, NGOs, journalists and other stakeholders. In this analysis, emerging policy brokers may attempt to transcend coalitions and transform their competing views into policy outputs. Some authors have attempted to give a numerical value to the policy behaviours of coalition members, in order to conduct a quantitative analysis of the policy process (Zafonte and Sabatier 1998). I will not go down this route, and will instead concentrate on describing the strategies and interactions of advocacy coalitions. Overall, the ACF will be used more as a theoretical model of the policy process than as a methodological tool. I do not seek to describe precisely all members of each coalition, nor to code their behaviours with a numerical value, but rather use the ACF to apprehend a political reality. The policy process is a very complex set of variables, actors and elements interacting with each other

In order to navigate within this policy subsystem, I have identified a series of policy areas in the environmental and migration spheres that will be studied. Policy implications of the debate on environmental migration are manifold (Boano et al. 2007; Brown 2008; Biermann and Boas 2007), but focus on a series of particularly relevant policy areas detailed in the next section. These policy areas are subsystems in their own right; and different coalitions could emerge for each of them. I argue that these different policy areas are part of a global policy subsystem on environmental migration, whose coalitions and strategies shall be described. As an illustration of this policy process, I present empirical evidence from Tuvalu and Katrina as micro-level analyses of policy outcomes in these different policy areas, shaped by coalition strategies.

4.1.3. Researchers in the Advocacy Coalition Framework

As mentioned above, the ACF considers researchers to be members of advocacy coalitions, and refutes the idea that they are policy-indifferent. In Chapter 1, Section 3 I drew attention to the interactions of research and policy, and the impact of science upon the policy process, particularly in the field of environmental policies.

One of the goals of this research is to highlight the role played by scientific research in the policy process, and the role of policy responses in the conceptualisation of research questions and issues. For this reason, researchers will be considered to form part of advocacy coalitions, along with traditional policy-makers, governmental agencies, international organisations, NGOs and the media. A few words, however, must be said about the place of researchers in the ACF.

Researchers are often consulted by policy-makers for two key reasons: in order for them to provide technical information and expertise, and because they are assumed to be rational and objective sources of information (Smith 1992). Beyond this function, researchers also have an important role in generating, promoting and disseminating new ideas (Fouilleux 2000). I contend that these ideas are shaped by policy beliefs, and that researchers, whether deliberately or not, are part of the policy process.

Given their importance in the field of environmental policies, researchers can also play the role of policy brokers, and some of are even invested with official functions in the policy process. Walter Kälin, for example, is at the same time Special Representative of the UN Secretary General on Internal Displacements, and professor of Migration Studies and Human Rights at the University of Bern.

Not all researchers play a similar role in the policy process, however: some engage actively in it through think tanks and/or advisory committees, while others do so unintentionally. Some have greater access to other policy-makers (such as the media or international organisations) than others. Overall, I aim to describe how ideas are institutionalised, and the interactions and strategies of the different actors of the process. Researchers will be placed in coalitions along with journalists, NGOs or elected officials; this does not imply that their objectives and strategies are similar, but only they share some core policy beliefs on the policy issue (although they can disagree and criticise each other on other issues). It could be argued that I myself am part of a coalition, but for the purposes of this research I hope to abstract myself from this position and take an external look at the policy subsystem.

2. Methods

I have said that the Advocacy Coalition Framework will be used more as a theoretical framework to apprehend the policy process than as a methodological tool. The methodological approach of this research is detailed in the following section.

2.1. Theoretical research

The theoretical research informing this thesis was mostly concerned with the analysis of normative frameworks and policy responses at the international level. Section 2.1.1 explains the choice of policy areas – the units of analysis – in this study, and Section 2.1.2. reviews the

three types of sources used: namely legal documents and archives, expert interviews, and direct observation.

2.1.1. *Policy Areas under Study*

The policy area most obviously affected by the debate on environmental migration is refugee protection. Divers scholars have called for revision of the international refugee regime in order to include peoples displaced by environmental change (Conisbee and Simms 2003; Biermann and Boas 2007; Dacyl 1995), whereas others have opposed such a revision and warned that it will dilute current protection mechanisms (Castles 2002; Suhrke and Visentin 1991). Though refugee protection is certainly a prime target of policy implications, I argue that the debate on environmental migration affects other policy areas as well, including disaster management, migration policies, adaptation to climate change, protection of IDPs, environmental justice and the global governance of migration. Some authors have also called for a reform of development policies (Brown 2008), but these seem somewhat peripheral to the debate, and will not be tackled here.

I have grouped the relevant policy areas into two policy streams – environmental and migration policies – and will attempt to study their parallel developments over time in relation to environmental migration. Each policy area will be analysed through the ACF model, and considered as a secondary policy subsystem. At this stage, I focus not on the implementation of a given set of policies in a specific country, but rather examine the main policy developments at the international level. The unit of analysis will not be particular policy, but rather the ongoing debates germane to the policy area at the international level.

My analysis takes a *longue-durée* view whenever possible, in order to capture long-term evolutions and developments. Sabatier and Jenkins-Smith have contended that ‘understanding the process of policy change (...) requires a time perspective of a decade or more’, since ‘a focus on short-term decision-making will underestimate the influence of policy analysis’ (1999: 118). Accordingly, I challenge the widely-held belief that the emergence of the concept of

environmental migration is directly associated with the hype and media-frenzy²⁴ surrounding climate change, and argue instead that this concept has roots in the mid-1980s. It is undeniable that climate change has given new salience to the concept and brought it to the fore of political and media agendas in the mid-2000s, but my point is that the emergence of the concept can be dated much earlier. The mid-1980s were a turning point because they marked the start of the asylum crisis and interrogations on the nature of the refugee regime, and also because they coincided with an accumulation of major natural disasters that highlighted the vulnerability of populations to environmental changes. Concerns about climate change also started to make their way onto the political agenda in the mid-1980s, with the first hearings on the subject being held in the US Senate, and the establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1989. Unsurprisingly, it was also in the mid-1980s that the UN Environment Programme (UNEP) issued the first report on ‘environmental refugees’ (El-Hinnawi 1985). Therefore, wherever possible, the timeframe of my research encompasses the last 25 years, from the mid-1980s until now.

In a first step, I describe the normative frameworks and legal instruments of each area (environmental and migrational) and interpret its policy developments over time. The central research question of this analysis asks, How have these frameworks shaped the policy response to environmental migration? In a second phase, these policy developments are illustrated by empirical evidence from Tuvalu and New Orleans.

2.1.1.1. Environmental Policies

This first stream of policies includes disaster management, principles of environmental law and adaptation to climate change. These policies all address the impacts of environmental changes on societies, a relatively recent preoccupation of environmental policies.

In the 1970s, concern for the state of the environment became widespread, and the first national environmental policies were designed, following the UN conference on the Human Environment, held in Stockholm in 1972. These policies were directed at protecting the

²⁴ These terms are not used in a pejorative fashion; they merely reflect the increased attention received by climate change in recent years, and the impression that environmental ‘refugees’ were just another part of a ‘doom and gloom’ scenario.

environment, and were concerned with pollution control, waste disposal, or the safeguarding of biodiversity. It was only a decade later that the impact of the environment on populations was carefully examined and addressed through policy instruments.

With regard to natural disasters, the concept of ‘vulnerability’, outlined above, emerged in the mid-1980s, after the disaster of Bhopal (1984) and Chernobyl (1986), as well as the 1983-85 famine in Ethiopia. The concept called into question our understanding of natural disasters, and reflected greater attention given to the impacts of environmental changes on populations. The evolution of the debate on climate policies is equally enlightening: climate change was initially addressed in terms of mitigation, and adaptation was perceived as an acknowledgement of the failure of mitigation policies. The first climate policies were therefore exclusively concerned with restricting greenhouse gas emissions; a shift occurred in the mid-2000s towards policies aimed at strengthening populations’ adaptive capacities to climate change. Finally, it is only recently that debates on environmental justice, including ecological debt, responsibility-sharing and compensation, have come to the fore of the international agenda.

Unsurprisingly, theories of environmental policy to date have mostly focused on policies of environmental protection (Baumol and Oates 1975), which are largely inspired by models derived from political economy. Theories concerning policies that address environmental impacts on populations usually draw on other approaches and models. Such policies are not always associated with specific decisions, but can be multiple and overlapping (Keeley and Scoones 1999). A common rule shared by both types of policies, however, is that scientific expertise plays a major role in shaping the policy debates. The triangular relationships between knowledge, power and policy have been conceptualised in a number of theories (Beck 1995; Latour 1987; Foucault 1980), most notably in theories of the mutual construction of science and policy (Barnes and Edge 1982).

My analysis will focus on the latter stream of policies, which address environmental impacts on populations, and on the interactions between science, power and policy. Chapter 5 will be concerned with interventions of the state and international agencies in disaster management and relief. Chapter 6 will focus on the development of adaptation policies to climate change within the context of the UN Framework Convention on Climate Change.

2.1.1.2. Migration Policies

Protection of refugees and IDPs is the prime focus of this part of the research. However, some mention will also be made of migration policies, although they remain domestic policies for the most part, since a significant of environmental migration flows are voluntary, and not forced.

The asylum crisis in the mid-1980s gave birth to a large number of academic interventions on the nature, and possible reform, of refugee protection. Revisiting the definitional issue of refugee movements, Zolberg *et al.* called for a better international refugee regime (1989). Similarly, lawyers called for a reform of the international refugee regime: Garvey argued it was inadequate (1985), Hathaway found it irrelevant (1997). This questioning of the adequacy of international refugee law led to further reflection on expanding typologies of refugees (Joly 2002; Richmond 1994; Marfleet 2006) to incorporate new types of forced displacements, including those triggered by natural disasters. The fifty-year anniversary of the Refugee Convention was marked by academic interventions on the ethics of asylum (Gibney 2004), and on the protection of those who were not, or were improperly, covered by the Convention, such as IDPs (Phuong 2004; Newman and van Selm 2003; van Selm et al. 2003).

According to Boswell (2007), migration policies can be classified into two broad categories: those inspired by neoclassical economics (Freeman 1995), which have a high theoretical value and predictability potential, but often tend to oversimplify the issues and neglect social structures; and those derived from neo-institutional approaches (Joppke 1998; Hollifield 2004), which provide complex explanations of social issues but often lack predictability, or cannot easily be tested empirically. The former assume that migration policies are shaped by conflicting, organized interests within a society, whereas the latter see the key variable of migration policies in the relationships between the state and stakeholders who oppose a restrictive approach to migration – this model is very close to the advocacy coalition framework. Boswell finds both sets of theories unsatisfactory, and propose instead a theory ‘focusing on the functional imperatives of the state in the area of migration, which shape its responses to societal interests and institutional structures’ (2007: 75).

Keeping these theoretical debates in mind, I will proceed to analyse the impact of environmental migration on asylum policies. To the best of my knowledge, the ACF model has not yet been applied to the study of asylum policy. My analysis will focus on the international refugee regime, but will also seek to address some regional policy responses, especially mechanisms of complementary protection in the European Union. Attempts to develop migration policies at the international level will be touched upon briefly in the conclusion: these attempts are connected to the global governance of migration, but also to the practices of refugee burden-sharing, which are addressed with a theoretical perspective in the works of Thielemann (2003, 2006a)

2.1.2. *Data Sources*

This aspect of the research relied on three types of sources: legal documents and archives, expert interviews, and direct observation.

2.1.2.1. Legal Documents and Archives

My primary sources of data were the very documents that constituted the normative frameworks. All these documents were publicly available, with the exception of some legislative proposals that were advance previews, which have since been released into the public domain. Archives and records of negotiation (*travaux préparatoires*) were also a primary source to analyse the evolution of the different regimes. Finally, legal commentaries and analyses provided vital insights into the minds of the policy drafters.

2.1.2.2. Expert Interviews

A series of interviews were conducted with key officials at UNHCR and IOM in Brussels and Geneva, UNEP and UNFCCC in Bonn, and the European Commission in Brussels. Additional interviews were also conducted with journalists, NGO representatives, and members of the Belgian and Australian parliaments who proposed asylum reforms to address environmental displacements. About 20 open interviews were conducted, mostly in an ‘off-the-record’ mode, and sometimes in informal settings. The names of the interviewees are

withheld for reasons of confidentiality. The goal of these interviews was to derive additional insights into the future evolution of different policy regimes. Interviews were conducted off-the-record in order to allow the interviewee to speak freely, and not as an official representative of his/her organisation.

2.1.2.3. Direct Observation

In recent years, a large number of meetings, workshops and conferences have been organised on the theme of environmental migration. The majority were attended by scholars and policy-makers alike, and constituted essential policy forums where coalitions exchanged and tested ideas. I tried to attend as many of these events as possible, in order to observe interactions between the coalitions first-hand.

2.2. *Field Research*

Field research was used to conduct micro-level analysis of policy outcomes, and will serve as illustrations of theoretical developments. The fieldwork component of this work should not be understood as case studies *per se*, but rather as empirical evidence and as an illustration of theoretical developments. As I have stated previously, this thesis does not aim to make a contribution on the empirical level, but rather on the theoretical one: empirical findings should thus be seen as supporting the theoretical contribution, and not the other way round.

These cases were not studied in a systematic comparative perspective (although some elements of comparison are of course possible), but rather as scoping studies of a single unit, with a view to generalising to a larger set of units (Gerring 2004). This section will elaborate upon the reasons for choosing Tuvalu and Katrina as places to conduct fieldwork, as well as the data used on the field.

2.2.1. *Rationale for the Selection of the Cases*

Possible choices for conducting the fieldwork were numerous: many different environmental changes affect migration patterns in diverse ways, and it was clear from the beginning that it would not be possible to cover the whole range of environmental changes and migration flows. Therefore, the cases would only have an illustrative value, and no generalisation is intended. The rationale behind the selection of the places of fieldwork was to pick two types of migration flows that were extremely different and would illustrate different types of policy responses, and yet were both deemed to be examples of environmental migration. From the beginning it was apparent that I would not be able to cover all possible types of environmental migration for practical reasons; accordingly I chose cases that lay at the extremes of the continuum of types of environmental migration. Language was also a criterion of selection, since case study research required interviewing in French or English. It was also necessary for the migration flows to be taking place at the time of interviewing, or recently, in order to conduct first-hand analysis. Tuvalu and Katrina met all these criteria and seemed an ideal choice.

In the case of Katrina, the displacement was triggered by a brutal event, and migration was almost exclusively internal and reactive. Tuvalu was completely the opposite: an international migration flow triggered by a slow onset environmental change, which was mostly proactive. Migration was forced in the case of Katrina; it was still quite voluntary in the case of Tuvalu. The former occurred in the world's richest country, and largest greenhouse gas emitter; the latter was happening in the developing world, in a country whose contribution to global warming was almost nil. Policy responses were very different in the two cases, and so could illustrate different aspects of the theoretical developments. Hence Tuvalu and Katrina provided dramatic contrasts, while both appearing as prime examples of environmental migration in the press and public discourses. These reasons, along with practical considerations, constituted the principle rationale for selecting these two cases.

2.2.2. *Fieldwork Conditions*

The fieldwork in each location was conducted in similar conditions, thanks to a travel grant of the National Fund for Scientific Research, in Belgium. In each case, I spent several weeks *in*

situ, and I had arranged visiting fellowship agreements with local universities, in order to facilitate access to resources and experts as well as to benefit from good research conditions, including access to university libraries.

The Louisiana fieldwork (mostly in New Orleans) lasted 14 weeks, between December 2006 and March 2007, approximately one year and a half after the disaster. I was a Visiting Fellow with the Department of Political Science at Tulane University (New Orleans), as well as at the Hurricane Center of Louisiana State University (Baton Rouge).

The fieldwork in Tuvalu, New Zealand, Australia and Fiji took place between June and August 2007, for a total duration of 10 weeks. During this period I was a Visiting Fellow at the School of Social Sciences of the University of South Pacific (Fiji and Tuvalu), as well as with the National Europe Centre of the Australian National University (Canberra).

2.2.3. *Data Collected*

2.2.3.1. Written Sources

In each case, my fieldwork relied heavily on the consultation of archives and official records. In Tuvalu, I obtained access to the National Archives of the country and official government records, including census data and documents related to migration agreements (most notably the Pacific Access Category). In Louisiana, I had access to the ephemera of the Historic New Orleans Collection, a collection of flyers, posters, press clippings, e-mail messages, videotapes, etc., gathered in the aftermath of the hurricane, related to diverse aspects of the catastrophe, in particular the relief and assistance process. This allowed me to better perceive how assistance had been organised on the ground. In addition, I had access to partial FEMA records, as well as data from the Louisiana Recovery Authority (Baton Rouge) and the City of New Orleans.

2.2.3.2. Oral Sources

In addition to written sources, interviews were conducted for data collection purposes. About 40-50 semi-open interviews were conducted for each case study. The list of respondents is provided in the Appendix.

Two types of respondents were targeted. The first group were experts and officials: university professors and scholars, elected officials, civil servants, members of NGOs, journalists, etc. Unlike the interviews conducted for the desk research part of the study, these interviews were all on-the-record. They were conducted face-to-face, except for some exceptional cases where the conversation was held over the phone. The respondents were selected on the basis of their expertise, and were usually contacted beforehand; questions were adapted to the field of expertise of the respondent. My contacts with experts and officials were greatly facilitated by the universities where I was a visitor.

A second group of respondents was the persons directly affected by the environmental change (or not). In the case of Tuvalu, this included residents of Tuvalu (non-migrants), but also those who had moved to Auckland. For Katrina, this included people who had returned to New Orleans after the disaster, but also people who were still displaced in Louisiana or neighbouring states. Respondents were chosen by means of the 'snowball method', where the first respondent is asked to provide contacts for other potential respondents. Given the lack of a population database, other methods of sampling were not practicable. In order to avoid strong bias due to the background of the first respondent, three 'first' respondents were chosen from different backgrounds (race, gender, social class) and asked to refer other potential respondents. After an initial contact by phone, the interviews were conducted on face-to-face, and were also semi-open, but followed a structured questionnaire that is provided in the Appendix.

2.3. *Research Questions and Hypotheses*

The central research question that shapes this research wishes to describe accurately the policy processes that are concerned with the concept of environmental migration. It can be formulated as follows:

What are the normative frameworks and policy responses that address environmental migration, and how do they influence the conceptualisation of environmental migration as a social construct and policy outcome?

In other words, I will describe the policy developments that have accompanied the emergence of the concept of environmental migration, on the assumption that these developments, in turn, contribute to the conceptualisation of environmental migration. This description will be conducted in different policy areas, over a relatively long time period. The level of analysis is predominantly the United Nations or regional organisations, except when the national level is more appropriate, such as in the case of asylum policies. In the second phase of the research, the two case studies will be used as examples of the application (or non-application) of these normative frameworks and policy responses at the micro-level.

The advocacy coalition framework is used as the key theoretical framework for this analysis. The various policy areas are grouped in two policy streams: environmental policies and migration policies, allowing me to provide a comprehensive overview of the different frameworks and policies available to deal with environmental migration.

Two secondary research questions derive from this central question:

- *How do policy developments interact with each other and mutually influence each other?*

Policy areas are not independent from each other, nor do they follow the same direction or the same pace. Using the hypotheses of coalition learning described above, I will examine the mutual influences between coalitions across subsystems.

- *Do these normative frameworks and policy responses adequately address environmental migration?*

This question relates to the evaluation of the policy response, and its adequacy to environmental migration. Many scholars have called for the development of new mechanisms to address environmental migration: Are such mechanisms necessary, or are existing mechanisms sufficient to deal with the issue?

These research questions are sustained by two sets of fundamental hypotheses that are tested throughout the research:

1. The state remains a central actor in the migration process, and patterns of migration depend more on state implemented norms and policies than on actual environmental changes. The policies shape not only the debate on environmental migration, but also patterns of actual migration. Consequently the structural theory of refugee movements (Zolberg et al. 1989) can apply to environmental migration, forced or voluntary. This hypothesis shall be primarily tested through fieldwork.
2. The environmental migration policy process revolves around two coalitions, which correspond to the ‘alarmist’ and ‘sceptical’ postures voiced in academic debates. Researchers are the main constituents of these coalitions, which also consist of journalists, NGOs, elected officials, intergovernmental agencies and national and international civil servants. Policy entrepreneurs play a crucial role in the formation of these coalitions.
3. The environmental policy stream is dominated by the ‘alarmist’ coalition, whereas migration policy stream is dominated by the ‘sceptical’ coalition. Some policy brokers are needed to reconcile the conflicting interests of both coalitions.
4. The distinct developments of environmental policies and migration policies can be explained by the fact that these two streams are not dominated by the same coalition.

Conclusion

The principal theoretical model underpinning this analysis is the Advocacy Coalition Framework (ACF). The ACF model explains policy developments by the formation of coalitions around belief systems of a policy issue. I argue that two main coalitions have developed with regard to environmental migration, based on alarmist and sceptical platforms proposed by researchers in academic debates. An originality of the ACF is that it allows for the inclusion of researchers into coalitions, and rejects the idea that these actors are policy-indifferent, as is often assumed.

In Chapters 5 to 8, different policy areas will be studied: a stream of environmental policies, namely disaster management and adaptation to climate change; and a stream of migration policies, including refugee and IDPs protection, as well as governance of migration. Each of these policy responses will be illustrated with empirical findings from New Orleans and Tuvalu, which will demonstrate the application of these policy responses on the field. These policy areas will be studied in a constructivist perspective: it is argued that policy developments contribute to the conceptualisation of environmental migration, and that science and policy interact with and mutually shape each other.

Until now, research on environmental migration has been conducted from a largely deterministic perspective that has generally assumed a causal relationship between environmental changes and migration flows. It is hoped that this research will make an original contribution to the literature by looking at the topic from a constructivist perspective, and by combining two different policy areas. In doing so, I do not aim to question or discuss the importance of environmental disruptions as migration drivers, but rather to explain how the ideational linkage between environment and migration has been institutionalised in the policy process.

Part 2

The Environment-Migration Nexus

“66 is the path of a people in flight, refugees from dust and shrinking land, from the thunder of tractors and invasion, from the twisting winds that howl up out of Texas, from floods that
bring no richness to the land
and steal what little richness is there.”

Chapter 12, p. 150

“Thus they changed their social life - changed as in the whole universe only man can change.
They were not farm men any more, but migrant men.”

Chapter 17, p. 250

John Steinbeck, *The Grapes of Wrath*.

Introduction

One of the classic novels of American literature, *The Grapes of Wrath*, tells the story of an Oklahoma family of farmers, the Joads, forced to sell their farm and move to California after the Dust Bowl drought devastates their crops. On their way to California, they find thousands of other families making the same journey with the hope of finding a better life westwards. The trek is marked with numerous incidents and growing despair, but the Joads have no choice other than to go on. In camps, where they meet other migrants, they realise that their prospects of decent jobs and lives in California may not be as expected, and the family begins to disintegrate. Upon their arrival in inhospitable California, they find thousands of migrants queuing for jobs, who have been parked in migrant camps set up by the Government. The tale's tragedy lies in the impossibility of the Joads' simple dream, their disillusion turned into despair and anger. The story ends dramatically and controversially with the break-up and downfall of the Joad family: Rose-of-Sharon, one of the characters, gives birth to a stillborn baby and ends up breast-feeding a starving man, as a last display of hope in human kind.

The book was awarded the Pulitzer Prize in 1940, and was turned into a major Hollywood movie²⁵ starring Henry Fonda in 1940. The ending of the novel was considered inappropriate for public audiences in 1940, and was significantly modified in the movie, which shows the Joad family managing quite well in a camp provided by the Government.

Beyond the human story of the Joad family's fate, *The Grapes of Wrath* also tells the story of one of the largest environmentally-induced migrations in recent history. During the 1930s, a combination of severe droughts, dust storms and inappropriate farming methods resulted in the formation of immense, dark clouds of topsoil in Oklahoma, Texas and Arkansas. Crops were devastated, and many farm families, especially from Oklahoma, decided to migrate westwards to California with the hope of finding better life conditions. The exact number of people displaced by the Dust Bowl is unknown; most authors believe it to be around half a million (Bonnifield 1978; Gregory 1991).

²⁵ The movie, released in 1940, was directed by John Ford and produced by Daryl F. Zanuck for Twentieth Century Fox. It is interesting to note that the movie features some actual 'Dust Bowl' migrants, who were paid \$5 a day to play extras in the caravan on Highway 66 (Black 1996).

The 'Dust Bowl Migration' rapidly became one of the great myths of American history, because it was believed to have transformed the geography of its population so radically. Actually, this migration was part of a much wider migratory movement. As James Gregory astutely explains, the concept of the Dust Bowl Migration is a 'wonderful misnomer' (1991: 17): many migrants were not affected by the dust storms or the droughts, and were not farmers. The so-called Dust Bowl Migration was a mass migration linked to the Great Depression, and not only to the dust storms that hit the Great Plains. Steinbeck's novel and its stark imagery played a significant role in associating the massive displacements of the Great Depression with the journey of Oklahoman farmers forced out of their homes by dust storms.

Furthermore, Hansen and Libecap explain that the Dust Bowl Migration was not the product solely of dust storms, but was also induced by the wider economic context, the size and type of the farms, inadequate farming techniques, and the lack of collective action (2004: 674). They show why, despite similar droughts in the same region in the 1950s and 1970s, massive migration flows did not result (*Ibid.*: 686). The massive displacement of the 1930s was indeed the consequence of a combination of factors, triggered by an ecological disaster.

The Dust Bowl Migration illustrates perfectly one of the central problems addressed by this work, namely the difficulties in conceptualising environmental migration as a specific type of migration. The following chapters aim to look at how environmental migration has been conceptualised so far. Chapter 3 reviews the extant literature on environmental migration, and subsequently attempts to delineate the state of the art of the main issues, stakes and challenges involved in the concept of environmental migration; Chapter 4 discusses some key elements of the environment-migration nexus.

Chapter 3

Literature review

Introduction

This chapter presents a review of literature on the complex relationships between environmental change and migration flows. This review is crucial for the development of this thesis, since it allows us to pinpoint the emergence and formation of the alarmist and sceptical coalitions. Alarmists contend that large migration flows are the direct result of environmental disruptions, while sceptics argue that environmental factors are not a distinct, causal variable, and in fact distract from other determining factors, such as poverty and political persecution. Each coalition is formed around separate academic disciplines, and its policy core stems from scholarly debates. Although the viewpoints of these coalitions have aligned more closely over time thanks to increased collaboration and external events, the opposition between the two coalitions continues to structure the literature.

Literature on the nexus between the environment and migration is relatively recent, mostly dating to the mid-1980s, a period characterised by asylum crises and major natural disasters. The nexus has been explored in a variety of different ways, but its two components have mostly been associated in a causal relationship. Some studies have focused on the impacts of refugee movements on the environment, whereas more recent studies have primarily addressed the impacts of environmental changes on migration flows. As explained above, this thesis is mostly concerned with this second aspect of the nexus.

Overall, four themes permeate the literature on the nexus: that research is impeded by a lack of empirical studies; driven by a climate change-dominated agenda; abundantly supplemented by 'grey' literature; and marked by disciplinary divides.

The lack of empirical research was already evident at the fifth meeting of the International Research and Advisory Panel on Forced Migration, held in 1996, when a ‘disappointingly small number of papers’ on the topic were presented. During the keynote address of the meeting, Kibreab stressed that ‘research on refugees [had] been largely environmentally-blind [...], and that in the absence of a body of empirical research, a number of myths and misperceptions still predominate[d]’ (Koser 1996: 357-358). Similar comments still held valid twelve years later, as identified by Brown (2008) and Kniveton *et al.* (2008). This area, however, has seen recent progress since the commissioning of the EACH-FOR research project by the European Commission. EACH-FOR, an acronym for ‘Environmental Change and Forced Migration Scenarios’, aims to produce empirical evidence of the linkages between environmental change and migration, thanks to twenty-two methodologically comparable case studies conducted in a comparative perspective. The two-year long project was coordinated between seven research centres in Europe²⁶, and was completed at the end of March 2009. This multi-disciplinary project is the first empirical study of the topic to be conducted on a global scale, and some of its preliminary results are discussed below.

The risk of migration flows associated with climate change was highlighted in the first assessment report of the IPCC (McTegart et al. 1990), and the impacts of climate change have since increasingly overshadowed other types of environmental change as migration drivers. The in shift of the focus has been so evident that it has led some authors to fear that people displaced by environmental disruptions not related to climate change may be forgotten by future studies and policies (Lassailly-Jacob 2006). Indeed, the majority of recent works and conferences on the topic focus exclusively on climate change and do not address other environmental changes as root causes of migration (Biermann and Boas 2007; Piguet 2008; Brown 2008; Meze-Hausken 2004; McLeman and Smit 2006; Kniveton et al. 2008). Furthermore, many of these works contain the implicit assumption that conclusions reached with regard to climate change hold true for other kinds of environmental disruptions, largely because the impacts of global warming, such as droughts or floods, do not seem to be fundamentally different in nature from other environmental disruptions. The numerous

²⁶ These research centres include: Atlas Innoglobe Ltd (Budapest); Sustainable Europe Research Institute (SERI – Vienna); the UN University Institute for the Environment and Human Security (UNU-EHS, Bonn); Erasmus University Rotterdam (The Netherlands); the University of the Basque Country (Bilbao, Spain); the Centre on Migration, Citizenship and Development (COMCAD) at the University of Bielefeld (Germany); and the Centre for Ethnic and Migration Studies (CEDEM) at the University of Liège (Belgium).

reports²⁷ suggesting that mass migration flows could be one of the most devastating consequences of climate change are certainly no stranger to the research agenda on the topic, as will be evidenced in the next chapter.

These numerous reports are part of a growing body of ‘grey’ literature, which forms a significant part of the research on the nexus, and occasionally drives the research agenda. This trend is also apparent for migration research in general, as ‘many of the information producers are governments, international agencies, and non-governmental organisations’, which produce literature with a ‘practical orientation’ (Mason 1999: 7). Grey literature has been particularly influential in supporting alarmist forecasts of future migration flows, sometimes based on inflated estimates (Kniveton et al. 2008).

Finally, literature on the nexus derives from a variety of different academic disciplines that offer different, and sometimes conflicting, viewpoints on the topic. Indeed, the study of environmental migration is multi-disciplinary by nature: while the study of environmental change usually draws on the natural sciences for its evidentiary basis, the study of migration is typically the reserve of the social sciences. These disciplines often lack forums where they can exchange ideas, and want for common underpinning theories, concepts and terminologies. Typically, researchers belonging to different disciplines simply do not know each other, and mutual collaborations remain scarce, though they have been more frequent in recent years. Within the social sciences, a range of disciplines are involved: geographers and economists study the impacts of environmental changes on populations, whereas migration patterns and policies are the focus of sociologists and political scientists. The diversity of research on the topic also translates into a diversity of viewpoints. The very existence of environmental migration is still debated, and the scope of the debate is, in itself, a matter for controversy and academic debate.

The field of debate has mostly been organised around the two conflicting perspectives of alarmists and sceptics. These perspectives date from the first mention of the nexus in early texts, and map, to a very large extent, onto disciplinary divides.

²⁷ See for example, *inter alia*, (European Commission and the Secretary-General/High Representative 2008).

1. Early Texts

The issue of ecological refuge was mentioned in 1948 (Vogt 1948), but the first use of the term ‘environmental refugee’ in the literature is uncertain: Kibreab detects its first occurrence in 1984 in a briefing document from the International Institute for Environment and Development (1997: 21), while Black (2001: 2) traces its origins to speeches and reports by environmentalist Lester Brown of the WorldWatch Institute in the 1970s. There seems to be universal agreement, however, attributing the first official use of the term to El-Hinnawi (1985) in a UNEP report entitled ‘Environmental Refugees’. In the report, El-Hinnawi outlined what was at stake with environmentally-induced migration, and gave a preliminary definition of what he called ‘environmental refugees’:

Those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardised their existence and/or seriously affected the quality of their life (1985: 4).

Many authors, however, were unsatisfied with the definition, largely because it did not distinguish between ‘environmental refugees’ and other types of migrants, nor did it provide any means to differentiate between the environmental refugees themselves. As Bates points out,

This definition makes no distinction between refugees who flee volcanic eruptions and those who gradually leave their homes as soil quality declines. So many people can be classified under the umbrella of ‘environmental refugees’ that critics question the usefulness of the concept. (2002: 466)

Most subsequent definitions, however, continue to revolve around El-Hinnawi’s, despite the critiques it attracted. El-Hinnawi also attempted to classify these ‘refugees’, distinguishing between three types of migrants:

- Those who had been temporarily displaced because of an environmental stress (usually a natural disaster);
- Those who had to be permanently displaced and re-settled in a new area;
- Finally, those who migrated within their own national boundaries because ‘the resource base in their original habitat has deteriorated to such a degree that it can no longer meet their basic needs’ (1985: 4)

These three types of migrants no longer maintain the classical distinction between forced and voluntary migrants, thus allowing for an inflation of the numbers of so-called ‘refugees’. As Suhrke has noted, ‘broad categorizations invite large numbers’ (1993: 6).

In 1988, a working paper by Jacobson from the WorldWatch Institute, attempted to systematise the study of this new category of forced migrants. Jacobson proposed a typology similar to that put forward by El-Hinnawi, distinguishing between temporary displacements associated with temporary environmental stress, permanent displacements associated with permanent environmental stress, and temporary or permanent displacement due to progressive environmental change (Jacobson 1988: 5). This typology, however, was flawed by undue emphasis on the time frame of the displacement, to the exclusion of other important variables, such as the degree of coercion of the migration, or the distance travelled from the point of origin. There was little distinction made between forced and voluntary migration. In a fashion similar to El-Hinnawi, Jacobson vaguely defined ‘environmental refugees’ as ‘people fleeing from environmental decline’ (1988: 6). His report identified some regions where environmental displacements were to take place, and estimated that 10 million could face the prospect of displacement. Jacobson contended that the term ‘environmental refugee’ was first used in reference to Haitian boat people, arguing that land degradation in Haiti created these desperate people and their dangerous journey to south Florida.

Both El-Hinnawi’s and Jacobson’s reports were received with great interest in the field of environmental studies, and attracted harsh criticism in the field of refugee studies: they had a ‘short-lived shock-effect on the public debate but were rejected as unserious by scholars’ (Suhrke 1993: 6). At the times of publication, El-Hinnawi was working for the UN Environment Programme, while Jacobson was a member of the WorldWatch Institute, an environmental think-tank: the reports were therefore perceived as an attempt to use forced migration to draw attention to environmental problems. Irrespective of its legal meaning, the use of the word ‘refugee’ was criticised. Suhrke and Visentin (1991) stated that the definition provided by El-Hinnawi was

So wide as to render the concept virtually meaningless (...). Uncritical definitions and inflated numbers lead to inappropriate solutions and compassion fatigue. We should not, however, reject outright the concept of environmental refugees. Instead we should formulate a definition that is more narrow but more precise.

They proceeded to make a distinction between ‘environmental refugee’ and ‘environmental migrant’. The latter is someone who ‘makes a voluntary, rational decision to leave a region as the situation gradually worsens there’, who moves from an area by choice. In contrast, environmental refugees are ‘people or social groups displaced as a result of sudden, drastic environmental change that cannot be reversed’ (1991: 77). Likewise, McGregor argued that ‘the category “environmental refugee” confuses rather than clarifies the position of such forced migrants, since it lacks both a conceptual and a legal basis’, contending that the category involved a ‘false separation between overlapping and interrelated categories’ (1993: 158). McGregor’s criticism was actually aimed at the very concept of ‘environmental refugee’ rather than its definition, prefiguring the academic controversies that were soon to appear with regard to the conceptualisation of environmental migration.

Richmond, in a book called *Global Apartheid*, devoted a chapter to ‘Environmental Refugees’. The chapter outlines his theoretical framework surrounding environmental migration, and attempts, for the first time, to situate it within migration system and theories. Richmond insists on the necessary distinction between international and internal migration, as well as between proactive and reactive migration. He proposes a multivariate model of environmentally-related population movements that acknowledges the mingling of environmental factors (constraints or facilitators) with social, economic, political and technological factors (1994: 82). The model replicates the continuum between proactive and reactive migration he had developed in an earlier work (Richmond 1993), suggesting that this continuum should replace the traditional dichotomy between voluntary and forced migration. Richmond also proposes a typology of environmentally-related disasters, classified in different categories according to their origin: natural, technological, economic, political or social (1994: 80). Outlining many of the challenges facing the study of environmental migration, he notes that the scale of this kind migration is ‘difficult to estimate’, depending greatly on ‘whether past, present, or possible future movements are considered; whether worldwide migration is considered or only that occurring in developing countries is considered; whether internal as well as external migrations are taken into account; and whether environmental degradation is considered in isolation or in conjunction with other political, economic, and social determinants of population movement’ (1994: 76). Nevertheless, he goes on to suggest some policy ramifications: the need for a new instrument of international law to address the ‘humanitarian needs of all those displaced from their homes’, the need for a system of

humanitarian priorities, the importance of more effective coordination of the work of UN agencies, and finally the need to integrate population movements in the concept of sustainable development.

At the time of publication of *Global Apartheid*, the first conference on the nexus between environment and migration was organised in Nyon, Switzerland, jointly sponsored by the Swiss Department of Foreign Affairs, the International Organisation for Migration (IOM), and the Refugee Policy Group (RPG). The background paper of the conference aimed to synthesise the burgeoning academic debates on the nexus, with an emphasis on migration induced by environmental changes. The paper classified the most important causes and dynamics of environmental migration into six categories: elemental, biological, slow-onset, accidental, development-induced disruptions, and environmental warfare. The classification proved short-lived and of little practical use, but did acknowledge other intervening factors, and the multi-causality of displacement. The report also pointed to policy issues, and stressed the need for a common definition and typology (*Migration and the Environment* 1992). Overall, the conference aspired to summarise the debates and raising some policy issues, including the need for a better coordination of relief and protection efforts by different UN agencies and NGOs.

Debates on the conceptualisation of the issue were soon to crystallise around the two conflicting coalitions of alarmists and sceptics.

2. Conceptualising the Nexus: Alarmists and Sceptics

The 1992 Conference in Nyon invited further research on the conceptualisation of the nexus, following early endeavours by El-Hinnawi and Jacobson. This conceptualisation addressed both aspects of the nexus: the impact of environmental changes on migration, as well as the environmental impacts of migration, though this latter aspect was addressed by fewer researchers. A clear divide quickly emerged between those who adopted a maximalist perspective and those with a minimalist perspective: the former insisted on strong causal relationships between both sides of the nexus, whereas the latter stressed the multi-causality of the nexus and other intervening factors. Logically, scholars with a maximalist perspective

forecasted waves of ‘environmental refugees’ and pinpointed environmental factors as a major driving force of migration, whereas scholars with a minimalist posture adopted a more sceptical stance vis-à-vis the empirical reality of such migration flows, insisting on the complexity of the migration process. For sake of ease, I describe the former as ‘alarmists’; and the latter as ‘sceptics’.

I argue that this divide is more than a scientific controversy, and that it continues to shape the policy debate on environmental migration. Both positions represent the policy cores of advocacy coalitions, whose influence remains important for policy responses to environmental migration. The coalitions initially formed around scholars from different disciplines: alarmists were mostly scholars from the natural sciences, and security experts, while sceptics were found among social scientists, and migration scholars in particular. NGOs and interest groups usually sided with alarmists, and the grey literature also tends to adopt a maximalist perspective.

This debate emerged soon after the coining of the expression ‘environmental refugees’, and has been ongoing since. Already in 1993, Suhrke noted that

While literature on environmental change and population movement is quite limited, two different and opposing perspectives can be discerned. One – which I call the minimalist view – sees environmental change as a contextual variable that can contribute to migration, but warns that we lack sufficient knowledge about the process to draw firm conclusions. The other perspective sets out a maximalist view, arguing that environmental degradation has already displaced millions of people, and more displacement is on the way. (1993: 4)

Fifteen years later, this debate continues in pretty much in the same terms. Then, ‘unable to marshal a critical mass of social scientific research, the scholarly discourse on environmental refugees nearly died’; continues Suhrke (1993: 7). Fortunately, Suhrke’s works, as well as those of Myers and Kent (1995), Black (2001, 1998) and Kibreab (1997), amongst others, revived the debate in the strongest terms.

2.1. *The Alarmist Coalition*

The taxonomy established by El-Hinnawi (1985) and Jacobson (1988) paved the way for an alarmist perspective that was used to forecast impressive migration flows related to a wide variety of environmental changes. Many scholars who adopted this perspective were initially interested in the environment-security nexus (Westing 1989; Homer-Dixon 1991; Swain 1996b) – out of concern for the linkage between environmental disruption and conflicts - and deployed refugee flows as an exploratory variable to justify a causal relationship between environmental change and conflict. Westing (1992) estimated that there were about 10 million ‘unrecognised’ refugees in sub-Saharan Africa, and predicted that this number would increase substantially, at a rate of 2 million yearly. He outlined three categories of refugees: internationally recognised refugees, cross-border unrecognised refugees, and internally-displaced refugees (intrinsically unrecognised) – all three categories were set to increase due to the increased frequency of natural disasters.

Homer-Dixon took the debate a step further, contending that environmental change would lead to acute armed conflicts (Homer-Dixon 1991, 1994); with a distinctly Malthusian air he opined that ‘waves of environmental refugees that spill across borders with destabilizing effects on the recipient’s domestic order and on international stability’ would be a key consequence of environmental change (1991: 77). Homer-Dixon, however, also invoked other factors, such as vulnerability, more acute in the South than in the North. Population displacements are mentioned as a social effect of environmental change, but Homer-Dixon underlines the multiplicity of interacting physical and social variables, contending that ‘the term “environmental refugees” is somewhat misleading [...] because it implies that environmental disruption could be a clear, proximate cause of refugee flows’ (1991: 97), seemingly contradicting his previous argument. He developed his research agenda further in a subsequent paper, in which he used three hypotheses to link six types of environmental change with violent conflict. The second of these hypotheses holds that ‘large population movements caused by environmental stress [will] induce “group identity” conflicts, especially ethnic clashes’ (Homer-Dixon 1994: 6-7) . He tests this hypothesis with empirical evidence from Bangladesh, where significant numbers of migrants have fled to the adjacent Indian states. He concludes that, along with other contextual factors, ‘land scarcity in Bangladesh, arising largely from population growth, has been a powerful force behind migration in neighbouring regions and communal conflict there’ (1994: 23).

Migration flows from Bangladesh to India are also cited by Swain (1996a) as empirical evidence of conflicts induced by environmental disruption, through migration flows. Swain's thesis is that 'population migration transports (...) the conflict from the environmentally affected regions to the migrant receiving areas' (Swain 1996b: 971). He contends that environmental migration poses important security challenges to developing countries, and should therefore be at the top of the global political agenda. Swain distinguishes three types of conflicts that can arise from environmental migration: state versus state conflicts, state versus group conflicts, and group versus group conflicts. Such conflicts develop because of an altering of power equations induced by environmental migrants. Swain's thesis, however, is supported by little empirical evidence, and fails to take into account either the role of adaptation strategies in receiving areas, or of migration as a coping strategy for those affected by environmental change.

To summarise the general approach of these works, the initial alarmist approach to the nexus assumed that environmental disruptions were major contributors to insecurity. Migration was conceptualised both as a consequence of environmentally-induced conflicts and as a trigger of future conflicts over natural resources. The theories were deeply rooted in a neo-Malthusian perspective, and gained authority with the commonly held perception that climate change was a threat to the world's security. Climate change prompted a deep questioning over the notion of security, and alarmist theories were quick to make their way into the policy realm.

From the mid-2000s onwards, different governments commissioned or were recipients of reports warning about the threat that climate change posed to national or international security. The first report of this kind – and the one portraying the most doom-and-gloom laden scenario – was commissioned by the US Department of Defence, and reportedly censored by the White House. The report evokes an apocalyptic scenario in which a brutal change of weather conditions, induced by the crossing of a climate threshold, triggers massive flows of migrants worldwide, who compete for resources, and ultimately threatening US and international security (Schwartz and Randall 2003). The report warns that such a scenario is plausible, yet not the most likely, and reveals its political agenda by urging the United States Government – which, notoriously, didn't ratify the Kyoto Protocol – to take climate change more seriously.

A report on the same topic was submitted to the Canadian Security Intelligence Service the following year (McLeman and Smit 2004). The authors noted that ‘the consequent displacement [to the impacts of climate change] of large numbers of people causes substantial disruption in the source area, but also places stress on areas that receive the unexpected migrants’ and concluded that ‘security implications are a combination of those in the source area and the receiving one’ (2004: 7). The cases of rural-to-urban migration in China and Pakistan, induced by environmental degradation and unequal distribution of natural resources, are cited by the authors as empirical evidence of the relationships between climate change and migration that might bear security concerns for Canada.

Another report, submitted to the German Government and endorsed by UNEP, also addresses climate change as a security risk (German Advisory Council on Global Change (WBGU) 2008). The report warns that climate change amplifies the mechanisms that lead to insecurity and violence, such as political instability and weak governance structures, and identifies four climate-induced conflict constellations. Environmentally-induced migration is one of these constellations, and authors assert that there is a ‘particularly significant risk of environmental migration occurring and increasing in scale’ in developing countries (2008: 120). They also raise the question of who will bear the costs of environmental migration, and contend that this issue contains the seeds of potential conflict. Among the threats to international stability and security listed, the triggering and intensification of migration is mentioned as one of the potential major fields of conflict in international politics. The report goes on to recommend a reform of the UN Security Council and UNEP in order to address the challenge, as well as increased cooperation among migration management agencies, including a new, ad hoc convention to protect environmental migrants.

Finally, a report recently prepared for the European Council adopts a similar stance, and warns that ‘Europe must expect substantially increased migratory pressure’, especially from Africa (European Commission and the Secretary-General/High Representative 2008: 4). The report recommends that a comprehensive European migration policy take into account environmentally-triggered additional migratory stress, but does not further elaborate on this.

The ongoing conflict in Darfur is often cited as an empirical evidence of neo-Malthusian theories: it is a case in which environmental change and resource scarcity have induced migration, leading to violent conflicts. The UN General-Secretary Ban Ki-moon has endorsed

such assumptions, and argued in an op-ed article in *The Washington Post* that ‘amid the diverse social and political causes, the Darfur conflict began as an ecological crisis, arising at least in part from climate change’ (Ki-moon 2007). The UN chief added that the repercussions reached far beyond Darfur, contending that conflicts in Somalia, Ivory Coast and Burkina Faso were rooted in similar ecological crises. Reuveny (2007) provides more systematic evidence however, and reviews 38 cases of migration movements prompted by environmental factors, often acting concurrently. Half of these movements resulted in violent conflict. A major flaw in his theory is that he conflates migration flows in which environmental factors played a major role, such as those between El-Salvador and Honduras in 1969 that lead to the “Football War” (Durham 1979), with other flows in which environmental drivers only played a minor role compared to ethnic tensions and other factors, such as in the case of the Rwandan genocide. Consequently, the cases cited by Reuveny can be used as evidence of violence triggered by migration, but not really as evidences of violence triggered by environmental change, with migration acting as the link between the former and the latter.

Overall, the alarmist coalition views environmentally-induced migration as a security threat, a threat that has been exacerbated and brought to policy level by climate change. Attention to the linkages between climate change and security is rapidly gaining currency, and the recent award of the Nobel Peace Prize to Al Gore and the IPCC can be interpreted as an acknowledgement of such linkages. In April 2007, the question of the linkages between climate change and security was discussed for the first time in the UN Security Council, at the request of the British chairman of the Council.

Building upon this initial approach to environment and security, some scholars tried to examine the linkages between environmental disruptions and migration, and forecast future migration flows. The priority of their research was no longer security threats, but the risks facing the environment and the consequences of environmental disruptions. Those scholars were led by environmentalist Norman Myers, without doubt the most prominent whistleblower in the field. Myers wrote extensively on the topic and he dared to forecast precise estimates, which were broadcast widely in the media (1997, 2002, 1993). Myers was himself inspired by the works of Westing (1992), who was amongst the first to conceptualise what he saw as a new form of displacement. In 1995, Myers published jointly with Kent a book entitled *Environmental Exodus*, and whose impact has remained considerable: it is one of the most oft-cited sources on the subject, for good reason. The study was the first to offer a

forecast of future flows, as well to identify hotspots at the country-level. Myers and Kent fed the well-known media appetite for numbers, sometimes at the risk of oversimplifying a complex situation. In particular, they insisted that demographic growth, sea-level rise and natural disasters could be used as explanatory variables for future flows of environmental migrants.

In subsequent works, Myers continued to draw attention to the ‘fast-growing numbers of people who can no longer gain a secure livelihood in their homelands because of drought, soil erosion, desertification and other environmental problems’ (1997: 167). As for the estimates, he scaled up Jacobson’s estimates of 10 million, stating that there are ‘at least 25 million environmental refugees today (...), mainly located in Sub-Saharan Africa (...), the Indian sub-continent, China, Mexico and Central America’ (*ibidem*). Myers also addressed the other side of the nexus, pointing out the environmental damages wreaked by these migrants upon fragile environments, aggravating the environmental decline. He identified several environmental causes that could provoke displacements, and tried to assess the extent of these displacements at two time horizons, 2010 and 2025, warning that ‘environmental refugees could become one of the foremost human crises of our times’ (1997: 181). Myers updated his estimates in 2002, forecasting that ‘when global warming takes hold, there could be as many as 200 million people overtaken by sea-level rise and coastal flooding, by disruption of monsoon systems and other rainfall regimes, and by droughts of unprecedented severity and duration’ (2002: 609). Through frequent repetitions, this latest figure, though highly speculative and questionable, has become taken as empirical evidence, and has been frequently cited in media reports and other studies, most notably in the *Stern Review* on the economics of climate change (Stern 2007).

Myers can certainly be credited with drawing worldwide attention to the topic of environmentally-induced migration. However, his work is largely based on speculative common sense rather than on actual figures and estimates – a point that has been vigorously criticised by scholars adopting a more sceptical perspective. Other scholars and many NGOs, however, followed the path forged by Myers.

In April 1996, UNHCR, IOM and the Refugee Policy Group convened a follow-up symposium to the 1992 conference. The symposium issued a statement of principles based largely upon Myers’ theories (*Environmentally-induced population displacements and environmental*

impacts resulting from mass migrations 1996). The statement classified environmental causes of migration and related them to migration patterns, in a deterministic perspective, but also drew a typology of environmental changes that could be induced by migration. Once again, the typology was not rooted in empirical evidence and proved short-lived. An interesting feature of the symposium, however, was the equal weight it gave to both aspects of the nexus, and its claim that ‘the link between environmental damage and decline, and population movements can be sufficiently strong to justify separate attention’ (*Environmentally-induced population displacements and environmental impacts resulting from mass migrations* 1996: 11).

This deterministic perspective is a common feature of works written from an alarmist perspective. Bates (2002) assumes a direct causal relationship between environmental changes and migration, and attempts to provide a typology of these changes. Her classification is based on three binary criteria related to the environmental disruptions causing the migration: their origin (natural or man-made), their duration (acute or gradual), and whether migration was an intentional outcome of the disruption or not. She then proceeds to identify three categories of disruptions: disaster, expropriation and deterioration. This classification might seem to have a high explanatory value, but it possesses some major shortcomings. A consistent classification based on three binary criteria would have produced eight categories, not three²⁸. The explanatory value of the subcategories, as well as their consistency, is also dubious: as a result of these binary subdivisions, many cases of environmental disruptions are left out of the classification, such as erosion or land degradation.

Byravan and Rajan (2006) focus on sea-level rise and insist on the ‘inevitability’ of the displacement of people living in coastal areas and small islands by 2050, because of sea-level rise. In line with Myers, they estimate that about 200 million people will be at risk with a one metre rise in sea-level, representing a land loss of about 212,000 square kilometres.

Numerous reports from NGOs have also contributed to the alarmist perspective, and provided additional estimates and forecasts. The Red Cross stressed in 2001 that more people were forced to leave their homes because of environmental disasters than war (International Federation of Red Cross and Red Crescent Societies 2001), while Friends of the Earth

²⁸ There are eight possible permutations for three binary variables. However, it is possible that some categories would have been left empty. It is difficult to imagine a planned natural disaster deliberately displacing a population. But, even if we reduce the number of possible categories to four, leaving out the two categories that would have implied an ‘intentional’ natural disaster, we still have six possible categories, not three.

Australia (2004) emphasised Myers' predictions and urged the Australian Government to take action against climate change. Lester Brown, who was amongst the first to use the term in 1970s, noted that flows of 'environmental refugees' were just in their beginnings and were 'yet another indicator that our modern civilization is out of sync with the earth's natural support systems' (2004). Adopting a neo-Malthusian approach, Brown recommended the use of family-planning techniques and a reduction of carbon emissions to solve the problem and stabilise the earth's climate. In a much-debated report, the NGO Christian Aid dramatically revised Myers' forecasts, and predicted that up to one billion people could be displaced by environmental disruption by 2050 (Christian Aid 2007). Even though the report acknowledged that 600 million of the predicted one billion would actually be displaced because of development projects, rather than actual environmental change, the estimate was still significantly higher than those made previously.

Even though environmental degradation has been recognised as a root cause of refugee flows by UNHCR since 1993 (Ogata 1993), nonetheless many scholars claim that no protection has evolved to help people displaced by environmental change. Accordingly, they initiated a debate at the policy level, where the alarmist perspective translated into a case for the development of new policies and instruments to fill in what was perceived as a protection gap.

Hermsmeyer (2005) has claimed that the inadequacies of the international refugee regime have denied the humanitarian rights of environmentally-displaced people. Her work reviews some causes of environmental migration, and suggests a series of policy measures, for example, the creation of a specialised agency, and development of effective strategies for prevention, response and recovery. She has also pleaded for an expansion of the UNHCR definition of refugees: such an expansion, she argues, is 'essential in order to provide environmental refugees with a legal mandate guaranteeing the security of basic human rights', and to 'create more consistency between practice, evidence and legal mandate of UNHCR', as well as increase donors' contributions (2005: 14). However, her analysis fails to delineate how 'environmental refugees' should be defined. King (2006) has also proposed the creation of a dedicated mechanism to address environmental migration – an International Coordination Mechanism for Environmental Displacement (ICMED) – whose role would be to coordinate the activities of the different agencies involved in providing relief to the displaced. She attempts to provide a typology of environmental displacement, according to the acuteness of the environmental disruption (acute vs. slow onset) and the possibility of return of the

displacees. Conisbee and Simms (2003) have made yet another case for a radical policy change, and pleaded for the inclusion of ‘environmental refugees’ in the population protected by the Geneva Convention, arguing that environmental degradation is, in many ways, a form of political persecution. If their amendments were adopted, people uprooted by environmental change would be entitled to the same protection as those uprooted by war and violence.

Finally, Bell’s contribution to the debate (2004) took a more original approach, since his is one of the few papers to frame the issue in terms of global environmental justice. He adopts a strong prescriptive stance, asking ‘how... should [we] respond to the plight of potential and actual environmental refugees?’ Bell rebuts most objections to the use of the words ‘environmental refugees’; he also judged that the well-known sceptics’ argument that definition of the category ‘environmental refugee’ might encourage receiving states to reduce asylum rights was ‘unconvincing’, and reflected ‘scepticism about the severity of the situation’ (2004: 136-138). He suggested an original approach to the issue, built on two leading theories of international justice: John Rawls’ ‘Law of Peoples’ approach, and Charles Beitz’s ‘cosmopolitanism’ theory. He concluded that neither theory could serve as an adequate framework to address the plight of ‘environmental refugees’, though the latter had some advantages over the former – and that a new framework for global justice was therefore required.

Such claims intersected directly with those put forward by another coalition that had developed in reaction to Myers’ and Homer-Dixon’s theories. Led by two senior figures of migration studies, Gaim Kibreab and Richard Black, the sceptical coalition contended that the concept of environmental migration made little sense, and that environmental impacts of migration flows were grossly overestimated.

2.2. The Sceptical Coalition

Kibreab (1997, 1994) was the first to attack the alarmist approach, which was increasingly accepted as ‘scientific truth’. According to Kibreab, the concept of environmental migration served to depoliticise the causes of displacement, allowing states to derogate their obligations

to provide asylum, since ‘environmental conditions (did) not constitute a basis for international protection’ (1997: 20-21); he perceived the concept as a threat to refugee protection, and an excuse for governments to justify restrictive asylum policies. According to him, the concatenated causal relationship between environmental degradation, population displacement and insecurity needed to be reversed, insecurity being the cause – and not the consequence – of population displacement. The second part of Kibreab’s work is related to the environmental impact of refugee movements, and leads to the conclusion that ‘environmental change and population displacement are the consequences of war and insecurity rather than their causes’ (1997: 33). Though Kibreab’s argument might be perceived as radical, it is important to note that he does not challenge the significance of environmental change in relation to migration, but rather the nature of its relationship with insecurity. Kibreab’s argument was partially presented in a keynote speech at the Fifth International Research and Advisory Panel Conference on Forced Migration held in Eldoret (Kenya) in April 1996, only to be contradicted by other papers presented in subsequent panels that cited empirical evidences of environmentally-induced migration, as reported by Koser (1996) – a sequence of events that gave a foretaste of the fierce debates to follow.

Black adopted a similar sceptical approach in his milestone book, *Refugees, Environment and Development*, published in 1998. The book asks the pertinent question, What is the reason for the linkage between forced migration and environmental change. Black notes that that ‘one reason frequently given in recent years to explain mass population displacement is the growth of environmental problems’, and wonders ‘in whose interest it is that environment degradation should be seen as a possible cause of mass displacement’ (1998: 1)? He considers that it is ‘academically (or, rather, ‘theoretically’) interesting to consider relationships between forced migration and environmental change’, but far from unproblematic. The book addresses both environmental causes and consequences of forced migration, drawing on several case studies in Africa (such as Rwanda, Senegal River Valley, and the Forest Region of Guinea). Black, however, refutes Kibreab’s argument that the concept is just an excuse for Northern governments to enforce tighter asylum policies, given that most of the literature on the topic calls for an extension of the current refugee regime, rather than a restriction. Yet he agrees with Kibreab that most of the ‘alarmist’ literature ‘serves only to differentiate a single cause of migration’ (1998: 12) and therefore may lead to restrictions in asylum policies in the North, which is important because most of these migration flows occur in developing countries. Black notes however that the origin of the concept lie in the environmentalist and

‘conflict studies’ literature rather than in asylum literature, and (rightly) suspects that Myers’ concern is not migration, but the threat associated with climate change. He then assesses empirical evidence from the linkage between environmental change and forced migration, concluding that there is a ‘lack of evidence of simple causality’ between environmental change and forced migration, and identifying a multiplicity of linkages and variables:

There is also a need to reconsider our approach to analysis of what are often complex and multidimensional linkages between refugees and environment. Rather than seeking evidence to isolate or “blame” environment as the cause of migration, or migrants as the cause of environmental damage, we need instead to ensure that relationships between people and environment, and dynamic changes in these relationships, are considered as a part²⁹ of any analysis of the causes or consequences of human movement, within their wider context (1998: 50).

In a subsequent working paper for the UNHCR’s *New Issues in Refugee Research* series, Black further questions the very notion of ‘environmental refugees’, saying that the ‘linkages between environmental change, conflict and refugees remain to be proven’ (2001: 3). He presents various empirical cases that show little evidence of a direct causal linkage, stressing that migration can also be seen as a coping strategy, in the case of desertification for example. He sees more justification for the concept of environmental migration in the case of brutal disasters, which must be analysed in conjunction with human-induced environmental degradation. Black asserts that current statistics and case studies on ‘environmental refugees’ are not ‘encouraging in terms of staking out a new area of academic study or public policy’ (2001: 11), and that these so-called refugees may be no more than a myth. However, he concedes that environmental changes can be factors behind large-scale migration, but raises doubts about the possibility of defining these migrants adequately. He concludes with some reflections on a possible international protection regime for ‘environmental refugees’, asking if such a regime would rather help or hinder ‘the battle to focus the world’s attention on pressing environmental problems’ (2001: 15).

Wood also agrees that there is no simple relationship between environmental causes and societal effects, and argues, along with Black, that the debate on ‘environmental refugees’ has been driven by ‘simplistic generalisations rather than solid empirical research’ (2001: 43). He insists that it is impossible to separate economic and environmental factors as root causes for

²⁹ Italics are in the original text.

population displacement. Consequently he coins the term ‘ecomigration’ to refer to the economic and ecological factors that combine to induce migration, and are impossible to separate from each other. The impossibility of isolating environmental from other factors is also emphasised by Lonergan and Swain (1999), who stress that generalizations about the environment-migration nexus mask ‘a great deal of the complexity that characterizes migration decision-making’. Isolating environmental factors is especially difficult in the case of voluntary movements, and the duration of the displacement is a key, but often overlooked, factor in order to determine the volume of the migration flow. The authors also stress that movement induced by environmental changes can result in additional socio-economic stresses, or sometimes additional environmental problems – a claim that echoes the arguments made by Locke, Adger and Kelly (2000a). Interestingly, Swain switches collations and no longer holds the alarmist view he put forward with regard to environmentally-induced conflicts (1996b, 1996a).

The coexistence of two such antagonistic positions as the alarmist and sceptical ones could in the literature struck Castles, who ventured to compare both perspectives through Myers’ and Black’s arguments, trying to ‘make sense of the debate’, as the title of his paper suggests (Castles 2002). The paper is based on a speech made in 2001 at Green College, Oxford University; it opens with a call for the need to bridge the disciplinary divide between forced migration studies and environmental studies. Castles notes that the two approaches are difficult to reconcile, for example, in Black rejecting the ‘apocalyptic vision’ put forward by Myers. He underlines a methodological difference between the conflicting perspectives: Myers uses wide-ranging estimates in a deductive perspective, whereas Black uses empirical studies at the national and local levels. In particular, Castles stresses that Myers does not provide figures on actual displacements, but only on potential displacements. The disagreement, however, is far from being purely methodological, and Castles points out that ‘general forecasts and common sense linkages do little to further understanding’, and that it is crucial to look at specific cases, and strengthen empirical research (2002: 4). Castles then abandons his neutral stance and reaches to the same conclusion as Kibreab and Black: ‘the notion of the “environmental refugee” is misleading and does little to help us understand the complex processes at work in specific situations of impoverishment, conflict and displacement’. However, he acknowledges that environmental factors are not unimportant in these situations, but rather are part of ‘complex patterns of multiple causality, in which natural and environmental factors are closely linked to economic, social and political ones’ – he calls

therefore for 'much more research and better understanding' (2002: 5). Yet Castles later writes that 'emphasis on environmental factors is a distraction from central issues of development, inequality, and conflict resolution' (Castles 2004). He further sides with Black in arguing that the term 'environmental refugee' is 'simplistic, one-sided and misleading, (and) implies a mono-causality that very rarely exists in practice' (2002: 8). Regarding a possible extension of the category of international refugee, he stresses the importance of a better, clearer definition, and warns that there is currently no political consensus concerning the extension of the refugee regime, and that a notion like 'environmental refugee' might be harmful for the current regime. Revealing his policy agenda, he invites scholars to do their utmost to defend the Geneva Convention, but also to call for an improved international legal regime and institutions to protect other types of migrants –agendas that might appear mutually contradictory.

Suhrke (1993) also reflects on the divide between the alarmist and sceptical coalitions, and affirms that the distinction between migrants and refugees must be restored in order to produce more accurate estimates of people forcibly displaced by environmental changes. She sees environmental degradation as a 'proximate cause of migration' that interacts with demography and political economy, but wishes to escape the 'trap of environmental determinism' (1993: 7-8). Following from this, she distinguishes two types of population movements: the first, 'especially vulnerable people who are displaced due to extreme environmental degradation', 'responding primarily to push-factors, they become refugees in much the sense that current sociological and legal terms define the condition'; the second, migrants who move pro-actively, before environmental disruption leaves them no choice, respond to a 'combination of pull-and-push factors', and 'migration here is part of the solution rather than the problem' (1993: 9). Listing five common forms of environmental degradation (deforestation, sea-level rise, desertification and drought, land degradation and water and air degradation), she questions whether migration type (forced or voluntary) is dependent upon the nature of the environmental degradation. Although she doesn't provide a definitive answer, she discusses each form of environmental degradation, and identifies 'pressure points' throughout the world. The second part of her paper deals with environmental migration and social conflict, drawing on numerous case studies. From this review of causes and consequences of environmental migration, Suhrke divides the most relevant forms of environmental degradation into different categories: general processes, degradation of specific ecological areas, and impacts of specific development projects. She

concludes that environmental disruption was a proximate cause of migration in all the cases studied, but that ‘it is difficult to argue that environmental degradation produces particular forms of outmigration except in one respect: the appearance of distress migrations occasioned by sudden or extreme environmental degradation’: only in the latter case is the term ‘environmental refugees’ appropriate, she argues (1993: 32). In a subsequent article (Suhrke 1994), Suhrke suggests some response strategies for those in refugee-like conditions. She proposes a further distinction to be made between simple displacement, where political violence is not an issue, and complex displacement, where environmental disruption and wars combine to force people from their homes. She calls for a continuation of the current system of relief assistance in the case of simple displacement, warning that a special programme for ‘environmental refugees’ would divert the scarce resources of the international refugee regime. Suhrke’s reflection on the divide between what she calls ‘maximalist’ and ‘minimalist’ perspectives does not absolutely reject the alarmist views in the same way that Black, Kibreab and Castles do. Instead, her proposal transcends the divide and emphasises the multi-causality of migration. In doing so, she opened the way for a more moderate approach to the nexus in which: the importance of environmental factors in the nexus was acknowledged, as was the intertwining of these factors with other migration drivers. This stance is adopted by Gonin and Lassailly-Jacob (2002), Kliot (2004) and Hugo (1996).

Gonin and Lassailly-Jacob (2002) take a very cautious approach: they insist on the multiple and complex causes of migration, internally or internationally, and put a strong emphasis on a role of the state in creating environmental disruption. They mention examples of industrial accidents hushed up by governments, development projects, cases of the environment used as warfare or as an excuse to displace minorities, and they stress the need to acknowledge political responsibilities along with environmental disruption. Using the case study of Sahel, they show that international migration can also be a response, and even a resource, in coping with droughts.

Kliot (2004) reviews critically the main components of the nexus. She makes a distinction between the two patterns of mobility of migration and circulation. Drawing from a Malthusian perspective, she insists on the importance of population growth as a push factor for migration, but also identifies other push factors such as disasters, natural and man-made hazards, and development projects. The complexity of these intertwining variables is central to her argument, her suggestion that ‘one explanation of the variation in patterns of reaction

to environmental forces lies in the concepts of resilience and vulnerability' (2004: 83). Yet, unlike most members of the sceptics' coalition, she affirms that 'the research nexus which links environment and migration made significant progress in empirical studies, but it still struggles for a sound/solid theoretical foundation' (2004: 96).

Finally, Hugo focuses on 'international migration occurring as a result of environmental changes and processes' (1996: 105) and regrets that knowledge of the relationships between those two concepts is rather limited. He contends that most migrations caused by environmental change have occurred within national boundaries, and argues that their international dimensions have been paid little attention, despite being of increased scale and significance. He considers the environment both a direct and a contributing factor to the migration process, and makes the case for a continuum, rather than a clear-cut distinction, between forced and voluntary migration (1996: 108). This position is similar to Richmond's, but diverges from Suhrke's. Hugo sees environmental migration, whether proactive or reactive, as a current reality, but insists on the need to 'understand the dynamic interaction of the multiple causal factors' at play (1996: 109). He also assesses the environmental impacts of international migration, and contends that hypothetical impacts were used as an excuse by the Australian government to adopt more stringent immigration policies. Overall, Hugo makes a strong point for more research and criticises researchers and policy-makers for neglecting the significance of environmentally-induced migration: he cites the examples of acute, massive environmental displacements in Asia and sub-Saharan Africa. Among scholars of the sceptical coalition, Hugo is clearly the closest to the alarmist position, and can almost be considered as a policy broker: his work concludes with a call for international cooperation to address forced migration caused by environmental disruption.

The demarcation between the alarmist and sceptical coalition is principally their stance towards the importance of environmental factors as (sole) migration drivers. The controversy between the two is connected with the very conceptualisation of environmental migration, and impacts upon the debate on policy implications – alarmists favouring reform and sceptics the status quo. This debate was first addressed by legal scholars, then by a new, revived stream of research on the topic, prompted by natural disasters in the mid-2000s and worldwide concern with climate change.

3. Legal Studies

Contemporaneously with debates over the conceptualisation of environmental migration, scholars started to enquire into the regime protecting those uprooted by environmental changes. Sceptics argued that the term ‘environmental refugee’ was misleading from a sociological viewpoint, because it presumed a single causality in the migration decision; legal scholars asserted that the term was equally misleading from a legal perspective, since it did not fall within the scope of the 1951 Geneva Convention. This latter objection to the term, however, reinforced the alarmist coalition: most scholars argued that a new protection regime was needed to address what were perceived as migration flows neglected by policy-makers. The development of legal studies in the field was mostly conducted by environmental law scholars, rather than by refugee law scholars; with the exception of Cournil and Mazzega (2007), all papers reviewed in the following section were published in environmental law journals and reviews.

As mentioned above, most members of the alarmist coalition were found among environmental scholars and conflict specialists, while migration scholars typically sided with the sceptics. The same can be said for legal scholars: most studies supporting the alarmist perspective can be attributed to environmental law, whereas refugee law scholars only addressed the issue marginally.

The first thorough study on the topic of migration in the law was conducted by Magniny (1999), who raised the hypothesis of creating a special status in international law for ‘environmental refugees’. Starting with a discussion of the origins and founding principles of refugee law, as well as the limits of the Geneva Convention, she elaborated on the controversial concept of environmental damage, and proposed considering victims of the damage in a collective dimension. This laid the basis for a discussion of a specific legal status for ‘environmental refugees’, as well as of the organisations that might implement such a status. Magniny claimed that legal protection mechanisms had to be international, autonomous, temporary and collective. According to Magniny, such a protection could be best assured by a multilateral agreement that would incorporate customary laws of asylum and hospitality that have been implemented in some developing countries. In addition, the agreement would include secondary rights – such as decent housing or working permits – for displaced peoples. The agreement would apply to internal migrants as well. Magniny’s

proposition was deemed utopian rather than concrete and practical, and it is unlikely that a sufficient number of states would ratify it, given the stringent migration policies developed by most of them (Cournil and Mazzega 2007).

Magniny's work opened the gates for a flood of legal reflections on the status of 'environmental refugees', particularly in France, which culminated in a conference addressing the issue, held in Limoges on 23 June 2005³⁰. The conference resulted in a formal declaration, the Appeal of Limoges, calling for an international status for 'ecological refugees' similar to refugee status; preventive action; better disaster management, including a mechanism of ecological assistance; and long-term policies guaranteeing the rights of 'ecological refugees', including an international assistance fund and the possibility of an ad hoc international convention.

Along with Magniny, Cournil (2006) underlined several inadequacies of the current regime, pointing to the weaknesses of specific legal texts (such as the Geneva Convention or the Addis-Ababa Convention of the Organisation of African Unity). She stressed that human rights were not guaranteed for 'ecological migrants', and that a case-by-case, inconsistent approach prevailed in the treatment of asylum claims on an environmental basis. Furthermore, Cournil did not limit her analysis to international law but also called into question European law, contending that a protection regime for the 'ecological refugee' was still to be built. She outlined the difficulties of creating such a regime, in particular the lack of an accepted upon typology, concluding that any legal status for 'ecological refugees' must necessarily be multi-faceted, in order to reflect the multiple patterns of environmental migration. In subsequent papers written in collaboration with Mazzega (Cournil and Mazzega 2007, 2006), the insufficiencies of international norms and national protections were discussed further, including an assessment of the pros and cons of some innovative protection mechanisms, including ecological intervention³¹ and environmental asylum. These two authors agree that an international protection regime for 'environmental refugees' is currently unrealistic, and suggest instead reinforcing the protection of internally-displaced people (IDPs). Were an international regime to be developed, however, they favour protection with a

³⁰ The conference, entitled 'Les Réfugiés Ecologiques' (Ecological Refugees), was convened by the *Centre de Recherches Interdisciplinaires en Droit de l'Environnement, de l'Aménagement et de l'Urbanisme* (CRIDEAU - CNRS/INRA), in collaboration with the *Observatoire des Mutations Institutionnelles et Juridiques* (OMIJ) and the *Centre International de Droit Comparé de l'Environnement* (CIDCE).

³¹ This term refers to the French doctrine of 'droit d'ingérence', by which a state intervenes in another state's internal affairs with the mandate of a supranational authority, usually for humanitarian reasons.

collective dimension and variable duration, according to the circumstances (therefore example, if there is the possibility of return or not), and rights for those displaced.

Michelot (2006) introduces the issue of environmental responsibility to the debate. In his analysis, the figure of 'environmental refugee' embodies the threats facing humanity: accordingly, the recognition of a status for those displaced might imply the acknowledgement of global responsibility and implementation of the principles of environmental justice. In this way, the creation of an international status would have implications far beyond the issue environmental displacement, and would hold much greater significance for environmental responsibility: potential flows of environmental 'refugees', she argues, would embody disrespect for environmental law. Chemillier-Gendreau (2006) also reflects on the possibility of creating an international status for 'ecological refugees'. She identifies three major difficulties in this endeavour: first, the large variety of causes that can induce displacement, thus diluting the responsibility assigned to each cause; second, the individualistic dimension of asylum, which allows states to restrict access to their territory; and finally the lack of a conceptual and legal definition for 'environmental refugees', which can be explained by a lack of willingness to develop the concept of collective responsibility in international law. Chemillier-Gendreau states that it is humanity's duty to express its solidarity through adequate international mechanisms. She proposes to extend the definition of refugee to 'all people whose life is threatened or whose normal living conditions are made impossible due to an environmental degradation, whether its origin is natural or the result of human actions perpetrated by states or private agents' (2006: 450), adding that the granting of refugee status could be based on class action, rather than on individual procedures. However, she believes that the main obstacle to developing protection mechanisms lies in the inadequacy of international law to address environmental protection and human solidarity. She stresses in particular the fact that international law remains rooted in states' sovereignty, which impedes the development of global governance mechanisms. She argues that a central authority is needed in order to guarantee the application of the burgeoning volume of international law, and urges scholars to develop a doctrine on the issue, and also press for support from public opinion: these two combined actions might persuade policy-makers to eventually address the problem.

Most legal scholars have argued that the refugee definition should be extended to include 'environmental refugees'. Cooper suggests a new definition of refugee that would include any

person who, 'owing to degraded environmental conditions threatening his life, health, means of subsistence, or use of natural resources, is outside the country of his nationality and is unable or (...) unwilling to avail himself of the protection of that country' (1997: 494). Most of her fellow scholars, however, contended that broadening the definition of a refugee was not the way to go, and that environmental law offered other alternative solutions.

An early work by McCue judges that 'the refugee system was never intended to address the problem of environmental refugees' (1993: 177). Given the reluctance of states to expand the current refugee regime, McCue suggests that advocacy efforts to protect 'environmental refugees' should be directed at securing a multilateral convention in environmental law, rather than at an extending the refugee protection regime. In his own words,

Environmental and immigration organisations interested in making headway on the issue of environmental refugees should abandon broadening the definition of refugee as a useless expenditure of political capital. They should focus on a multilateral convention for the purpose of coordinating existing aid for migrants and the environment. (1993: 177)

He argues for the adoption of basic principles of international environmental law, such as the duties to prevent environmental disasters, to notify and provide information about them when they occur, and to develop contingency plans³². The convention would go further and include a general duty to compensate the victims, in what the author admits is the 'most difficult political leap' posed by his proposal. The compensation would not be based on a 'polluter-pays' principle, but rather on 'pooling the compensation that all states might have to render each other into a fund' (1993: 186). Thus the issue of environmental responsibility would be avoided. McCue presents his radical proposal as a 'more effective alternative to improve the plight of environmental refugees' (1993: 190) compared to broadening the definition of refugees, which McCue sees as a waste of time and resources.

Falstrom makes the case for a new convention to address both the causes of the problem (environmental degradation) and its consequences (displacements):

³² Such contingency plans, applied to environmental migration, would 'extend the principle of *non-refoulement* in the case of an environmental event causing trans-border migration in an amount recognized by the convention' (1993: 184).

Merely allowing environmentally-displaced individuals to move does not solve the problem. Not only is their homeland continually decimated, but also the massive influx of environmental refugees to other areas creates a vicious cycle of environmental problems in these new areas. (2001: 5)

Falstrom notes that most protection mechanisms usually focus on the consequences of the problem, but fail to deal with its root causes. Hence she advocates a convention that would address displacements, but also contain obligations for states to prevent environmental damages from occurring. She suggests that such a convention could be modelled on the Convention Against Torture, drafted in 1984: as she notes, this Convention applies to all persons fearing torture, or whether acts of torture have been perpetrated or not, and whether the person is prosecuted because of her belonging to a specific group or not. Furthermore, she points out that the protection obligation imposed on states is not permanent, and therefore makes it easier for states to comply with the obligation. Once the period of protection ends, states would be entitled to re-examine the situation and return the person to her home if the situation were deemed safe. The convention would also deal with the root causes of the environmental problem, and Falstrom recommends that ‘as in the Convention Against Torture, the Convention on the Protection of Environmentally Displaced Persons should incorporate extensive provisions outlining State responsibility to find, correct, and prevent occurrences of the environmental degradation and destruction that forced people to migrate’³³ (2001: 23). She further notes that the Convention Against Torture is one of the most successful and widely ratified international agreements, and thus declares herself reasonably optimistic regarding the possible success of a similar convention to address environmental displacement.

The idea of a convention similar to the Convention Against Torture is enthusiastically endorsed by Lopez (2007). Lopez details the insufficiencies of the current protection regimes in Europe and the United States, and observes that neither European directives on temporary and subsidiary protection nor the American Temporary Protected Status³⁴ can offer adequate protection to ‘environmentally-displaced persons’. Thus she considers Falstrom’s proposal the most concrete framework to deal with the issue. She notes that it would not only ‘reassert the obligation of *non-refoulement*, the essential element of instruments of international

³³ Such measures might include educating and training farmers regarding sustainable land use, stricter regulations for hazardous industries and waste dumping, disaster prevention mechanisms, etc.

³⁴ For example, this status was provided to the people of Montserrat displaced by a volcanic eruption in 1997, and to the people of Honduras and Nicaragua displaced by hurricane Mitch in 1998.

protection’, but also ‘provide an extensive set of rights and obligations, combined with an elaborated mechanism of implementation’ (2007: 408). She stresses that literature on the topic usually concentrates on discussion of the refugee definition and its application ‘environmentally-displaced persons’, a discussion that ‘has lasted for many years and has not proven constructive’ (*ibidem*). Furthermore, such a discussion does not address the root causes of the problem, though this is paramount in order to remedy the issue comprehensively, she argues. Surprisingly, she concludes that ‘the particular issue of protecting those environmentally displaced does not (...) pose any major legal or political difficulties’ that could not easily be dealt with by the convention proposed by Falstrom.

Although these studies seem unconnected from debates on the very concept of environmental migration and the meaning of the environment-migration nexus, they also contributed to the conceptualisation of the issue. A majority were published in environmental law journals, further contributing to the divide between migration and environment scholars. Efforts to bridge this disciplinary gap, however, have been undertaken in recent years: most of the latest works on the issue acknowledge the multi-causality of environmental migration, and suggest some policy responses.

4. Towards a Synthesis?

From the mid-2000s onwards, the positions of the alarmist and sceptical coalitions underwent something of a rapprochement, for several reasons: first, the increasing number of multi-disciplinary collaborations; second, a number of major disasters that struck different parts of the world in 2004 and 2005; and third, the increased attention given to climate change. These three sets of factors drove a significant evolution in both coalitions.

Regarding the first factor, it is noticeable that many recent publications have been co-authored by scholars from different disciplines, or from opposing coalitions (Boano et al. 2007; Kniveton et al. 2008; Renaud et al. 2007; Cournil and Mazzega 2007). As a matter of fact, collaboration between environmental and migration studies coincided with cross-coalition collaboration, as I have shown that the divide between both coalitions was also a disciplinary divide. Additionally, an increasing number of conferences and workshops addressed the

topic, bringing together members from both coalitions. Such events included an IOM expert workshop in Bangkok, held on 22-23 February 2007; a UNU-EHS and IOM research workshop, held in Munich on 16-18 April 2008; a Climate Change & Migration conference, organised by the Institute for Public Policy Research (IPPR) in London, on 29 April 2008; a policy dialogue on environmental migration, held in Brussels on 4 July 2008; and an international conference on Environment, Forced Migration and Social Vulnerability, held in Bonn on 9-11 October 2008, to name just a few. Collaborative research projects, such as the EACH-FOR project, the Global Governance project (GloGov) or the International Human Dimension Programme on Global Environmental Change (IHDP), were also initiated. These collaborative publications, events and projects greatly contributed to the rapprochement of both coalitions, which had until then few for a for exchanging ideas.

Second, the debate was influenced to a great extent by current events. Between December 2004 and October 2005, no fewer than three major disasters struck the world: a tsunami in South East Asia, on 26 December 2004; hurricane Katrina on the Gulf Coast, on 29 August 2005; and the Kashmir earthquake in Pakistan, on 8 October 2005. All three disasters induced important population displacements, and two of them (the tsunami and the earthquake) prompted major UNHCR operations. Empirical evidence of environmentally-induced mass displacements was obvious, and the lack of empirical data on the issue could no longer be plausibly claimed by the sceptical coalition – even though in-depth studies of these displacements reveal the role played by other factors. As empirical evidence was mounting – at least in the media, if not in academic works – it was increasingly difficult to downplay the role of environmental drivers in forced migration. Radical arguments claiming that emphasis on environmental drivers was a distraction from other, more pressing issues (Kibreab 1997; Castles 2004) no longer held, faced with contradictory evidence on all television screens. On the other hand, the alarmist coalition could use these three events as striking examples of the theses they had long been defending.

Third, climate change received increased and sustained attention from the media, policy-makers and public opinion, following the almost simultaneous release of the IPCC Fourth Assessment Report (Intergovernmental Panel on Climate Change 2007b) and Al Gore's *An Inconvenient Truth* (Guggenheim 2006). This led to a significant evolution in the positions of both coalitions. Alarmists' presentation of migration flows as a devastating consequence of climate change was, at least partly, aimed at raising awareness at the dangers of climate change.

This goal had been achieved, at least to a certain extent, and this might explain why the alarmist coalition lost some steam post-2006. On the other hand, the doubts of the sceptical coalition could have been interpreted as questioning the very evidence of climate change, rather than climate change as a migration driver. Scepticism about climate change-induced migration was easily assimilated to scepticism about climate change itself, a position that could prove damaging for the academic careers of those who held it. Sceptics were keen on dissociating themselves from climate deniers, and most post-2006 studies focused on migration flows associated with climate change, rather than with environmental change at large.

Although the positions of both coalitions have come notably closer under the influence of the above set of factors, the divide still persists. Literature from the mid-2000s has been characterised by two underlying trends: a focus on climate change, and a heavier emphasis on policy implications. The debate between alarmists and sceptics is no longer about the conceptualisation of environmental migration – both groups seem to agree on the multi-causality of the movements – but rather about policy implications and responses.

Most recent papers have discussed the specifics of climate change-induced migration. Piguet (2008) distinguishes between three types of impacts associated with climate change: hurricanes, torrential rains and floods; droughts and desertification; and rising sea-levels. Of these three categories, he notes that the latter ‘appears to be the aspect of global warming that represents the greatest direct threat for numerous populations’ (2008: 8). On the contrary, the potential of hurricanes and floods to induce long-term and long-distance migration remains limited (with the significant exception of Bangladesh), and ‘forecasts of increased migrations linked to drought related phenomena remain hazardous’ (2008: 7). He concludes that empirical evidence shows a clear link between environmental change – especially sea-level rise – and migration, but also notes that no climatic or environmental hazard of itself results in migration, given the number of other factors involved. Turning to policies, he argues against a revision of the Geneva Convention, and favours increased burden-sharing of assistance and preventative efforts in the affected countries, as well as the development of subsidiary protection schemes, such as temporary asylum. Brown (2008) also focuses on climate change impacts, and distinguishes between climate events – brutal disruptions such as hurricanes and floods – and climate processes – slow-onset changes such as sea-level rise. Only climate events can be identified as sole drivers for migration, whereas climate processes combine with

non-climate drivers – population, poverty and governance – to induce migration. He notes that climate-induced migration will impact upon different policy sectors: development, urban policies, economy, security and social cohesion, as well as health policies. Despite these major policy implications, Brown regrets the ‘collective, and rather successful, attempt to ignore the scale of the problem’, and identifies three areas where progress can be made: expanding the refugee definition to include people displaced for environmental reasons or drafting a new, specific convention (which does not amount to the same thing); strengthening the adaptation capacities of affected countries; and finally relaxing immigration policies for climate migrants. Biermann and Boas (2007) agree with Piguet that the three climate-change related causes of displacement are sea-level rise, extreme weather events and droughts. They see little use in expanding the definition of a refugee, because of uncertainties regarding its political feasibility and effectiveness, and also because it has ‘problematic ethical consequences by threatening the protection of current political refugees’ since it will not sufficiently account ‘for the specific character and needs of climate refugees’ (2007: 20-21). Instead, they propose a *sui generis* protection regime, to be added as a protocol to the UN Framework Convention on Climate Change (UNFCCC). They argue that ‘climate refugees’ need international recognition and protection, as well as financial assistance, but that current mechanisms are currently insufficient to deal with the issue. The additional protocol they suggest rests on five core principles:

- Planned re-location and resettlement, since they argue that climate change impacts are more predictable than wars and turmoil;
- Resettlement instead of temporary asylum, a view that contrasts sharply with authors favouring an extension of temporary protection regimes (Magniny 1999; Piguet 2008);
- Collective rights instead of individual ones, a position shared by virtually all scholars;
- International assistance for domestic measures;
- International burden-sharing of resettlement costs, based on common but differentiated responsibilities, respective capabilities and the reimbursement of full incremental costs incurred.

Such a protocol, they argue, would best fit within the framework of UNFCCC, and would thus benefit from the wide support of parties to the climate convention. They suggest the establishment of a committee on recognition, protection and resettlement of ‘climate refugees’, which would determine the populations needing relocation due to climate change.

They acknowledge that such a proposal is likely to create some friction with the Geneva Convention, but contend that there is no reason to reserve the term ‘refugee’ to people fleeing persecution and not apply it to people fleeing climate change impacts. They also propose founding a new, specific funding mechanism aimed at fully reimbursing the incremental costs incurred by the resettlement of ‘climate change refugees’, though they remain vague about how the fund would be financed. Finally, a recent report of the Norwegian Refugee Council (Kolmannskog 2008) took a more conservative approach, and argues that more research is needed to identify protection gaps, before any concrete step can be taken. The report notes that ‘many of the forced migrants will probably fit into already existing categories of protected persons, but they may need to be made more visible and recognised within the categories’ – thus it recommends that preventative mechanisms are strengthened and protection possibilities further examined (Kolmannskog 2008: 31).

These four policy-oriented takes on climate change-induced migration all recommend different solutions, which are best seen on a sceptic-alarmist continuum, rather than as separate approaches. Policy-wise, the sceptical end of the continuum does not call into question the international asylum regime, and does not favour the development of new instruments, whereas the alarmist end calls for an extension of the refugee definition or the drafting of a new, ad hoc convention. Unsurprisingly, reports found at the alarmist end of the spectrum are authored by environment scholars (Brown, Boas and Biermann), whereas more conservative reports are written by migration scholars (Piguet, Kolmannskog).

Two papers, in particular, co-authored by environment and migration scholars, tried to move beyond the debate, and to consider environmental changes at large as migration triggers. Renaud *et al.* (2007) sought to provide a better conceptual framework for environmental migration. They identify three main dimensions in the scholarly debate over environmental migration: a definitional issue over the terminology ‘environmental refugee’, a debate over ‘whether such people even exist’ (2007: 15), and a debate over the protection to which these people should be entitled. The paper aims to shed new light on these three aspects of the debate. Regarding the definitional issue, they propose a new typology of environmental migrants, distinguishing between:

- Environmentally motivated migrants, who ‘may leave a steadily deteriorating environment in order to pre-empt the worse’;

- Environmentally forced migrants, who ‘have to leave in order to avoid the worst, often on a permanent basis’;
- And environmental refugees, who ‘flee the worst’ (2007: 29-30)

Regarding the second aspect of the debate, they provide ample evidence of the reality of environmental migration, associated with climate change, disasters, or loss of ecosystems. Finally, they suggest a set of recommendations to address the third aspect of the debate, ranging from strengthening the scientific empirical basis of environmental migration, increasing awareness, improving legislation (with new mechanisms rather than an amendment to the Geneva Convention), providing the resources for adequate humanitarian aid, and strengthening institutions and policies. They call for the implementation of such policies not to be impeded by the continuing debate over the conceptualisation of environmental migration, but to move beyond it.

Boano *et al.* take a similar path, and argue that ‘in a warmer world, the traditional definition and understanding of the concepts of ‘refugee’ and ‘protection’ may both need to change’ (2007: 3). They make the case for mechanisms that improve communities’ resilience to environmental change and reduce their vulnerability, and challenge the deterministic approach to vulnerable groups as passive victims. At the same time, they also call for new institutional responses and greater multi-disciplinary research.

Two other contributions explored new angles on the issue. McNamara (2007) examines the discourse of different UN agencies and officials, and asserts that discursive politics reproduce and reinforce the absence of multilateral protection for ‘environmental refugees’ at the United Nations. She sees this protection gap from a neo-structuralist perspective as an outcome of debates and discourses held at the UN. She argues that reasons for these discourses lie in the shifting attitudes toward the role of multilateralism in environmental issues. Her arguments are further delineated in a doctoral dissertation devoted to the analysis of such discourses (McNamara 2006). Another emerging approach deals with migration not as a consequence of climate change, but as an adaptation strategy to mitigate its impacts upon populations. McLeman and Smit (2006) develop a theoretical model of migration in response to climate change, and test it – successfully – on the famous historical case of the Dust Bowl migration. The model describes vulnerability as a function of exposure and adaptive capacity, and includes different types of response to climate change, among which migration is not always

the preferable option. The authors show that particular types of exposure to hazards influence the potential for migration, and that migrants and non-migrants are differentiated through different adaptive capacities.

Finally, although this is not the focus of my research, a few words must be said about attempts to improve estimates and better understand the empirical linkages between environmental change and migration. Kniveton *et al.* (2008) compare different theoretical models in order to understand different migration behaviours developed by people coping with environmental stresses. They focus in particular on two models, the Sustainable Livelihoods Approach – which seeks to explain how households cope with external vulnerabilities – and the New Economics of Labour Migration – which seeks to understand why people migrate. They propose continuing both approaches to analyse ‘how households respond to climate shocks, and the extent to which migration is part of their response’ (2008: 32). They proceed to discuss some statistical methods that quantify migration flows associated with climate impacts. They rightly note that common predictions are usually based on the projected number of exposed people, and assume in a deterministic fashion that migration is the only possible response. They use agent-based modelling to simulate peoples’ responses to climate signals, and assert that it is a ‘potentially highly effective tool for modelling climate change impacts on migration’ (2008: 53). Afifi and Warner (2007) use another tool, the gravity model, to address the same question. The gravity model is a common statistical tool used to predict geography and flows of migrations. Afifi and Warner are the first to use it to address environmental migration. They use basic independent variables – economic, social and political factors – and add dummy environmental variables such as occurrence of earthquakes, overfishing, floods, etc. They analyse about 30,000 observations, controlling for the former variables, and conclude that environmental variables have a significant, positive impact on migration flows across countries.

Finally, the Environmental Change and Forced Migration Scenarios (EACH-FOR) project was launched in order to address the dearth of empirical studies on environmental migration. The project selected 22 case studies of environmental change, and surveyed the affected populations’ migration behaviours. Although the final results of the project are not yet available at the time of writing, some preliminary conclusions suggest that ‘disasters, development and slow-paced environmental change are three factors that contribute to environmentally induced migration’ (EACH-FOR 2008). Environmental factors increasingly

prompt governments to plan for relocation and resettlement of vulnerable populations. Though migration can be an adaptation strategy to cope with environmental change, the most vulnerable population do not have the resources to move.

Conclusion

The conceptualisation of the environment-migration nexus has witnessed different notable evolutions. Scholarly debates initially focused on the environmental impacts of migration, before turning to environmentally-induced migration, as the first impacts of climate change became apparent and the world was struck by a number of major natural disasters. Legal studies and policy proposals were conducted while conceptual controversies were ongoing, before comprehensive empirical studies were undertaken. The development of scholarly literature on the subject was chaotic in many regards, but was traversed by two opposing perspectives, organised around the alarmist and sceptical coalitions respectively. This opposition supplied the prime analytical framework for the evolution of the literature, as well as the conceptualisation of the nexus.

In recent years, an increased number of forums, workshops and joint publications have brought environmental and migration scholars together. One of the hypotheses of the ACF is that policy actors tend to accept information confirming pre-existing beliefs, and reject dissonant information, especially when it concerns policy core beliefs. Although learning from one's own coalition is an easy process, learning across coalitions proves more problematic. Policy forums, especially if they are repeated over time, provide ideal venues for the process of facilitating learning across coalitions. Nonetheless, despite the fact that these occasions have multiplied in recent years, the opposition between alarmists and sceptics has not disappeared, and remains organised around a few elements that shall now be discussed.

Chapter 4

Elements of conceptualisation

“Those who track the effects of global warming had assumed that the first flow of climate refugees would likely be with the abandonment of Tuvalu in the South Pacific or other low-lying islands. We were wrong. The first massive movement of climate refugees has been that of people away from the Gulf Coast of the United States.”

Lester Brown, 17 May 2007.

Introduction

This chapter will discuss the key elements around which the two advocacy coalitions revolve. First the question of the definition of environmental migration is addressed. The issue of definition, which is directly linked to estimates and forecasts of environmental migration, remains highly debated. Debates over definitions remain greatly influenced by the opposing coalitions, and by the ‘numbers game’ of estimates and forecasts of future migration flows.

Finally, the different environmental causes of migration, as well as resulting migration patterns, will be described and discussed. Earlier studies tended to link types of environmental change to specific migration patterns, in a deterministic perspective. It is now widely acknowledged that the causes of migration are multiple and intertwined, including environmental factors. As for migration patterns, the case is made here for the existence of a continuum, rather than discrete categories of migrants.

1. The Definitional Issue

Among the core issues at stake in the conceptualisation of the nexus is the definition of environmental migration. Despite numerous attempts and proposals, no agreed upon definition has yet emerged, and this void has led to a great confusion over the terms used to describe the people displaced by environmental events. ‘Environmental refugees’, ‘ecological migrants’, ‘climate refugees’, or ‘environmentally-displaced people’ are all terms frequently used by scholars and the media alike to describe what they assume is a common reality. The definitional issue is directly linked to the conceptualisation and typologies of environmental migration, its estimates and forecasts, and the policy responses aimed at addressing it. Furthermore, the debate is marked by a number of confusions over different concepts, and ‘environmental migration’ has eventually become a hold-all for different migration dynamics that often have little in common.

1.1. *Why Defining Environmental Migration is Problematic*

Different reasons account for the difficulty of defining environmental migration. These reasons are rooted in the debates over the conceptualisation of environmental migration, but the lack of definition also contributes, in a ‘Catch-22’ situation, to controversies over the concept.

One of main reasons for the lack of definition is linked to the difficulty of isolating environmental factors from other drivers of migration. Most authors stress the multi-causality of migration and the intermingling of factors (Black 2001; Castles 2002; Brown 2008; Boano et al. 2007). Therefore, one can legitimately ask whether isolating environmental drivers is possible, or makes much sense conceptually. Sceptics tend to argue that it does not, and that doing so is a distraction from other, more pressing issues (Castles 2004; Kibreab 1997). Alarmists, on the contrary, see the urgency of acknowledging and defining environmental migration. Lassailly-Jacob (2006) rightfully questions whether environmental migrants make up an additional category of forced migrants, or are better understood within existing conceptual categories.

The question of causality relates to the relative importance assigned to environmental factors among other drivers: the former are deeply rooted in socio-economic, cultural and political contexts, and are not easy to disentangle. Even though the importance of environmental drivers is widely acknowledged in the literature, the debate remains ongoing regarding the need to conceptualise these drivers as distinct from other migration drivers.

This intermingling of migration drivers, however, is far from being the sole obstacle to defining environmental migration. Another major hindrance lies in the confusion of forced and voluntary migration. A common assumption is that environmental disruptions trigger only forced – and often brutal – displacements, an assumption emphasised in the term ‘environmental refugees’. Suhrke wonders whether there is ‘something about the nature of environmental degradation that tends to produce refugee-like movement rather than migration?’ (1994: 480) Many authors stress, however, that environmental factors also induce voluntary migration (Renaud et al. 2007; Suhrke 1994; Hugo 1996). As will be discussed in Section 4.2, the distinction between forced and voluntary migrants is a fine one in the case of environmental migration. Yet the distinction is a fundamental one in migration studies and policies, which is a cause for some confusion over the definition and the policies most adequate to address the phenomenon.

Finally, a further difficulty arises from the absence of any legal definition of the concept. Unlike refugees or internally-displaced persons, no specific legal framework exists to address environmental migration. Once again, this can be seen as another ‘Catch-22’ situation: the development of a legal definition is also impeded by the conceptual fuzziness that prevails. At the time of writing, talks were under way between several agencies in Geneva, including UNHCR and IOM, to find common ground on a definition and typology of environmental migration.

Though this study does not discuss the characteristics of environmental migration or the need to categorise it, definitions and typologies *do* matter, and not only for the scholarly debate. Environmental migration as a social phenomenon is generally apprehended through its definition, which bears high responsibility for the development of normative framework and policy responses. Without a clear definition, one cannot identify which populations are of concern and require assistance nor can one accurately estimate the number of people displaced or prompted to migrate because of environmental factors. Words and typologies

also matter for the populations themselves, because of the images and meaning they carry: as will be shown in the Section 1.3, people displaced by hurricane Katrina objected angrily to the use of the term ‘refugees’. Thus getting the wording right is important; in the next section, I shall attempt to summarise previous attempts to provide a definition, and clarify the concepts I intend to use in subsequent parts of this work.

1.2. *A Working Definition*

The first definition provided by El-Hinnawi (1985) was met with widespread criticism, with most authors asserting that the definition was too wide and had little practical relevance (Suhrke and Visentin 1991). In subsequent years, many other attempts to define environmental migration have been made by a wide range of authors (Myers 1997; Renaud et al. 2007; Cooper 1997). The majority still revolve around some key elements that were already present in El-Hinnawi’s definition:

- With only few exceptions, most definitions address only forced displacement, excluding voluntary migration;
- A strong emphasis is placed on the destruction of peoples’ habitat or livelihoods;
- Environmental changes are loosely defined, and can include man-made or natural disasters³⁵, brutal or slow-onset changes.

More recently, a definition proposed by IOM and has been used as a working definition by a number of scholars (Kniveton et al. 2008; Brown 2008):

Environmental migrants are persons or groups of persons, who, for compelling reasons of sudden or progressive changes in the environmental that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or chose to do so, either temporarily or permanently, and either within their country or abroad. (International Organization for Migration 2007)

The three features observed in El-Hinnawi’s definition are also present in the IOM definition, which is remarkably close to the former: a definition that met with harsh criticism in 1985 is

³⁵ Even though this distinction is questionable, as explained in Chapter 1.

greeted with tacit approval 22 years later. The same criticisms made then can certainly be applied to the IOM definition: it is extremely broad, thus inviting alarmist forecasts, and does not distinguish between different types of migration (voluntary and forced, temporary and permanent, internal and international). Furthermore, it does not acknowledge the multi-causality of migration, and does not elaborate on the characteristics of environmental drivers. Hence the definition is of limited policy relevance, since it implies that similar policies could apply to different types of migration – especially forced and voluntary migration – which is hardly the case. Overall, the broader definitions tend to be used by members of the alarmist coalition.

Renaud *et al.* attempted to distinguish between different types of migration, and proposed a definition based on a triple distinction between environmentally motivated migrants, environmentally forced migrants and environmental refugees (2007: 29). The distinction between the first and the two latter categories is based on the voluntary or forced character of the migration, while the latter categories differ in the ‘swiftness of necessary actions’: environmentally forced migrants can plan and prepare their migration, whereas environmental refugees have to flee in panicked circumstances.

Policy-wise, the distinction between forced and voluntary migration is of utmost importance (Hugo 1996; Suhrke 1993): protection regimes and migration policies are rooted in this fundamental divide. Distinctions between slow-onset, brutal, internal and international movements, though important, are secondary in comparison to the fundamental distinction between forced and voluntary migration. Hence I propose use of the working definition developed by the EACH-FOR project, which distinguishes between environmental migrants and environmental displacees:

Environmental migrants are people who chose to move voluntarily from their usual place of residence primarily due to environmental concerns or reasons. (...)

Environmental displacees are people who are forced to leave their usual place of residence, because their lives, livelihoods and welfare have been placed at serious risk as a result of adverse environmental processes and events³⁶ (natural and/ or triggered by people) (Dun et al. 2007).

³⁶ Italics in the original.

The core distinction between the two categories is the element of voluntary versus forced migration. Yet these two types of migrants share a common motive for departure or flight from their usual place of residence, that is, a situation of objective environmental degradation or change. This factor can be combined with other factors, for example, social, economic or political. In the case of forced migration, those moving must identify environmental factors as one of the main motive forces. It is important the migrants themselves identify the reasons prompting their migration, and that these reasons are not just assumed from an external viewpoint. No distinction is made whether the migration is temporary or permanent, or whether it is international or not. 'Environmental migrants' refer to people who are prompted to migrate because, in their mind, environmental factors are one of the foremost reasons for leaving their usual place of residence. Their migration is pro-active, and can be viewed as a coping strategy. On the other hand, 'environmental displacees' are forced to move by both slow onset and rapid onset environmental process and events. Their departure or flight is forced, and it is assumed that they are unwilling to leave their place of residence but have no other choice.

Unlike many other definitions, the one described above carefully avoids the use of the term 'refugee', because of its specific legal meaning in international law, its policy implications, and its political connotations and symbolic weight.

In subsequent chapters, the terms 'environmental migrants' and 'environmental displacees' will be used in accordance with this definition. When referring to both types of migrants, I shall use the neutral term 'environmentally displaced persons', or EDPs. Finally, 'environmental migration' refers to the social phenomenon as a whole, including both types of migration, forced and voluntary.

This distinction between forced and voluntary migrants should 'infuse some realism in the projection of future flows' (Suhrke 1993: 7), which shall be discussed in Section 2.

1.3. Empirical Illustration: The Refugee Controversy in the Wake of Hurricane Katrina

Labelling people displaced by environmental changes is a daunting prospect, and the definitional issue is far from being resolved. Discussions of the definition, however, seldom

take into account the perception of such labels and categories by those they intend to name and classify. Names and labels matter for the migrants as well, as is evidenced by the controversy that erupted over the use of the term ‘refugee’ in the wake of hurricane Katrina.

In the immediate aftermath of the disaster, the media were highly praised for their role in assisting the recovery efforts. A Louisiana local radio station WWL, an affiliate of CBS, took phone calls from people trapped in their house and helped rescuers locate them. The local newspaper *The Times-Picayune* did not miss a single day of the crisis, despite its offices being flooded; the whole staff relocated in the Communication Department of LSU at Baton Rouge, and the paper continued to be published on the Internet. CNN dispatched its reporter Anderson Cooper to New Orleans very early after the flood, and played an instrumental role in alerting the general public about the drama that was unfolding in New Orleans. In the absence of any local or state officials, the media were the only link between the trapped residents and the external world. I shall first discuss the role played by the media in shaping the catastrophe, and then discuss how the refugee controversy developed.

1.3.1. Imagining the Victims

Given their role in the aftermath of the disaster, it is not surprising that the media played a central role in shaping the language characterizing the disaster and its victims. Many studies have shown the process and mechanisms that lead to this characterization (Hopkins 2007b; Sommers et al. 2006; Tierney et al. 2006). Most reporting was conducted with people who had not evacuated New Orleans or those who had relocated in Houston, and less attention was given to those who had fled earlier and relocated elsewhere. Soon the image of Katrina’s victims became black and poor, as clumsily expressed by Wolf Blitzer on CNN: ‘You simply get chills every time you see those poor individuals... so many of these people, almost all of them that we see, are so poor, and they’re so black’ (Brinkley 2006: 204).

Through this characterization, the media also constructed social perceptions, sometimes different from the perception of the victims themselves: the National Guards were often pictured hugging babies or rescuing people, but they were perceived as ominous by the very people they were supposed to help.

Soon the focus shifted from the levees and the floods to scenes of social unrest, looting and shooting that were supposed to be taking place in the city. The lack of food supplies in New Orleans strongly contrasted with the fully-stocked shelves of stores and supermarkets, which had all been locked up. Before long stranded residents broke into the stores, looking for food and supplies. These actions were often described by the media as ‘looting’, leading to a ‘criminalisation of New Orleanians in Katrina’s wake’ (Kaufman 2006). Overall, it was widely acknowledged that these reports were grossly exaggerated and over-dramatized. I argue that this view contributed to the semantic shift that took place in the Texan media, in which evacuees were described as victims in the first days following the evacuation, and increasingly as troublemakers and even thugs and criminals as time went on. Furthermore, Hopkins showed that these reports impacted negatively on the public perception of the poor and the black (Hopkins 2007a), while Tierney, Bevc and Kuligowski brilliantly traced the linkages between these perceptions and the handling of the crisis by the authorities (Tierney et al. 2006). They posit the existence of a common myth about disasters that connects disaster to social unrest, violence and looting, arguing that ‘the media’s relentless adherence to disaster myths and to frames emphasizing civil unrest and urban insurgency, along with the strategic response measures these reports justified, had a number of immediate negative consequences’ (2006: 77). The most obvious of these negative consequences was the dispatch of military personnel to New Orleans, with the mission of enforcing law and order, rather than of bringing food and supplies. Tierney and her colleagues argue that the conjunction of media reports and disaster myths of social unrest reinforced political discourse for the greater involvement of the military in disaster management, as well as militarism as an ideology in the United States. As mentioned above, the presence of the military in New Orleans and their focus on law and order generated much criticism.

Overall, the media constructed a particular image of the victims of the hurricane. In focusing on those who had not evacuated, they presented a portrait of the victims that was exclusively black and poor, and therefore stressed the social vulnerabilities and inequalities that were suddenly exposed by Katrina: although they had existed for a very long time before the storm hit. Furthermore, the media insisted heavily on incidents of looting and social unrest, and conveyed an image of the victims as vandals and troublemakers. In doing so, they reinforced a distorted racial framework in which blackness and poverty had long been pathologised (Dyson 2006). If the victims were impotent to act against the construction of images and

public perceptions about them, they were able to revolt against the label they were given: that of refugees.

1.3.2. *Naming the victims, or the Refugee Controversy*

In the immediate aftermath of the hurricane, the word most commonly used to describe the victims was ‘refugees’ (Sommers et al. 2006: 40), but the term was unanimously rejected by the victims themselves, who insisted on being called ‘evacuees’ or ‘survivors’. Among the two dozens of persons I interviewed, only one agreed to being called a refugee. Interestingly, she had been a refugee before³⁷, when she fled France during the Second World War to settle in Louisiana with her husband. ‘I felt I was reliving my life again’, she explained, ‘that was exactly the same experience. I don’t see what’s wrong with “refugees”, that’s exactly what it was.’ The remaining interviewees insisted they were not refugees, and the most common rationale they presented was that ‘refugee’ implied they were foreigners in their own country. ‘We were transplants, not refugees’, explained one evacuee, ‘refugees are from foreign countries’. Refusing the ‘refugee’ label was also a way, for many, to stress the duties and obligations of their country towards them. Former New Orleans Mayor Marc Morial proffered the term ‘citizen refugees’ without success (Gordon 2005), and President Bush also weighed in the controversy, stating during a meeting with representatives of voluntary organization on 6 September 2005:

You know, there's a debate here about refugees. Let me tell you my attitude and the attitude of people around this table: The people we're talking about are not refugees. They are Americans, and they need the help and love and compassion of our fellow citizens. (White House Press Secretary Office 2005b)

Shortly after the controversy erupted, many news media stopped using the word and replaced it with others, most often ‘evacuees’. Mark Schleifstein, of *The Times-Picayune*, explained that he received a memo from his editor asking reporters to no longer use the word³⁸. Lolis Ellie, another reporter for the same newspaper, told me that he stopped using it ‘Because it obviously hurt people’s feelings’, but he felt there was no other adequate word to describe the

³⁷ In the traditional meaning of the word, displaced by war rather by a natural disaster.

³⁸ Interview with the author, New Orleans, February 2007.

plight of the evacuees: 'In my view, "evacuee" is not strong enough; these people had lost everything and were looking for a refuge, but I didn't want to add more suffering to their life'³⁹. Other news media, on the other hand, persisted in using the word, most notably CNN, *The New York Times* and *The Associated Press*. On 7 September 2005, Lou Dobbs made the case for the continued use of the term 'refugee' on CNN:

You've heard on this broadcast, by the way, several people, including Reverend Jesse Jackson and others admonish us not to use the term refugee when describing the New Orleans citizens who have had to flee their homes. Jackson and others including President Bush have said or implied that term is racially insensitive. In my opinion, straightforwardly, Reverend Jackson and President Bush are not entirely correct. The Miriam Webster Dictionary defines refugee as one who flees. (...) The president, Jackson and others apparently think that news organizations created the term refugee just to describe victims of Hurricane Katrina. Hardly. Even a cursory review of reporting of such disaster of Hurricane Andrew, the 1993 midwestern floods and wildfires through the west have all prompted the use of the term refugee by news organizations. I'm proud to tell you that this network has resisted others telling them how to use words. Rejecting, in fact, the United Nations suggestion that we use, instead of refugee, the expression internally displaced persons. I love that one. We'll continue here to use the term on this broadcast where we think it is most descriptive. (Dobbs 2005)

Other reasons were also put forward to dismiss the term 'refugee': some argued that the term stripped people of their dignity (Masquelier 2006)⁴⁰, while others, such as reverends Jackson and Sharpton, contended that the term was racially biased. Linguist Geoffrey Nunberg, in a study posted on his personal website, observed that the term had been used before, to describe the people fleeing the Dust Bowl – another case given the label of 'environmental migration' – and also that the word 'refugee' was twice more likely to be used than 'evacuee' when the word appeared within ten words of the words 'black' or 'poor' (Nunberg 2005). This led him to the conclusion that "Those disparities no doubt reflect the image of refugees as poor, bedraggled, and forlorn, and they suggest that there's a genuine basis for the impression that the word tends to single out one group, even if unwittingly".

As Masquelier points it, the unease about the word 'refugee' in New Orleans points toward a categorical void:

³⁹ *Ibidem*.

⁴⁰ Interestingly, after the 1999 floods in Venezuela, President Chavez suggested that the victims should be called *dignificados*, instead of *damnificados*.

The word (...) was unsuitable to describe the plight of people who had been (...) forced to evacuate their homes prior to or in the days following the storm: they had left their homes, not their country. And yet (...) there appeared to be no adequate substitute that would convey with enough intensity the nightmarish experience so many New Orleanians had gone through in the wake of Katrina and the dire predicament survivors (...) faced as they prepared to start life anew away from the ravaged Gulf Coast. (2006: 135)

Masquelier further argues that this categorical void reveals a social void in which poor New Orleanians had been confined for years.

The failure of the authorities in the aftermath of the disaster was not confined to emergency relief: there was a much larger social failure of the social system, and the disaster exposed vulnerabilities to a country that had long been blind about them. In many ways, Katrina was a social disaster of unprecedented amplitude. In that regard, the word ‘refugee’ was more than just a name, but a summary of these vulnerabilities. In many ways however, those stranded in the city experienced a refugee-like situation of stress, trauma and despair; for many of them, the place where they had been relocated was indeed another country. Though the word ‘refugee’ was widely used by the media to describe all people displaced by the hurricane, the images accompanying the term exclusively focused on the poor, black residents stranded in the city, and soon the word ‘refugee’ equalled ‘black’ and ‘poor’, as if those who had evacuated before the hurricane belonged to another category: the ‘evacuees’.

The reason why those called ‘refugees’ were stranded in the city was directly related to their social vulnerabilities, as I have tried to show in the first section of this paper. I argue that they rebutted the R-word because it was perceived as a stigma for these vulnerabilities. Masquelier rightly asserts that ‘Our failure to find a word that would describe appropriately the dire circumstances of so many Katrina victims without further victimizing them hints at a much larger failure, one that resulted over the years in the virtual disenfranchisement of a whole stratum of the U.S. population’ (2006: 741). The lack of an adequate vocabulary also reveals the invisibility of these vulnerabilities, and the lack of a conceptual machinery to acknowledge and address them.

In the context of Katrina, two readings of the rebuttal of the word ‘refugee’ can be given: a refusal to be considered ‘second-class’ citizens, or foreigners in their own country, and also a refusal to admit that New Orleans residents had been failed and abandoned by their own government. This dual reading reflects a double estrangement. The first conveys the idea that the refugee label confiscated the identity and citizenship of those it designated, and confined them to a state of displacement: when in fact their only wish was to return to New Orleans as soon as possible. The second reading emphasizes the obligations of the state towards its citizens, and conveys anger at the lack of response by the authorities. Many interviewees insisted that their government had a duty of care towards them, and refused to accept the notion of a failing state that would just abandon them and let them become refugees.

This controversy has deep implications beyond the immediate circumstances of Katrina for current academic and political debates on the definition and typology of environmental migration, as it reminds us how much categorizations matter, even in the most dramatic circumstances. These categorizations shape the identity of the victims, and thus one can assume that they also affect their ability to cope with the disaster. Until now, the academic community has widely considered the term ‘refugee’ to be a misnomer in cases of environmental migration for legal reasons: people displaced by environmental changes are not recognised as refugees under the 1951 Geneva Convention. The controversy that erupted in the wake of Katrina invites us to reconsider the role of language and labels in shaping perceptions of the victims of disasters, and the impact of these categories on the people they are supposed to classify. As the case of Katrina makes clear, the ‘refugee’ may be a misnomer not only for legal reasons.

2. Predictions and estimates

Predictions and estimates are one of the most contentious issues in the conceptualisation of the nexus. They are used abundantly by alarmists to support their views; the same numbers are criticised for artificial inflation by sceptics. The multi-causality of displacement, as well as the confusion between forced and voluntary migration, make it difficult to identify an exact number of environmentally displaced persons. Given the lack of comprehensive methodology and empirical studies, the field is wide open for guesses and pessimistic

estimates⁴¹ rather than actual numbers. Boano *et al.* cite no fewer than 10 different estimates from different scholars and organisations (2007: 11-12).

With regard to actual displacement, the most oft-cited figure comes from the Red Cross, which claims that there are currently more people displaced by environmental change than by war: approximately 25 million (International Federation of Red Cross and Red Crescent Societies 2001). As for future flows, a figure frequently cited is derived by Norman Myers (2002), who forecasted that there could be up to 200 million displaced by 2050. This figure gained even wider currency after it was endorsed by Stern, in his highly-publicised report on the economics of climate change (2007: 56). Some estimates were even more doom-filled, predicting that up to one billion people could be displaced by 2050 (Christian Aid 2007). The figure, however, included all types of displacement, and not only those triggered by environmental changes⁴², contrary to what has often been reported. The table below summarises some of the main estimates and forecasts.

<i>Source</i>	<i>Current estimates</i>	<i>Forecasts by 2010</i>	<i>Forecasts by 2050</i>
El-Hinnawi (1985)	30 million	50 million	150 million
Myers (1993, 2002)	25 million	-	150, then 200 million
Myers and Kent (1995)	25 million	50 million	212 million
Stern (2007)	-	-	200 million
Christian Aid (2007)	25 million	-	300 million

Table 1 – Estimates and forecasts of environmental displacees.

Different factors impede the collection and development of accurate data and forecasts. Some of these factors are common to all displacement-related issues, others are specific to environmental migration.

Crisp notes that ‘while all of the standard works on refugees are replete with numbers, few even begin to question the source or accuracy of those statistics’ (1999: 2). A similar observation can be made for works on environmental migration: most of them reproduce

⁴¹ Or ‘guesstimates’, in Kolmannskog’s vocabulary (2008: 4)

⁴² The people displaced by climate change-related events accounted for 250 million and those displaced by natural disasters for 50 million, whereas people displaced by development projects, such as dams, accounted for 645 million.

previous statistics without critically assessing them. Figures provided by Myers are often quoted as scientific truth, without questioning his methodology.

The quest for numbers is also hampered by the controversy over the concept and definition of environmental migration. Without clear definition, providing accurate data seems a daunting task. It is worth noting, however, that a similar problem is encountered when counting refugees, even though a legal definition exists. In the words of Crisp,

Any form of enumeration exercise must be based upon a clearly defined unit of measurement if it is to produce reliable, usable and comparable data. In the case of refugee statistics, however, such clarity does not always exist. (1999: 4)

Most displacements triggered by environmental factors are internal, not international. This poses a further statistical problem, since counting cross-border movements is much easier than internal movements: ‘the machinery to collect data on these movements simply does not yet exist’ (Brown 2008: 25). Crisp provides a list of questions that are left unanswered when one attempts to count internally-displaced people (IDPs):

In the absence of a clear criterion such as the crossing of an international border, how far does a person have to move to be considered ‘internally displaced’? When do internally (displaced) people cease to warrant that status: when they return to their original place of residence, or when they have achieved a certain degree of physical and socio-economic security in the place to which they have fled? Given that a large proportion of the world’s IDPs are thought to live in towns and cities, how can they be differentiated from other rural-to-urban migrants? (1999: 5)

Some further problems are specific to the nature of environmental migration. When it comes to predictions, figures are usually based on the number of people living in regions at risk, and not on the number of people actually expected to migrate. Estimates do not account for adaptation strategies, different levels of vulnerability to change, or simply – though it might sound harsh – disaster-related casualties.

Predictions also need to take account demographic changes that are expected to occur over the next few decades. Whereas global population growth can be predicted to a certain extent, its geographic distribution remains uncertain. In recent years, migration to urban areas has

accelerated. An increasing number of people live in regions highly exposed to natural risks and hazards, resulting in an increased number of disasters. These evolutions are particularly significant in developing countries, and make estimating the number of potential migrants a dubious task.

Finally, a large number of future displacements are expected to be caused by the impacts of climate change. It is possible to mitigate these impacts through adaptation strategies, and to mitigate climate change itself by reducing our greenhouse gas emissions. Thus the future impacts of climate change on societies will greatly depend on future levels of greenhouse gas emissions and on the amount of funding that will be allocated for the development of adaptation strategies in vulnerable regions. In a nutshell, future displacements depend, to a large extent, on present-day actions. Because of the inertia of the climate system, the impacts of global warming until 2050 are largely pre-determined by our past emissions (Hansen et al. 2006). Impacts beyond 2050 depend on our current emissions, and this is the reason why predictions generally do not go beyond 2050. Though the impacts of climate change until 2050 are largely known thanks to the IPCC reports, adaptation strategies can minimise how these impact affect societies. Hence future displacements also depend, to a great extent, upon the adaptation strategies that are implemented today – of which pro-active migration may be part.

Despite these difficulties, getting the numbers right is an important step in developing adequate policies. The programming of assistance and mobilisation of resources, including funding, depend on accurate numbers (Crisp 1999). In the absence of reliable statistics, numbers can be easily inflated and manipulated, in order to attract attention to some populations, sometimes at the expense of other needy groups.

In order to move forward, Boano *et al.* suggest that, instead of drafting global estimates, ‘a more valuable route to understanding the potential scale of displacement, and thus the scope of policy intervention’, would consist in obtaining a more nuanced understanding of the different forms of environmental migration, and developing a more empirically-grounded approach to the issue (2007: 12-13). Kniveton *et al.* agree that a first step is to ‘try to understand how people cope with the different types of gradual stresses and sudden shocks brought about by climate change and variability’, and suggest that a second step involves quantitative methods, such as agent-based models, in order to simulate future migrations

patterns based on current migration behaviours (2008: 7). What is now needed is detailed data collection through empirical studies, a task that the EACH-FOR project has started exploring.

3. Environmental Causes of Migration, and Multi-Causality

Environmental causes of migration are usually vaguely described, as if all types of environmental disruption resulted in similar migration flows. In fact, research shows that this is far from the case: not all environmental changes induce similar movements, and some of them do not induce movements at all (Kniveton et al. 2008: 32-36). Furthermore, similar movements can be induced by different kinds of disruption, while the same disruption can result in very different movements – the case of hurricane Katrina is particularly revealing in this regard, as will be exemplified in this section. Some authors, however, have attempted to classify environmental changes, and have proposed different typologies.

3.1. Classifying Environmental Disruptions

The confusion over types of environmental changes is a major difficulty in understanding the driving forces behind the environment – migration nexus: El-Hinnawi (1985) distinguishes between disasters, what he calls ‘major environmental changes’ (such as the construction of dams), and slow-onset degradations of the environment. He assumes that natural disasters only produce temporary displacement, while permanent relocation is the sole outcome of major and gradual environmental change, a claim dismissed by empirical research. The 1992 Conference on Migration and the Environment identified six categories that ‘highlight the most important causes and dynamics of environmental migration’: elemental disruptions, biological disruptions, slow-onset disruptions, accidental disruptions, disruptions caused by development, and environmental warfare (*Migration and the Environment* 1992: 11). Each category comprises different degrees of disruption, ‘ranging from mild to catastrophic’, and environmental migrations are supposed to be the result of the most severe of these disruptions.

Richmond addresses the multi-causality of migration, and proposes a multivariate model of environmentally related population movements, aimed at highlighting the interaction between political, technological, economic and political factors with the environment. He differentiates between five categories of environmentally related disasters, and insists that 'they are not independent from each other but may be interactive and mutually aggravating' (1994: 81). Natural disasters form the first category (hurricanes, volcano eruptions, earthquakes, etc.), while the second category comprises technologically-induced environmental disasters such as pollution, industrial accidents or the construction of dams⁴³. The third category deals with economically-induced disasters, including deforestation, crop failure, and also species extinction. The fourth and fifth categories are less expected. The former deals with politically-induced disasters such as war, terrorism, apartheid or anarchy, whereas the latter category is made up of socially-induced disasters that include ecological activism, jihad and boycott. Richmond admits that the connection of these last two categories to the environment can be somewhat remote, but he aims to show the political, technological, economic and social factors underlying so-called 'environmental disasters'.

Bates (2002) also attempts to provide a typology of environmental changes that induce migration. Her classification is based on three binary criteria: the origin (natural or man-made) of environmental disruptions, their duration (acute or gradual), and whether migration is an intentional outcome of the disruption or not. She proceeds to delineate three categories of disruptions: disasters, expropriations and deterioration. Disasters are defined as 'acute events that are not designed to produce migration', expropriations as 'acute anthropogenic disruptions' aimed at dislocating populations, and deterioration as a 'gradual, anthropogenic changes (...) that were not intended to produce migrants' (2002: 469). This classification might seem to have a high explanatory value, but actually possesses some major shortcomings. A consistent classification based on three binary criteria would have produced eight categories, not three. Some types of disruptions are left out, such as gradual natural change (not aimed at displacing populations), or man-made gradual change aimed at displacing populations, such as resettlement policies. The explanatory value of the subcategories is impeded by a lack of consistency.

⁴³ Displacements induced by dams and other development projects are usually not considered environmental displacements.

In recent years, the literature has mostly focused on climate change-related disruptions, neglecting other environmental causes of migration (Lassailly-Jacob 2006). Such disruptions have sometimes been categorised according to their pace: Brown distinguishes between climate *processes*, which are slow-onset changes, and climate *events*, which are sudden and dramatic hazards (2008: 16-17). Other distinctions are made according to the expected impacts of climate change, and three of them are usually selected as likely to induce migration flows: sea-level rise, droughts and extreme weather events (Piguet 2008; Intergovernmental Panel on Climate Change 2007b). Piguet notes that only sea-level rise is likely to produce large-scale, permanent displacement.

Overall, the usefulness of categorising environmental changes seems limited: patterns of migration, I argue, depend more on policy responses than on the type of change involved. Furthermore, environmental changes are often cumulative, and tend to mutually aggravate each other. Finally, they tend to be so diverse that the number of categories needed to accommodate all types of changes would be too large as to be meaningful from a practical point of view. Rather than drafting clear-cut categories, a more promising avenue consists in analysing these changes as part of different continua. Such continua would include:

- The geographical extent of the change, from the local to the global level. Some changes need to be addressed locally (a volcano eruption, for example), while others, such as climate change, require global action⁴⁴.
- The level of human responsibility in the change. Disasters used to be attributed to fate and destiny. Increasingly, human responsibility, including states' responsibility, has been acknowledged in disasters and other gradual changes. The acknowledgement of this responsibility is central to policies of compensation and environmental justice.
- The pace of the change. Migration patterns and policies differ greatly according to whether the change is brutal or slow-paced. Brutal changes usually trigger humanitarian assistance, whereas slow-onset changes can be best addressed through adaptation strategies and development programmes.

⁴⁴ Impacts from climate change, however, can also require local solutions in addition to the international framework.

Analysing environmental changes is a necessary but insufficient condition in order to understand the forces driving environmental migration. These changes are often intertwined with each other, but also with a wide range of other migration drivers, which mutually influence each other.

3.2. Multi-Causality

The biggest problem in analysing environmental changes is not their categorisation, but evaluation of their relative importance compared with other migration drivers. The literature has repeatedly emphasised the complexity of the relationship between environmental factors and migration. Although alarmists initially viewed it as a simple causal relationship and sceptics as a non-existent relationship, both positions evolved in recent years: alarmists admitted that environmental drivers were intertwined with other factors, while sceptics agreed that environmental factors could contribute to driving migrations. Comparing both approaches, Castles noted that environmental factors were ‘part of complex patterns of multiple causality, in which natural and environmental factors are closely linked to economic, social and political ones’ (2002: 5). This view has since prevailed in the literature, and has been part of a wider movement stressing the importance of environmental factors in social transformations (Diamond 2005).

Lonergan and Swain (1999) use evidences from El Salvador and Sahel to show how diverse factors interact to induce migration: ‘certain populations are becoming more vulnerable to environmental change because of other factors, particularly poverty and resource inequities intertwined with population growth, institutional constraints, and economic insufficiency’. They refute the idea that there could be a ‘direct cause and effect relationship between environmental degradation and population displacement’, and contend that ‘degradation of the environment is inextricably linked to (social, economic and political) factors’ (1999: 4). Though it might be ‘relatively easy to identify the parallel occurrence of environmental degradation and population movement’, they argue, movement takes place in response to a combination of stimuli, and not a single – be it environmental – stimulus. Hence ‘separating environmental processes from the structures within which they are embedded is both difficult and a distortion of reality’ (1999: 5).

The acknowledgement of multi-causality is a victory for both coalitions. Environmental processes are no longer perceived as separate from social, economic and political relations, as claimed by early alarmists, but rather embedded in them. On the other hand, they are no longer perceived either as non-existent, or minor migration drivers, as claimed by the most radical sceptics. Therefore the debate focuses on the importance of environmental factors amongst other drivers.

Hugo asserts that there can be no doubt that ‘the incidence of disasters has (...) increased as have the associated population displacements’ (1996: 113), but identifies several other factors that exacerbate the predisposing conditions for environmental migration, thus increasing the incidence of precipitating, migration-inducing events. Such factors include population growth, poverty, intensive agriculture, weak environmental regulations and corruption.

Environmental changes are increasingly perceived as a trigger for migration, if combined with predisposing conditions. These proximate predispositions have to do with social vulnerability, poverty, population density, policies, etc. Sceptics argue that these are the crucial determinants of the ensuing pattern of migration, even more so than the nature of the precipitating environmental change. Hence the underlying causes of environmental migration lie in social, economic and political processes. Alarmists argue these causes are to be found directly in environmental changes.

Environmental changes as causes of population movements are therefore best understood as precipitating events and processes, which can subsequently induce migration when they match predisposing factors. The fact that such changes are increasingly numerous and increasingly associated with population movements is not contested. The underlying causes of these movements, however, remain a highly debated topic among alarmists and sceptics.

4. Migration Patterns

Environmental changes are very diverse, and so are the migration flows induced by these changes. Although they are often gathered under the label of environmental migration, these flows actually represent a wide spectrum of migration patterns, trajectories and behaviours.

Many attempts have been made to classify and categorise them – Black rightly points that ‘there are perhaps as many typologies as there are papers on the subject’ (2001: 2).

My goal here is not to present yet another typology, nor to present typologies that have been suggested so far. The most pertinent of them, including the one made by Renaud et al. (2007), have already been presented in my coverage of the definitional issue.

A common shortcoming of many typologies is that they try to combine the classification of environmental changes with the classification of migration patterns (Jacobson 1988; Piguet 2008; Masters 2000). Such a combination is rooted in a deterministic perspective, which assumes that certain migration patterns correspond to certain types of environmental change. I argue that both classifications need to be separated, as migration patterns depend not only upon the type of environmental disruption, but also upon other social, economic and political factors, as well as individual characteristics.

Furthermore, different levels of analysis are often confused. Environmental migration is often viewed as a collective process, yet migration behaviours vary according to the individuals. Hence it is important to distinguish between different levels of analysis: the macro-, meso- and micro-levels. The micro-level relates to individual migration behaviours, whereas the meso-level is concerned with the movement of groups and the macro-level with global migration flows. Individual migration patterns can be different from patterns of the meso-level, let alone the macro-level. Given that most of protection regimes are based on individual persecutions, as will be shown in Chapters 7 and 8, this distinction is important to make.

Besides the different levels of analysis, there are a number of distinctions that need to be made, since not all migration flows are similar and nor do they require the same policy responses.

4.1. International and Internal Migration

The distinction between international and internal migration is one for which it is possible – and fairly easy to establish clear-cut categories. This distinction bears naturally an essential meaning for normative frameworks and policies: the fundamental building block of

international law remains states' sovereignty, thus any international agreement on environmental migration excludes consideration of internal displacement. Apart from the Guiding Principles on Internal Displacement, adopted in 1998 (Commission on Human Rights 1998), no document of international law offers any protection to those IDPs.

Research shows that most people moving because of environmental reasons tend to stay close to their former place of habitat, and travel relatively short distances, within their country (Hugo 1996). When international migration occurs, it is usually because former patterns of migration between two or more countries pre-existed prior to the environmental disruption (Entzinger 2008). Yet most policy proposals to address environmental change are rooted in international law (Falstrom 2001; Biermann and Boas 2007; Conisbee and Simms 2003), and therefore can hardly apply to internally displaced peoples.

Hugo, however, suspects that environmental factors are set to become more significant in impelling international movements, and not only internal movements (1996: 119). Sea-level rise is the main reason for the expected increase in international movements in the coming decades. Coastal and deltaic regions are the most densely populated worldwide, and the potential for migration from these areas due to sea-level rise is thus considerable. For many low-lying island nations, the possibilities of internal resettlement are extremely limited, so there will be a pressure for resettlement abroad, especially when strong social networks exist between the origin and destination countries, as it is the case between many island countries and Australia, New Zealand and the United States (Moore and Smith 1995). Hugo also points to some non-climate drivers that may account for an increase of international environmental movements in the future: the proliferation of migration facilitators, such as social networks between origin and destination countries, as well as the emergence of an international immigration industry. He concludes that 'a greater proportion (of environmentally-induced migration) will occur between nations in line with globalization trends and proliferation of migration networks and increasing numbers of institutions, businesses and people facilitating international migration' (1996: 119).

Finally, another type of environmental migrant highly prone to international migration are those attracted to a destination country by a perceived more favourable environment. Pull factors are the determinant migration drivers here, and these migrants are usually labelled 'amenity migrants' (Moss 2006; Greenwood 1985). This type of migration occurs both

nationally and internationally⁴⁵, but is also expected to increase as some countries benefit from a more favourable climate thanks to climate change⁴⁶. These migrants are worthy of mention, although they are not the focus of this work.

4.2. *Voluntary versus Forced Migration*

The distinction between voluntary and forced migration is often presented as paramount for the implementation of assistance and protection policies, but is not easy to make in the case of environmental migration. Environmentally-displaced persons are often labelled refugees, although they do not fit the legal definition contained in the 1951 Geneva Convention, irrespective of whether their movement is compelled or not. I first discuss the problematic use of this label before addressing the blurring between forced and voluntary movements in the case of environmental migration.

4.2.1. *The Refugee Label*

Suhrke observes that ‘the reason why the term “refugee” has been attached to a number of environmentally related population flows is grounded in sociological, not legal, reasoning’ (1994: 481). ‘Refugee’ has indeed a double meaning: sociologically, it refers to a person forced to flee her habitat and seek refuge elsewhere; legally, it refers to a person meeting the criteria defined in the Geneva Convention. In the literature, the debate on the definition of refugee has often revolved around the causes of displacement, and these are generally assumed to be political rather than economic or environmental. Zolberg *et al.* (1989) recognise that economic and political processes are interconnected – they don’t mention environmental processes – but assert the predominance of conflicts in the creation of refugee movements. They further contend that the fundamental distinction between refugees and migrants lie in the involuntary character of their movement.

⁴⁵ Examples of internal amenity migration include movements to Florida and other Southern states in the United States, or to Northern Australia. Examples of international amenity migration include retirees from Northern and Western Europe moving to Mediterranean countries.

⁴⁶ For example, this is the case for Russia and Canada.

Other authors, however, have provided much broader definitions, which can extend to include environmental displacees. Examples of such definitions include Olson's:

Refugees are forced to leave their homes because of a change in their environment, which makes it impossible to continue life as they have known it. They are coerced by an external force to leave their homes and go elsewhere. (1979: 130)

and Kunz':

It is the reluctance to uproot oneself, and the absence of positive original motivations to settle elsewhere, which characterizes all refugee decisions and distinguishes the refugee from the voluntary migrants. (1973: 130)

Such definitions are closer to the common, sociological notion of refugee, rather than its legal definition. As shown in the refugee controversy in the wake of hurricane Katrina, ignoring the sociological dimension of the term in order to focus solely on its legal connotations would be a profound mistake: refugees were not born with the Geneva Convention, and the term has an existence of its own. It bears heavy symbolic connotations of powerlessness and vulnerability. Suhrke further observes that symbolic connotations of the term 'refugee' are important not only for the migrant herself, but also for the host country or region:

Whether a population movement consists essentially of migrants or refugees has great significance for the impact on the receiving areas. Refugees (...) are more likely to be seen as a net burden in the receiving areas and typically require assistance. (1994: 10)

Thus speaking of 'environmental refugees' when discussing environmental migration is a double misnomer: it implies that the migrants benefit from a refugee status, which is not the case (legal misnomer), and also implies that they are all in refugee-like situations, which is hardly the case either (sociological misnomer). In many cases, environmental migrants respond to a combination of push- and pull-factors, and migration can be part of the solution to environmental stress, rather than the problem itself. Furthermore, as shown above, the term 'refugees' may be rebutted by the migrants themselves: its heavy symbolic load should not be underestimated.

4.2.2. *A Blurred Line between Forced and Voluntary Movement*

Though this distinction is essential, it is also highly controversial, and not as clear-cut as it might seem. Migration that is perceived to be voluntary often conceals a certain level of constraint, whereby migrants have little choice about the conditions of their migration. On the other hand, some cases of forced migration, such as resettlement, may leave some discretion to the displacee as to the time and place of her/his relocation. For these reasons, Hugo argues that ‘population mobility is probably best viewed as being arranged along a continuum ranging from totally voluntary migration (...) to totally forced migration’, rather than in clear-cut categories (1996: 107). This difficulty of clearly distinguishing between migrants and refugees is not only conceptual, but bears practical implications: Crisp (2007) notes that mixed groups of migrants make it increasingly difficult for states to differentiate between refugees and migrants.

Such observations are particularly valid when applied to environmental migration: whereas some people have to flee for their lives when faced with a brutal disaster, for example, most will experience a progressive degradation of their habitat, and decide to leave once a threshold has been reached, or once migration facilitators make it possible. Though their migration is compelled, those who migrate retain the possibility of choosing when and where to go. Most often, the line between forced and voluntary migration is blurred, and the distinction between ‘environmental migrants’ and ‘environmental displacees’ is also best understood as a continuum, in which amenity migrants represent one end, and people fleeing for their life in a disaster situation the other. The extent to which migration is compelled largely depends upon the time when migration occurs, an aspect that shall now be developed.

4.3. *Proactive and Reactive Migration*

Kunz (1973) makes a fundamental distinction between ‘anticipatory refugee movements’, in which people flee before the situation deteriorates, and ‘acute refugee movements’, where the objective is to find a haven of safety at a time of crisis. Richmond (1994) goes a step further

and argues that this distinction is more essential than the distinction between forced and voluntary migration, and it reflects the degree of autonomy of the actors regarding their migration decision. He applies the distinction to environmental migration, and differentiates between 'proactive migration' and 'reactive migration'. He argues that

Gradual environmental degradation, soil erosion, etc., may initially lead to proactive migration, but eventually result in reactive movements as the process of degradation accelerates. Reactive migration that combines environmental and social determinants occurs when whole communities are forced to move as a consequence of environmental degradation or disaster and re-establish in a new location.
(1994: 78-79)

The time when people move actually reflects their degree of autonomy as to their migration, and is often related to its degree of constraint. Islanders leaving Tuvalu because they are concerned with sea-level rise are considered voluntary migrants if they do so now, proactively. If they flee at a time when the island flooded however, they will be most likely considered as forced migrants – because they fled reactively. Yet those who fled New Orleans in prevision of Katrina were undoubtedly considered forced migrants, as were those trapped in the city and eventually evacuated. On the other hand, a New Orleaner leaving the city proactively, outside the hurricane season, because of the fear of another hurricane, would be considered a voluntary migrant. Furthermore, the threshold when environmental degradation becomes no longer bearable may vary greatly from one migrant to another, as does the degree of proactivity.

Two conclusions need to be drawn from these quick examples: first, the distinction between proactive and reactive migration does not exactly match the distinction between forced and voluntary migration, even though they relate to each other; second, these two types of migration are not discrete as 'before' and 'after' can be, and are thus best perceived as the two ends of a continuum. This continuum influences the policies that are implemented to deal with the migration: reactive migration suggests the development of humanitarian and disaster management policies, whereas proactive migration seems to be best addressed by migration policies and adaptation strategies.

4.4. *Short-Term and Long-Term Migration*

At what point is a movement considered a migration? Statistical guidelines usually consider that the duration of the move must be at least one year before it can ‘qualify’ as a migration (Bilsborrow et al. 1997). Hence temporary movements are not considered migrations. Although these guidelines were developed to collect data on international movements, they also apply, to a great extent, to internal movements.

The question of the duration of the movement is of great importance with regard to environmental migration. On the one hand, some kinds of environmental changes, such as floods and other extreme weather events, are assumed to induce temporary movements, and to allow people to return to their home after a short period of time (Piguet 2008). Empirical evidence, such as the displacements induced by hurricane Katrina, prove otherwise. On the other hand, although voluntary migration is often perceived as a long-term move, if not a permanent one, studies suggest that seasonal – hence temporary – movement can be an effective adaptation strategy to cope with environmental change (McLeman and Smit 2006).

I argue that the duration of the move is not only dependant on the nature of the triggering environmental change, but also, and more importantly, on the social and economic characteristics of the migrant, and on the policies implemented to address the movement and return of those displaced. Even though some changes are irreversible, such as sea-level rise, many of them are, and the possibilities of return for migrants will depend mostly upon social, economic and political factors.

For those displaced, when does displacement end? It is a long-standing question in refugee studies. The answer usually relates to policies: instead of setting a precise duration, it is considered that the displacement comes to an end when they displacees are able to return home, or when they have reached a livelihood level improved or comparable to their pre-displacement level (Cernea 2003). Similarly, setting a cut-off point between short-term and long-term migration makes little sense, and this distinction is best understood along a continuum. Migration initially thought to be of short-term can become permanent, as will be evidenced in the case of Katrina, where temporary housing became permanent habitat.

4.5. A Synthesis

In addition to the distinction between international and internal migration – which represent discrete categories – I have argued that three other important distinctions are best understood as a continuum, rather than as clear-cut categories. These continua, to a certain extent, are related to each other, and need to be considered together in order to provide a comprehensive picture of the migration flow, and to allow for the development of appropriate policies. I therefore propose considering them in a three-dimensional view, as shown below.

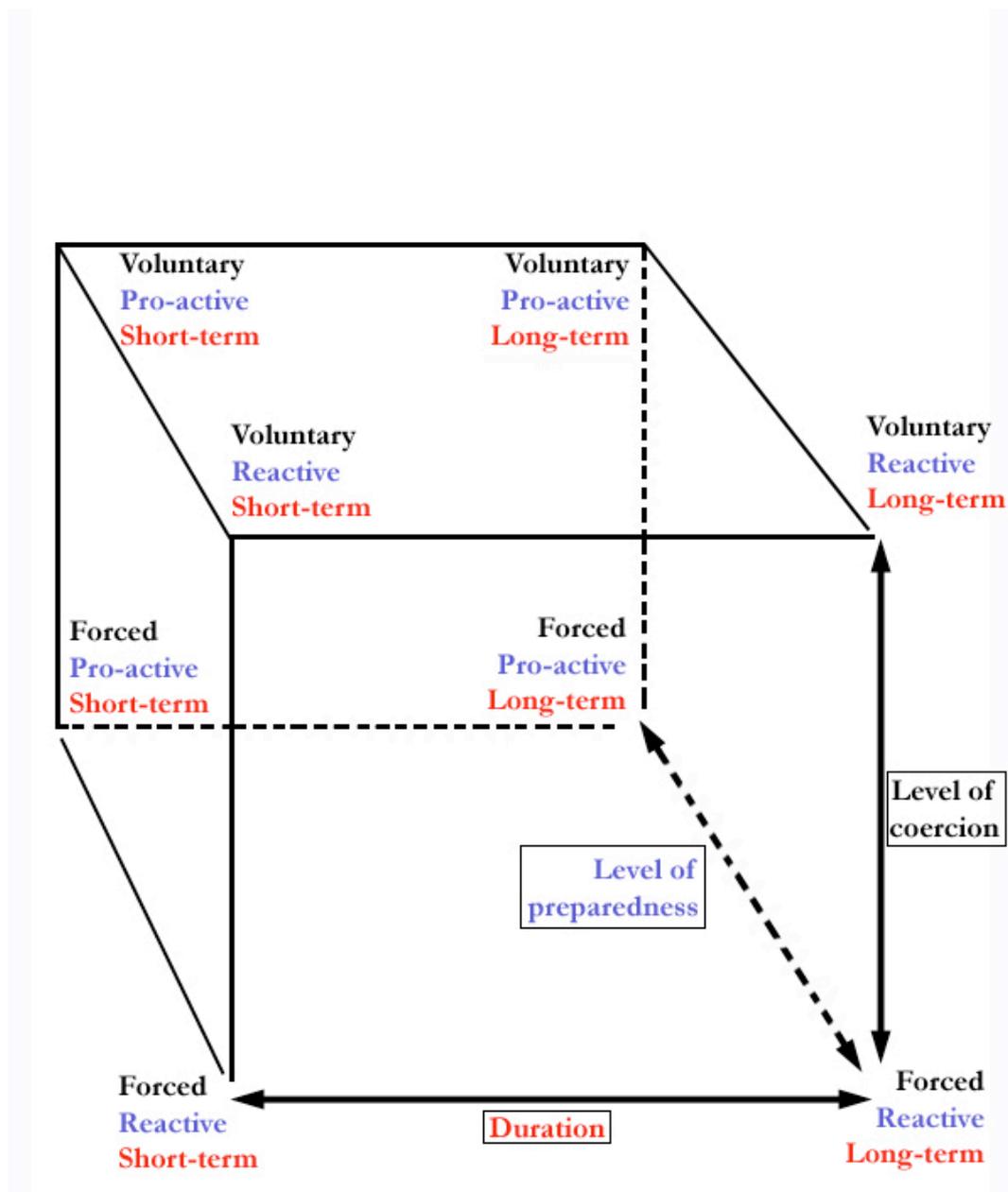


Fig. 3 – A three-dimensional view of environmental migration patterns

The two ends of the three continua are as follows:

- In the forced-voluntary continuum, at one end is migration compelled by a life-threatening event, and at the other an amenity migration;
- In the short-term – long-term continuum, at one end is a displacement where people are able to return to their homes after a few days, and at the other end a permanent relocation;
- In the proactive-reactive continuum, at one end is a carefully planned migration associated with a slow-onset environmental change, and at the other end an emergency evacuation.

This visual representation of the migration patterns, which can be duplicated for both internal and international migration, allows for a comprehensive overview of the main characteristics of the movement, as well as for a visual comparison between different types of movement. People evacuated after hurricane Katrina who were permanently relocated in another US city, for example, would be placed near the bottom right-hand edge at the front of the cube. Those leaving Tuvalu to relocate in New Zealand because they're concerned with sea-level rise would be placed near the top right-hand corner at the back of the cube. Both cases will now illustrate how different migration drivers and patterns interact with each other on the field.

5. Empirical illustrations

5.1. *Tuvalu*

From relative obscurity a few years ago, Tuvalu has become in recent years a media darling: no fewer than six television documentaries about the small archipelago have been produced in the last decade⁴⁷, and countless articles have appeared in magazines and newspapers. Despite

⁴⁷ These documentaries are: Aït Habbouche, M. and Corbière, H. (2007) *Tuvalu, les nouveaux réfugiés*. France, 52 minutes.

Bayer, J. and Salzman, J. (2005) *Time and Tide*. United States: Wavecrest Films, 59 minutes.

small variations, they tell pretty much the same story: that of a small atoll country whose very existence is threatened by sea-level rise, and its quest to accommodate its population abroad as ‘climate change refugees’. Portrayed as an Atlantis in the making or the canary⁴⁸ of global warming, Tuvalu has come to ‘epitomize the environmental catastrophe of worldwide climate change and sea-level rise’ (Chambers and Chambers 2007: 294). Particular emphasis is usually placed on ‘king tides’, high waters flooding the island at certain times of the year, that many see as an empirical evidence of the first impacts of climate change (Connell 2003: 89). A key scene in one of the abovementioned documentaries shows an islander packing his luggage to leave for New Zealand directly after the floods, afraid that another wave could wipe out his house (Ait Habbouche and Corbière 2007).

5.1.1. *The Current Conceptualisation of ‘Environmental Migration’ from Tuvalu*

This popularity of Tuvalu in the international media hardly comes as a surprise: one of the smallest and most remote countries on earth, Tuvalu seems to exemplify a typical case of forced migration induced by environmental change. The government of Tuvalu itself has encouraged this growing popularity, repeatedly emphasising the threats faced by the small archipelago, and the possibility of its disappearing. One year after the admission of Tuvalu to the United Nations, its permanent representative Enele Sopoaga addressed the 56th General Assembly in the following terms:

In the event of further rising sea levels, where are we to hide? (...) How ironic it would be if decades from now the last Member to enter the UN, Tuvalu, was the first Member State to withdraw because it has disappeared without a trace. (Sopoaga 2001)

Horner, C. and Le Gallic, G. (2004) *The Disappearing of Tuvalu: Trouble in Paradise*. France: Documentary Educational Resources, 75 minutes.

Lindsay, P. (2005) *Before the Flood*. United Kingdom: Stampede Limited, 59 minutes.

O'Connor, M., Jones-Middleton, S. and Tourell, W. (2001) *Paradise Drowned: Tuvalu, The Disappearing Nation*. New Zealand: Off the Fence, 47 minutes.

Pollock, E. (2005) *Tuvalu: That Sinking Feeling*. United States: PBS, 16 minutes.

⁴⁸ Historically, coal miners took canaries into mines as detectors of noxious gases. If a canary died, the miners realized that they were in a region of danger and took the necessary precautions.

From then on, most media reports would describe Tuvalu as a lost paradise, a remote community whose lifestyle, culture, and very existence were threatened by sea-level rise, leaving its people with no other choice than fleeing abroad⁴⁹.

However, Farbotko and Connell have demonstrated that such accounts fail to capture the complexity of environmental changes in Tuvalu and the realities of migration flows. Furthermore, they have shown that these accounts could actually hinder the adaptation efforts undertaken (Connell 2003: 102) and affect the inhabitants' resilience and resourcefulness, since they were represented as 'disempowered in the face of rising sea-levels, helpless victims of the refusal of Australia and other Western nations to promote mitigation of climate change or modify their policies towards refugees' (Farbotko 2005: 288).

Tuvalu has become essentially perceived through the lens of environmental displacement and vulnerability to climate change, a perception that has been consistently reinforced and sustained by the discourse of its government. Connell argues that 'for Tuvalu the greenhouse effect has proved an exceptionally powerful and all-embracing garbage can, encompassing the totality of observed environmental change and scientific explanation' (Connell 2003: 105). Reports on other environmental changes are scarce⁵⁰, and emigration is almost always described as the sole possible option in the face of climate change. It seemed therefore relevant to my research to examine how this option was considered by the islanders themselves, as well as the motives behind the migration decision of Tuvaluans who had relocated to New Zealand.

5.1.2. *Environmental Changes*

Although discourses on Tuvalu often reduce its environmental vulnerability to the impacts of climate change, the archipelago is affected by other types of environmental disruption. These disruptions are a major concern for the population, and yet are often overshadowed by

⁴⁹ See for example (Roberts 2007; Simms 2001)

⁵⁰ Some reports mention however issues related to waste management (Noualhat 2005) or unrestrained and ill-adapted development (Baram 2005).

climate change impacts in media discourses. They are described and discussed in this section, starting with climate change.

5.1.2.1. Climate change

Small island states are extremely vulnerable to climate change and sea-level rise, as stressed in the latest assessment report of the IPCC:

Sea-level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure, settlements and facilities that support the livelihood of island communities. (...) There is strong evidence that under most climate change scenarios, water resources in small islands are likely to be seriously compromised. (...) Climate change is likely to heavily impact coral reefs, fisheries and other marine-based resources. (...) It is very likely that subsistence and commercial agriculture on small islands will be adversely affected by climate change. (Mimura et al. 2007b).

Sea-level rise is naturally a major concern for the Tuvaluan population, and some have already started building small dikes to protect their house. Actual measurements of sea-level rise, however, are surprisingly scarce, and people tend to rely on their own observations and anecdotal evidence to find proof of the rise.

Twenty years ago, there were lots of beaches in Funafuti, lots of them... Now there's only one, close to the hotel. Oh, and there's one in the North, as well, but it's very small. It's very sad. Erosion is a big problem now, and there are also people who take sand from the beach to build their houses.

(Enate Evi)

Hunter calculated that the average long-term sea level change at Funafuti would be a rate of 0.8 mm per year (with a margin of error of +/- 1.9 mm), relative to the land. However, Hunter also noted that uncertainties in the calculated trend remained 'undesirably large' (Hunter 2002: 2), and Connell added that 'sea levels are not now perceptibly rising' (2003: 104). In the absence of reliable data, Tuvaluans turn to empirical observation for evidence of climate change. Two phenomena in particular attracted wide attention. The first is the disappearance of a small islet in the Funafuti lagoon. The islet, which used to be abundant in

trees, has now been reduced to a small pile of sand and rocks, which some see as evidence of climate change; others prefer not to put forward an explanation. The second phenomenon is probably more striking and has a deeper impact on peoples' perception of the dangers associated with climate change: every year around April, large parts of the atoll are submerged by 'king tides'. King tides are yearly high tides that come directly from beneath the ground, and penetrate it from behind. Instead of being carried by giant waves, the water springs directly and slowly from the ground, making the event even more spectacular. King tides used to occur once in every five or six years; they have now become annual, triggering fears of some that they might eventually become permanent.

Tomorrow I'll take you to the islet over there. It used to be like the islet you see there (he shows a distant, tree-covered islet, while the first islet is only a mass of rock)... But the trees fell into the water one after the other, no there's nothing left. I don't know if it's about sea-level rise or anything like that, but it didn't use to be like that.

(Eti Eseta)

Climate change in Tuvalu started when the islet started to drown, that was five years ago. And what happened to the islet can happen tomorrow to Tuvalu, people know that.

(Tataua Pese)

Last year we had to evacuate five families because of the king tides, they had to live in the school for one week. Every year we need to evacuate some families, but now they last longer, so it creates more damage and the people cannot return to their homes.

(Eseta Lauti)

Furthermore, the salinity of the soil has also considerably increased, rendering the culture of *taro* almost impossible. *Taro* is Tuvalu's main agricultural product and, besides fish, is its only natural resource. Moreover, the formation of Tuvalu atolls is primarily based on coral reef, which barely holds any soils, making planting on the atolls extremely difficult. Declining yields have forced Tuvaluans to rely increasingly on imported products for their diet, resulting in severe health problems, including diabetes.

Another consequence of climate change for small island states is the increased frequency of extreme weather events. A depression is created in the Pacific Ocean when the surface

seawater temperature reaches 27° C. The depression can develop into a tropical cyclone that then wanders around in the Pacific Ocean. Several times during recent years the islands have been hit by severe tropical cyclones even though the most northern part of the island group lies outside the “hurricane belt”. In 1997 Funafuti was hit by the three hurricanes⁵¹, Gavin, Hina and Helly. They eroded half a square kilometre of the 26 square kilometres island state. Memories of the hurricane Bebe, which devastated Funafuti in 1972, are still vivid amongst the population, and the fear that the atolls might be obliterated by a tropical cyclone is perhaps more present than the anxiety associated with sea-level rise. Tuvaluans know that they have nowhere to hide or evacuate in the case of an extreme weather event, and cannot plan their migration. They are particularly anxious that a storm surge might coincide with a king tide, especially at night when are sleeping. A cyclone that devastated Tonga shortly before my fieldwork had further reinforced this fear.

A lot of people died with hurricane Bebe. The problem here in Tuvalu is that we have nowhere to go.

If there's a hurricane, many people will die, that's for sure.

(Penieli Metia)

5.1.2.2. Other Environmental Issues

Climate change, however, is far from being the only environmental concern to Tuvaluans. The lack of freshwater is another major difficulty: without any rivers or lakes, the only source of water across all atolls of Tuvalu relies on rainwater that the islanders collect in water tanks. Scarcity of water is further compounded by the problem of an increasing island population that demands greater water consumption. Furthermore, Tuvalu atolls continuously suffer twin water problems that consist of freshwater shortage and saltwater flooding. Droughts have been more frequent in recent years, even though this might sound paradoxical for a country threatened by sea-level rise.

⁵¹ Hurricane is normally a term reserved for cyclones that develop in the Atlantic and the North East Pacific Oceans, whereas cyclones in the South West Pacific Ocean (where Tuvalu is located) are simply referred to as tropical cyclones (terminology of the National Hurricane Center, Miami). However, the word ‘hurricane’ was widely used by Tuvaluans to refer to tropical cyclones, hence the choice was made to keep using it when referring to specific hurricanes/tropical cyclones.

Another environmental problem concerns waste disposal and treatment. The demographic growth of Funafuti, as well as the increasing reliance upon imported goods, has led to a major problem of waste disposal (Noualhat 2005). Two dumps have been created in the borrow pits at both ends of the island, further aggravating the soil's vulnerability to sea-level rise. The dumpsites are also a source for infectious diseases and other health problems.

We asked the Americans to fill up the borrow pits many times, but they don't want to do anything, they say it's not their fault... But whose fault is it then? We've been living with these holes forever.

(Enele Sopoaga)

5.1.3. *The Multi-Causality of Migration*

The continuous migration flow between Tuvalu and New Zealand has often been presented by scholars (including myself before doing this work) as the epitome/archetype of environmental migration. For many alarmist scholars and a majority of the mass media, Tuvaluans represented the first sacrificial victims of climate change. This section aims to show that the perception by Tuvaluans of migration to New Zealand is much more complex than this determinist perspective, and is a social construct that finds its roots in the different perceptions of and discourses on environmental vulnerability.

5.1.3.1. Different Views on Climate Change and Vulnerability in Tuvalu

In contrast to popular belief, Tuvaluan views on climate change and the need to migrate are not homogenous: there are almost as many opinions on the subject as there are individuals living on the island, reflecting a variety of conflicting views on the effects of climate change in Tuvalu. These different views can be organised into two groups: those who do not want to leave, and those would like to leave.

Those Who Don't Want to Leave

The most commonly held view mixes resignation and despair: while acknowledging the reality of climate change, these respondents also expressed a deep attachment to their country, and asserted they would not leave even if the island was entirely submerged by the ocean.

This is my country, I'm ready to die here. I know some people who are leaving, but I don't want to go with them. I want to stay here.

(Eti Eseta)

I don't want to leave, if we all leave, Tuvalu is going to die, and I don't want that. We need to be there, this is where we need to be.

(Luisa Kakamua)

The international community needs to do something to help us. We're not responsible for climate change, so our country cannot disappear. The other countries need to fix this problem.

(Suilia Toloa)

Others adopted a more optimistic tone, and believed it was possible for the country to adapt, even though it would require international assistance. These respondents tended to regard migration as a defeat, and would only consider it if all other migration strategies had failed. Those holding this view were usually amongst the most educated respondents, and closer to the government.

If we have enough resources to adapt, Tuvalu can be salvaged. It's all a matter of money, you know. I don't think Tuvalu will disappear, there's no need to migrate. It's not God's plan for Tuvalu to move.

(Sakala Tekavatoetoe)

This discourse, however, could sometimes appear a little disingenuous: a representative of the government held forth in this vein for about half an hour before admitting, off the record, that he was actually due to leave soon and had bought some land in Fiji.

Others refused to acknowledge climate change as a problem, and viewed sea-level rise as a natural process:

We are an atoll country, it is normal that the sea-level changes with the tides and the currents. One day it goes up, the other day it goes down.

(Risasi Finikaso)

A few reacted angrily to my presence, and claimed that climate change was an invention of industrialized countries to scare island nations.

We didn't have any problem before people like you came and started talking about climate change...

Now the people are leaving for New Zealand because of you.

(Pulafagu Toafa)

A small, religious minority remained convinced that divine intervention would save Tuvalu at the eleventh hour, because God had made the promise to Noah that there would be no more flooding on Earth. The Church is now considering the problem seriously, and has started raising awareness about the problem, as well dismissing Noah's story as a metaphorical legend, not to be taken literally.

Those Eager to Leave

Among those considering migration as an option, there were two contrasting commonly held views: a first group envisioned migrating out of the fear that the island would be brutally flooded.

I don't want to wake up one morning with the island washed away, look what happened in the Solomon Islands! I prefer to leave now before I have no other choice: I don't know what can happen to our country, so I will apply for the Pacific Access Category as soon as I will have enough money.

(Nofoalofa Petero)

A second group considered migration in a more proactive fashion, as a way to reduce environmental vulnerability and develop other projects in New Zealand.

The future of Tuvalu is uncertain, so I think I'll be better off in New Zealand. Life is better in New Zealand anyway, there are no opportunities in Tuvalu.

(Kumitia Tekaa)

In most cases, environmental factors mixed with economic and social factors. Most of these would-be migrants had family in New Zealand already, and their family ties were a strong

additional ‘pull factor’. Respondents with families often considered migration to be in the interest of their children, and thus as a risk-reduction strategy for the family.

This overview of attitudes towards climate change and migration shows that migration is not conceived of in a determinist framework, but is rather a decision taken by the migrant based on personal perceptions, values and interests. A similar perception of climate change could lead to two different outcomes (stay/leave), whereas different views on the impacts of climate (Tuvalu will survive/will disappear) could lead to the same outcome. Hence there was no direct causal relationship between climate change, attitudes towards its effects, and migration behaviour. Other factors, such as personal values and interests, need to be accounted for in order to understand migration behaviours.

5.1.3.2. Different Migration Drivers to New Zealand

Concern about climate change was very apparent amongst the Tuvaluan community in New Zealand, even though they had no direct experience of the situation. Almost all migrants interviewed indicated that climate change and rising sea-levels had been a concern, although not always the main one, in their decision to move to New Zealand.

All respondents shared a common concern for the climatological state of their home island and were very aware of the trouble and difficulties that their families were facing back on the island. All feared that their country was in danger of being submerged under the seas, and this fear was widespread amongst all age groups. Most respondents had a good understanding or fair knowledge of the impacts of climate change on their islands, and had heard from families and/or personally experienced flooding situations and coastal erosion.

When I left, it was clear that it would be going worse year after year. My brother was here already with his family, so it was easier for me to leave Tuvalu. I return once a year, because I still have family in Tuvalu. Maybe they’ll come as well to New Zealand, one day. That depends on how bad it gets. [...] I don’t know if Tuvalu will disappear or what [sic], but I don’t think people have a future in Tuvalu, it’s going to get worse.

(Tomalu Talu)

Family ties and social networks played an important role in their migration: many mentioned the help they received from island community groups during the immigration process, such as sponsorship, help seeking employment, or even assistance in filling in the immigration application forms. Economic factors also played a significant role in the migration decision, and almost all respondents mentioned unemployment or insufficient income as a reason driving their migration decision.

Finally, it should be noted that many of those interviewed wanted to obtain New Zealand citizenship, with the ultimate goal of being able to move to Australia under the aegis of the Trans-Tasman Travel Arrangement (TTTA). The TTTA, a non-binding immigration procedure applied and supported by both the governments of New Zealand and Australia, allows Australians and New Zealanders to travel to, live and work for an indefinite period in each other's country without restriction.

In two years from now I'll be able to get a kivi passport, I want to go Brisbane. I've always wanted to go to Australia, I'll open a business there. I don't know what kind of business yet, but I want to have my business. Work is too hard here in New Zealand.

(Molu Tavita)

Overall, although concern for the future impacts of climate change and its current impacts was generally present in the migration decision, this driver was not always the decisive one, and economic and family factors were also significant drivers.

5.1.4. *Migration Patterns*

Before examining the migration patterns of Tuvaluans, it should be noted that the whole Polynesian region is highly prone to migration. Migration is a significant pattern of lifestyle, and even a social routine at times (Connell and Conway 2000). Bedford (1992) argues that whole Pacific region is a migration system, with regular and sustained migrations flows between Australia, New Zealand and Pacific countries. He contends that these flows are dominated by labour and education migration.

5.1.4.1. A Compromised Tradition of Migration

Among the respondents interviewed, there were many that had migrated several times during their lifetime, some up to eight times. Throughout the islands' history, 'migration has long been significant in Tuvalu' (Connell 2003: 94). From the beginning of the 20th century, widespread labour migration first occurred to plantations in Samoa and Queensland, and then diversified onto the phosphate mines of Banaba (Kiribati) and Nauru. Migration increased after the Second World War, and further diversified 'as Tuvaluans were trained to work as merchant seamen on the ships of overseas lines, alongside continued migration to Nauru, both of which activities brought a substantial flow of remittances to Tuvalu' (Connell 2003: 94). When phosphate mines in Nauru were exhausted, migrant workers were shipped back to Tuvalu, resulting in a significant decrease in remittances. In the absence of higher education in Tuvalu, most Tuvaluans are trained overseas, largely at the University of the South Pacific in Fiji (see below).

In recent years, migration opportunities in the region have decreased, and international migration has been increasingly difficult: for example, the Nauru mines were closed, and political tensions between Tuvalu and Fiji led to the suspension of the visa waiver programme. Under the government of John Howard, Australia also implemented a very stringent immigration policy towards Pacific islanders. Unlike most islands in the region, Tuvalu is completely independent, and is not a protectorate, dominion or colony of any larger country. Accordingly, while Tuvalu's neighbours have different migration opportunities, this small nation has witnessed its migration options shrink radically over the past few years, and the government has been actively seeking new migration opportunities for its citizens, with limited success.

The problem is that we don't have anywhere to go. Before, there were several possibilities, but we feel a bit stuck now. It is vital that we develop new migration opportunities, for the economy but also with regard to climate change. Tuvalu has no natural resources. Its only natural resource is its people.
(Avafoa Silu, Foreign Affairs Secretary)

5.1.4.2. Tuvalu's Migration System

Internal Migration

The most important migration flow in Tuvalu is internal migration. Since the Australian government donated the Nivanga boat to the Tuvaluan government in the late 1990s, migration and movement between the different atolls has expanded considerably. Before the boat was introduced, the only public means of moving from one atoll to another was a seaplane, whose maintenance was extremely costly and which could only carry a very limited number of passengers. Not only did international aid supply an easier way to travel between the atolls, it also provided a major 'pull' factor to do so, since Funafuti underwent rapid development in the late 1990s and early 2000s. International support was provided for the establishment of numerous facilities, including a new administrative building, a hospital, a telecommunications centre, a wharf, and the development of a maritime school just outside of Funafuti. Furthermore, the royalties derived from the sale of the ".tv" internet domain allowed for the asphaltting of the Funafuti road system and the introduction of luxury goods such as DVD players and plasma screens on the island. Migration from the outer islands to Funafuti boomed, and, as mentioned above, the government is now seeking to develop services and facilities on the outer islands as well, in order to slow down this continuous flow.

Overpopulation is really the biggest problem in Tuvalu right now. People have no place to live, it's impossible to buy land or build a house. Hopefully if there are services and shops on the outer islands as well, people will be less inclined to come. That's why we're helping the government in this endeavour and we're providing funding to develop new infrastructures and facilities in Vaitupu and Niutao.

(Kirk Yates, NZ Aid)

Fiji

Migration to Fiji is relatively important thanks to the presence of the University of the South Pacific in the capital, Suva, of which Tuvalu is an associate member. Students at the University usually receive a scholarship from the Asian Development Bank or the South Pacific Commission (SOPAC), which allows them to bring their family with them for the duration of their studies. Upon completion of their degree, students – and their families – are required to move back to Tuvalu. International and regional organizations, such as the local offices of UNDP or SOPAC, are another major source of the Tuvaluan presence in Fiji. Tuvaluan civil servants working for these organizations typically settle in Fiji with their

families. Finally, a limited, but sustained flow still exists between the atoll of Vaitupu and the island of Kiao, which was purchased from Fiji in 1951. Since 2005, Tuvaluans from Kiao have been entitled to Fijian citizenship. However, migration flows between Tuvalu and Fiji have considerably slowed down since the introduction of a visa for Tuvaluans and other Pacific Islanders. Tine Leuelu, Tuvalu's High Commissioner in Fiji, recalls nonetheless that the Tuvaluan presence in Fiji remains considerable, and that community organisations are active and well-structured.

Australia and the United States

Migration to Australia or the United States is extremely limited, due to tight migration policies and controls. According to the Tuvaluan Ministry for External Affairs, there are no more than 300 Tuvaluan residents in Australia, mostly in the area of Brisbane. Australia, however, remains commonly viewed as an El Dorado, and a major incentive to take up New Zealand citizenship, since migration between Australia and New Zealand is unrestricted for those holding a citizenship from one of the two countries.

I would like to migrate to New Zealand when I'll have enough money. I will work there for three years or so, and then I want to move to Australia. That's where I want to stay, because life is better there.

(Oketopa Tinilau)

New Zealand

Migration between Tuvalu and New Zealand remains much more significant, since an estimated 3,000 Tuvaluans currently live in New Zealand⁵², mostly in the West Auckland area, as shown on the map below.

⁵² The official figure was 2,625 on 1 January 2007, but there are an estimated few hundred thousand undocumented migrants.

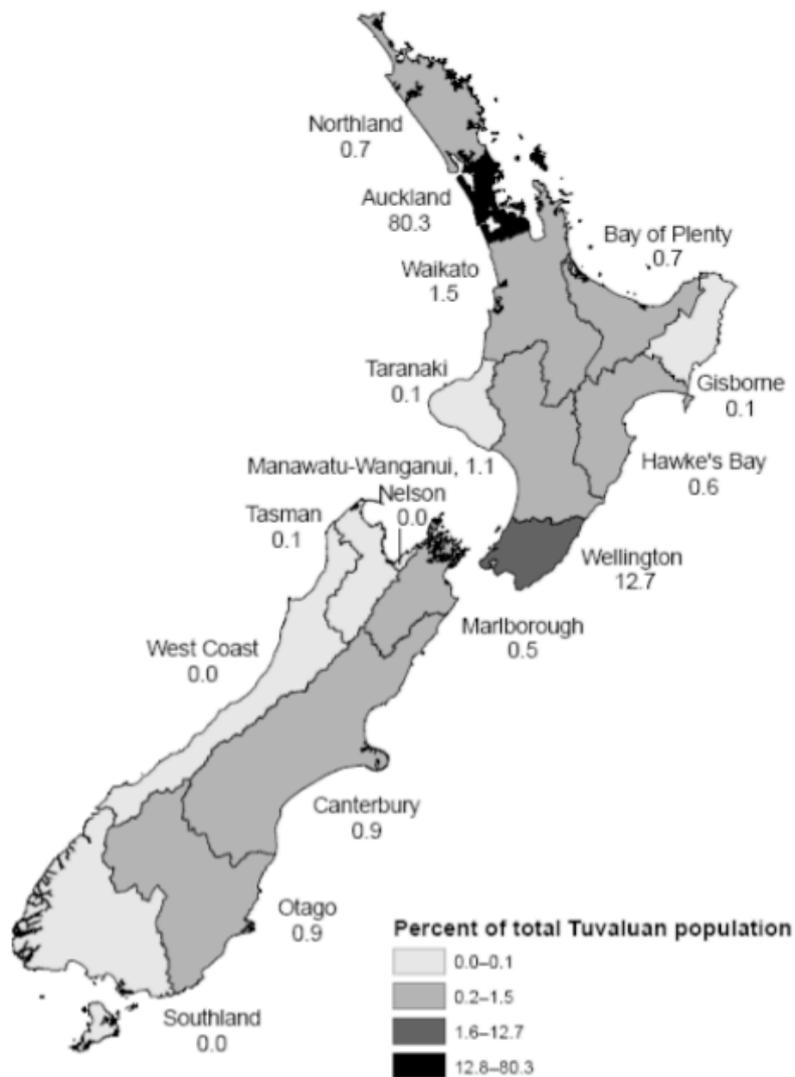


Fig. 4 – Tuvaluan population in New Zealand (Statistics New Zealand 2007)

Between 2001 and 2006, the Tuvaluan population in New Zealand increased by 34 per cent. Of this total, those born in New Zealand accounted for 37 per cent, and those who were able to hold a fluent conversation in Tuvaluan accounted for 71 per cent, a figure that has remained steady since 2001 (Statistics New Zealand 2007).

Pacific immigration to New Zealand has had a tortuous history: in the 1970s, the New Zealand government was highly concerned with Tongan over-stayers, who were perceived to be trouble-makers and arrested by the police in dawn raids. Dawn raids later extended to illegal migrants of all nationalities, who were detained and sent back home, while Polynesians were subject to random searches by police in the streets: this caused serious trauma to the relationship between New Zealand and its Pacific neighbours, as well as an embarrassment for

the New Zealand government. McDonald observes that New Zealand and its Pacific neighbours are still 'tied into a neo-colonial relationship' by aid, trade and immigration, a relationship in which New Zealand's goodwill is an essential and dominant factor (McDonald 1977).

The Tuvaluan community in Auckland is a vibrant one, and maintains strong ties with those remaining in Tuvalu. Community-based culture is still evident among Tuvaluan New Zealanders mainly through church activities, island celebration functions and sports events. However, it is not as strong and obvious as back home in the islands due to the different life style and financial pressure of making a living in New Zealand. The traditional Tuvaluan culture does still exist, but it has been blended with New Zealand culture. The greater distance between the houses of Tuvaluans has also diluted the strength of the community-based culture compared to on the island.

Tuvaluans in New Zealand share a lot of common concerns with other Polynesian communities and the relationship with other Polynesian communities remain strong. In general, Pacific Island groups in New Zealand face similar struggles with housing, employment and health issues. It is also worthwhile noting that inter-marriages of Tuvaluans with other Polynesians has further enhanced the strong ties between Tuvaluans and other Polynesian groups, such as Samoa, Tonga and Maori populations in New Zealand.

5.1.5. Conclusion

The migration process between Tuvalu and New Zealand is far more complicated than is often described, particularly in the media. The dominant approach is an alarmist one, whereby flows of refugees flee the rising sea-levels of Tuvalu to seek refuge in New Zealand. From an external point of view, Tuvalu at least has an interest in reinforcing this approach, in order to gather support for its plight.

Internal points of view contrast radically with that which plays out beyond the realm of domestic policies. First, most Tuvaluans are unwilling to leave their country, and believe that Tuvalu will not necessarily disappear. Second, those who have migrated to New Zealand did so for other reasons besides climate change, including economic opportunities and family ties. Although environmental factors affected their decision to migrate, the key factor seems to

have been an uncertainty regarding the future of their country, and their migration can often be characterized as a risk-reduction strategy for the family. Even in apparently obvious cases of environmental migration, the relationship between environmental change and migration flows cannot be characterized as a direct, causal relationship. On the contrary, it seems that environmental migration as a concept is a product of individual perceptions and interests, as well as of domestic and external policies. This does not mean that the threat of climate change is not real, or that environmental factors do not play a role in migration behaviour, but rather that the importance of such factors – environmental migration as a concept – is a social and political construct.

This construct is underpinned by a wide range of interests and strategies, mobilised by actors in New Zealand. In order to garner support and attract development aid and funding for adaptation strategies, the government of Tuvalu has joined the ranks of the alarmist coalition. The majority of the media are also part of the alarmist coalition, as well as many researchers: typically those who have not conducted fieldwork on the archipelago. Those who have spent time with Tuvaluans tend to adopt a more sceptical stance, as does – officially – the government of New Zealand, in order to justify its labour migration schemes. However, in order to promote its position amongst Pacific countries and as a frontrunner of the fight against climate change, the country might be tempted to switch coalition in a near future, especially if international pressure continues to mount around this issue.

5.2. *Katrina*

In the aftermath of hurricane Katrina, approximately 250,000 people fled or were evacuated to Houston, Texas. They were greeted by cheerleaders, and provided with food, clothes and blankets. The media widely reported on these displays of generosity, and news reports described evacuees expressing their desire to settle in Texas (Hopkins 2007b: 10). In the days following the arrival of the evacuees, beds and basic facilities were installed in stadiums, convention centres and supermarkets; children were schooled and paired with local pupils; and job fairs were organized so that evacuees could take up temporary jobs. A few weeks later, however, Houston started experiencing problems that many residents associated with the massive influx of migrants from flooded New Orleans: a rise in crime, traffic jams, a housing crisis, unemployment, social unrest... One year later, the songs and dance routines of the cheerleaders had turned to complaints and anger. On the first anniversary of the disaster,

on 30 August 2006, 1700 Houstonians gathered at a meeting to urge Mayor Bill White to send evacuees back to New Orleans. The housing scheme implemented by Houston was perceived by residents as a 'giveaway' programme, and residents asked the authorities to stop the assistance programme for evacuees (Kilday 2006). The attitudes expressed at this event were far from just anecdotal; this story is supported by the results of the annual survey of Houston conducted by sociologist Stephen Klineberg. Even though 97 per cent of the respondents agreed that 'the Houston community really came together to help the evacuees' and 85 per cent of them personally donated money, food or volunteer time to help them, 74 per cent acknowledged that helping the evacuees had put a 'considerable strain on the Houston community', and 66 per cent associated a major increase in violent crime with the evacuees' presence. Overall, 47 per cent of the respondents felt that the impact of the evacuees in Houston had been a bad thing for the city, while 36 per cent thought the opposite. One year later, this number had shrunk to 11 per cent, while 65 per cent said the overall impact of evacuees had been a 'bad thing' for Houston (Klineberg 2006).

One of the most striking effects of Katrina is the demographic depletion of the city of New Orleans. Three years after the disaster, barely half of the population has returned to the city, whereas the other half remains scattered throughout the United States. The situation in Houston mentioned above is representative of the unexpected impacts of a population movement that was first believed to be temporary, both by the evacuees and the emergency planners.

5.2.1. *The Environmental Disruption*

How the disaster unfolded is now a well-known story, and there is little point covering it in great detail. A few points, however, are worth keeping in mind.

The main reasons why New Orleans was flooded were the huge storm surge and the failure of the levee system. Hurricanes were hardly a novelty for New Orleanians, but Katrina was 'the big one', the hurricane they had been dreading for years (van Heerden and Bryan 2006). It should be stressed however, that Katrina was only a Category 3 hurricane⁵³ when it made landfall, and that this landfall occurred about 40 kilometres west of New Orleans.

⁵³ The damage potential of hurricanes is measured on the Saffir-Simpson scale, which ranges from 0 to 5.

The hurricane hit New Orleans on August 29, 2005, and was followed by a huge storm surge, formed in the Gulf of Mexico. Many experts had warned that the levees that were supposed to protect the city would not be able to contain a massive storm surge, and this is exactly what happened (van Heerden and Bryan 2006). The city was almost entirely flooded in a matter of hours, and pumps were unable to drain the muddy water for about three weeks. About 75 per cent of the houses were destroyed, and 2,000 casualties were reported. Moreover, around 1.5 million people were displaced, many of whom scattered across the United States. The majority of the population had evacuated before the hurricane hit, but approximately 15 per cent, roughly 67,000 people, remained stranded in the city.

The causes of the disaster were mixed. While many insisted on the social vulnerabilities, lack of preparedness and levee failures, others linked the exceptional magnitude of the hurricane to climate change (Gelbspan 2005). The linkage between climate change and hurricane magnitude is highlighted in the IPCC's fourth assessment report, issued in 2007 (Intergovernmental Panel on Climate Change 2007b). This latest report by the IPCC indicates that the strength of hurricanes will increase in the future (Intergovernmental Panel on Climate Change 2007a), and many in New Orleans fear a Category 5 hurricane whose path would include the city itself (McQuaid and Schleifstein 2006).

Ultimately, it seems difficult to directly link the hurricane with climate change: its causes were multiple, both natural and anthropogenic. I shall now turn to describe the migration patterns that preceded and followed the event – as will become evident, they had little in common with those observed in Tuvalu.

5.2.2. *Migration Patterns*

Two phases of migration occurred: the first one was concerned with the evacuation and its aftermath, while the second phase was concerned with the return and relocation of about one half of these inhabitants.

5.2.2.1. The Evacuation

The evacuation of the Gulf Coast was the largest internal displacement ever experienced in the United States: an estimated 1,200,000 people fled the Greater New Orleans area in a couple of days, a displacement whose magnitude has frequently been compared to the Dust Bowl migration (Grier 2005). Interestingly, both events were induced, at least in part, by environmental changes.

The evacuation plans of local authorities drew much criticism from commentators and scholars alike (Shughart II 2006; Brinkley 2006). Shughart recalls that

Despite the alarms being sounded by LSU's⁵⁴ storm-trackers and a personal telephone call on Saturday from the director of the National Hurricane Center warning him of the seriousness of the threat New Orleans faced, Mayor C. Ray Nagin did not issue an order to evacuate the city until Katrina was within 48 hr of making landfall and did not make evacuation mandatory until late Sunday morning, when fewer than 24 hr remained (2006: 37).

The Governor of Louisiana, Kathleen Babineaux Blanco, was also widely accused of being too slow to react, and for delegating much of her power to Mayor Nagin when it came to the evacuation. In the final report of the committee set up by the House of Representatives to investigate the government failures before and after hurricane Katrina, it was noted that:

Despite warning 56 hours before landfall, Governor Blanco and Mayor Nagin delayed ordering a mandatory evacuation in New Orleans until 19 hours before landfall. (...) The failure to order timely mandatory evacuations, Mayor Nagin's decision to shelter but not evacuate the remaining population, and decisions of individuals led an incomplete evacuation. (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006: 2)

This criticism, however, must be nuanced. Most of the respondents I interviewed were critical of the federal administration, and the Federal Emergency Management Agency (FEMA) in particular, but many of them praised the local authorities for the way the evacuation was handled. Even though this observation has no statistical value, I observed that poorest

⁵⁴ LSU stands for Louisiana State University

respondents had a stronger tendency to blame the federal administration, and that their judgment of the administration was – unsurprisingly – strongly correlated with their experience of the evacuation: an horrendous experience was more likely to be associated with criticism towards the administration.

Two Stories of the Evacuation

As Kiefer and Montjoy have observed, there are actually two stories of the evacuation (2006: 122). The first tells the tale of the relative success of the traffic flow management for those who evacuated by themselves – the vast majority of the population. This success was achieved in large parts thanks to a contraflow system that was implemented on the I-10 motorway⁵⁵. The contraflow allowed motorists to use both sides of the motorway, thus reducing potential traffic jams considerably, although several respondents recalled that it took more than ten hours to drive to Baton Rouge during the evacuation, instead of the typical hour and a half. Boyd also notes that more than one million people moved out of harm's way within 48 hours, a number far above the 65 per cent exit capacity of the city. This number represented 90 per cent of the population at risk, but only 65 per cent of those who did not own a car (car-less population) (Boyd 2006).

The other story of the evacuation is the one that drew the most attention: around 15 per cent of the population of New Orleans, representing about 10 per cent of the population at risk, did not evacuate, because they were unable or not willing to do so. Boyd further asserts that about 110,000 people rode out the storm at home or in a friend or relative's house, including 70,000 in New Orleans (2006).

Following the hurricane, these people were gathered the Superdome football stadium, which had previously been identified as a refuge for the stranded population. As the Superdome exceeded its capacity, inhabitants moved into the Convention Center, where similar facilities had not been installed. Some stranded residents were also directly evacuated by federal, state and local agencies, as well as by local volunteers. Coast Guards were credited with 33,000 rescues, and Louisiana Wildlife and Fisheries with 22,000 rescues (Boyd 2006).

⁵⁵ The I-10 is the principal exit route out of New Orleans, and connects the city to Baton Rouge, and further to Texas.

These two stories resulted in a strange paradox: although the evacuation of the city overall was a relative success, it was the incompleteness of the evacuation, abundantly depicted in the media, that triggered public uproar concerning the management of the disaster. The evacuation rate was far higher than the most optimistic predictions of evacuation planning experts (van Heerden and Bryan 2006), but the fact that about 70,000 individuals remained stranded in the city in appalling conditions was the focus of the most vehement criticism of the disaster management. I argue that the reason for this was that the evacuation was racially and socially stratified, exposing massive inequalities in vulnerability. These inequalities had been grossly neglected, and this negligence was perceived as racism. In the abovementioned survey conducted for *The Washington Post* by the Kaiser Family Foundation and Harvard University, 68 per cent of the respondents claimed race and poverty had impacted on the speed of the rescue efforts ("Survey of Hurricane Katrina Evacuees" 2005), even though the official assessment of the authorities' failures rather pointed to a lack of preparation, coordination and initiative, without mentioning race and poverty as determining factors (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006).

The Social Vulnerabilities of Those who Did Not Evacuate

The reasons why people did not evacuate were multiple and intertwined. A survey conducted by *The Washington Post*, the Kaiser Family Foundation and Harvard University among evacuees in Houston identifies the main factors that impacted upon the migration decision of those who stayed behind ("Survey of Hurricane Katrina Evacuees" 2005):

	<i>Yes (%)</i>	<i>No (%)</i>	<i>Main reason (%)</i>
I did not have a car or a way to leave	55	45	36
I was physically unable to leave	22	48	5
I had to care for someone who was physically unable to leave	23	76	7
I waited too long	42	58	7
I thought the storm and its aftermath would not be as bad as it was	64	35	29
I worried that my possessions would be stolen or damaged if I left	27	73	4
I didn't want to leave my pet	9	90	1
I just didn't want to leave	37	62	10

Table 2 – Key reasons why New Orleans residents did not evacuate. Source: ("Survey of Hurricane Katrina Evacuees" 2005)

- Fifty five per cent of the respondents indicated that a reason for their not leaving was they did not own a car or had no way to leave, and 36 per cent indicated that was their main reason for not leaving. It is useful to mention here that roughly one quarter of the New Orleans population did not have a car, a situation highly unusual in American cities. Furthermore, internal mobility was more limited in New Orleans than in other American cities: 77.4 per cent of the people living in New Orleans were born in the city, and had lived there most of their lives (Fussell 2006), and some had never been out of the State of Louisiana or even the city. Some of the respondents I met did not evacuate because they simply did not know where to go.

- Another prominent reason that prevented people from evacuating the city was the idea that the storm would not be as big as it was. Sixty four per cent of the people surveyed mentioned it a reason not to leave, and it was the primary reason for 29 per cent of them. This might sound surprising given the numerous warnings and intense media coverage of the hurricane. However, as stated above in the first section, one must keep in mind that New Orleans was frequently on the path of hurricanes, and evacuations were almost an annual routine, resulting in a 'cry wolf' effect. As expressed by one interviewee:

I didn't want to evacuate, I thought it would be like every year, a lot of hassle, and the traffic jams, all for nothing... My children finally convinced that I had to evacuate, and they came to pick me up at 5 in the morning. I had only packed a few things, because I thought we'd be back the day after, as always.

(Mary Altazan)

- Some were also unable to leave (22 per cent of those surveyed), or had to care for someone who was unable to leave (23 per cent of the respondents). One of these two reasons represented the main reason for not leaving for 14 per cent of all respondents. Evacuation procedures lacked provisions for those who were ill or disabled. At a conference on the evacuation of the car-less population, many participants pointed out the need for the city to compile a database of all its disabled residents, in order to be able to organise their evacuation preventively in case of a new hurricane alert. A girl in her twenties that I interviewed told how she had decided to ride the storm in her home at Kenner⁵⁶ because she refused to leave behind her old neighbour, who was unable to evacuate and apparently not being taken care of by the authorities. The situation in hospitals was very difficult: approximately 250 residents were stranded in the city's Memorial Hospital, among whom 34 eventually died as a result of Katrina (Curiel 2006: 2067). Some medical personnel chose to administer some patients with lethal doses of morphine, knowing they would not or could not be rescued, or that their medical condition could not tolerate an evacuation procedure. These cases have been widely discussed and meditated upon, and serve as a perfect illustration of the disarray in which medial personnel were left.
- Other reasons included a too long wait (42 per cent), concern that the house would be burgled or possessions stolen (27 per cent), a refusal to abandon pets (9 per cent), and simply a refusal to leave (37 per cent)⁵⁷. Pets were not allowed in shelters, and some residents refused to leave them behind. An interviewee explained that she did not want to leave her dog behind, and she knew the dog would not be allowed in shelters. When she saw the water rising in her house, she decided to borrow her neighbours' canoe, and canoed up to the French Quarter, since she had heard on the news that

⁵⁶ A suburb of New Orleans where the international airport is located.

⁵⁷ Multiple answers were allowed.

this part of the city was not flooded. She then let herself into an unoccupied friend's house, and stayed there for a few days. Another interviewee did not want to leave his French Quarter house unoccupied, so he bought himself a gun, and rode out the storm in his house.

Such a survey, however, fails to capture other reasons that account for why some segments of the population did not evacuate. Laska and Hearn-Morrow have shown how social vulnerabilities were concentrated in New Orleans (2006: 10): these factors included poverty, race, lack of personal vehicle, and rented housing. Evacuation required money for food, gas and lodging, and many poor families were unable to afford the expense. Furthermore, the hurricane struck at the end of the month: many of the poorest residents were awaiting their pay cheque, leaving even fewer resources available for their evacuation (Fussell 2006).

GIS maps illustrate the role played by poverty and race in this process. The following map shows that the neighbourhoods with the lowest evacuation rates were also the poorest neighbourhoods of the city, or immigrant neighbourhoods (Vietnamese immigrant neighbourhoods in particular):

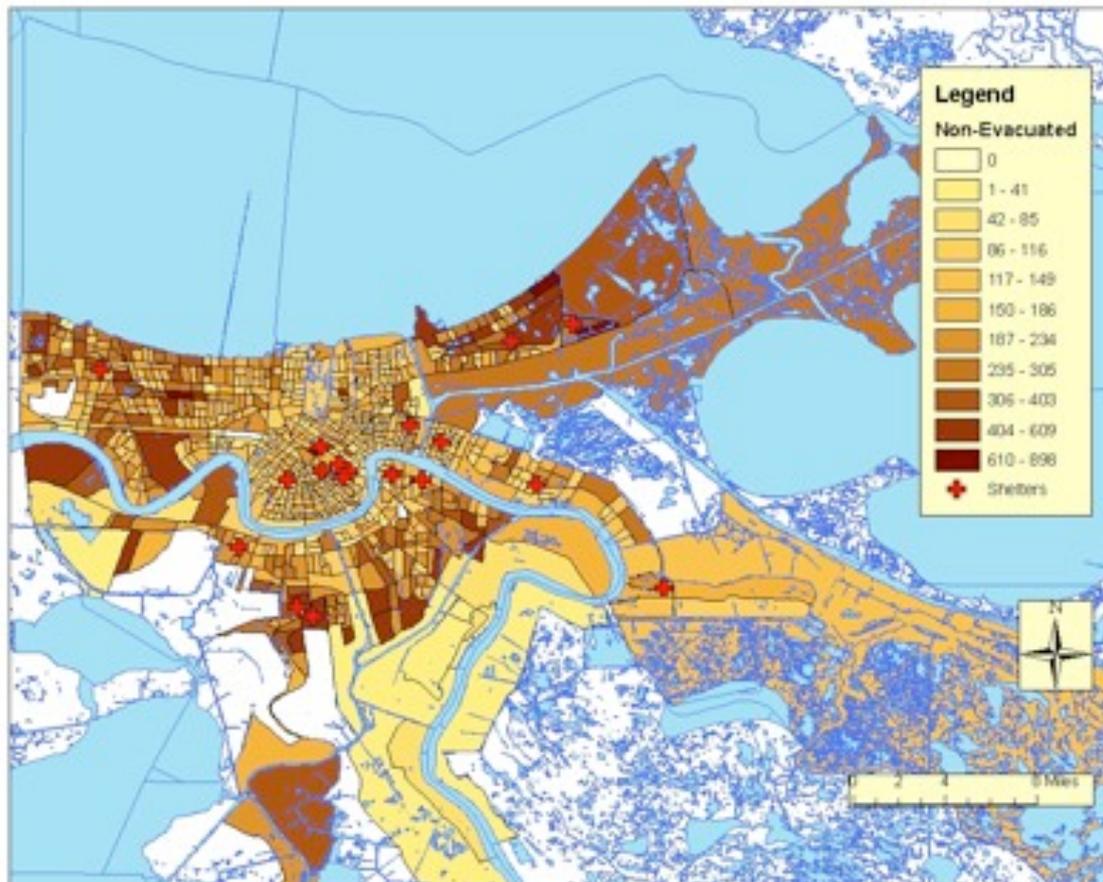


Fig. 5 – Map of New Orleans’s non-evacuated population and shelters. (Map courtesy of Ezra Boyd)

John Beggs, professor of sociology at Louisiana State University, further insists on the role played by the social environment in explaining evacuation patterns⁵⁸. He points out that the individuals who were most isolated are less likely to leave, since ‘isolation is crippling their mobility’. This observation was confirmed by many interviewees, particularly by elderly people. Many of them, unwilling to leave, were convinced to do so by their children, grandchildren or friends.

Finally, the role of information should not be downplayed. Several publications have already pointed out the importance of access of meteorological information in order to minimise the damage inflicted by natural disasters (Watkins 2007). In the case of Katrina, despite the wide media coverage before the hurricane made landfall, only 73 per cent of the respondents to the above-mentioned survey were aware of the evacuation order before the hurricane hit ("Survey of Hurricane Katrina Evacuees" 2005). Amongst those who heard the evacuation order

⁵⁸ Interview with the author, Baton Rouge, March 2007.

(mostly through television and/or radio), 32 per cent asserted that the evacuation order did not give clear information about how to evacuate, and only 38 per cent eventually chose to do so.

Overall, many factors influenced the decision and ability to evacuate, and these factors often combined. Although most of the evacuation was rather successful, and carried out before the hurricane made landfall, a fraction of the New Orleans population remained trapped in the city. Those trapped in the city were mostly black, poor, renters, and car-less. These social vulnerabilities accumulated and resulted in environmental vulnerabilities, which were directly dependent upon socio-economic factors. Laska and Hearn-Morrow correctly observe that 'evacuation decisions were shaped by income, age, gender, access to information and transportation, health and physical mobility, occupations, and social networks' (2006: 11). Those who could not evacuate on time were failed by authorities not only before the hurricane hit, but also in its aftermath, and this group received most of the media coverage.

Perception of the Evacuation

The term 'exodus' was widely used to describe the evacuation of New Orleans, stressing the collective dimension of the process. Thousands of cars flocked on the I-10 motorway to Baton Rouge, Lafayette and Houston, and hundreds of thousands of people fled the area within 48 hours. The idea of a mass, collective displacement is a common characterisation of migration flows associated with environmental change in general.

It is true that hurricane Katrina hit all neighbourhoods of the city, without apparent distinction of race, class, or sex, even though the uniform destruction hid wide inequalities and different vulnerabilities. However, the evacuation patterns of its residents were extremely diversified, calling into question the commonly held perception that the evacuation was a collective process. During my interviews, not a single evacuee told me the same story about her/his evacuation. Some evacuees fled the city early, others waited until the last minute, while some remained trapped in their house. Some travelled far away, sometimes to California or Florida, while others went no further than Baton Rouge. Some stayed with friends and family, some preferred to rent a hotel room or an apartment, and others opted for the shelters provided by the authorities or the Red Cross. The help received also varied considerably according to the place of resettlement and the conditions of the evacuation.

Most importantly, some could choose their destination, while others could not: many of those who were trapped in the city and subsequently evacuated by the authorities recalled how they did not know their destination before they boarded the bus or the plane that was taking them to their new destination. All mentioned that the fact of not knowing their destination deeply affected their ability to cope while they were away. It would be impossible to mention here all the stories and experiences collected during my fieldwork, however, it seemed important to stress some notable differences and common characteristics.

A key variable in the ability of the evacuees to cope with their displacement seemed to be their sense of place, which affected their individual and cultural identity while away. This can be related to what Giddens called an ‘environment of trust’ (Giddens 1990): a place where some identity markers could be found, impacting upon self-identity. When evacuees did not know their destination, this ‘environment of trust’ was naturally more difficult to find and/or to build. All persons I met mentioned that a ‘sense of place’ was important to them, especially given that none had brought many personal possessions from their home in New Orleans.

We didn't know where we were going, that was horrible. We didn't know whom we would be with, how we would be taken care of. We were treated like cattle, that was horrible.

(Claire Cachalan)

There was another common feature to all evacuation experiences: no one envisioned the evacuation to be a long-term migration. All evacuees I met were convinced that they would be able to return to their homes after a couple of days, and none had packed many clothes or brought with her/his many possessions. For many, it took several days to realise that their only remaining material possessions were the small backpack they had carried with them during the evacuation. An interviewee recalled how surprised she was to receive a US\$ 300 credit card from the Red Cross, and how she turned it down at first, convinced that other people needed help more than she did. The Red Cross volunteer then forced her to accept the card, simply telling her: ‘Lady, you lost everything’. For this interviewee, this was the point when she realised that her house and her possessions were gone, and that she would need help to cope with a long-term displacement. As I will show later, the authorities also envisioned the evacuation as a short-term displacement, and did not plan for the long term: the idea that Katrina could result in an important migration flow was not considered.

The evacuation was not a horrendous experience for all evacuees: some evacuated in advance and were able to stay with family, but others felt they were treated in a callous way by the authorities.

5.2.3. *Conclusion*

Although though the migration process surrounding Katrina has been widely presented as a collective exodus, it actually encompassed different types of migration patterns. The key feature of this migration flow, however, was that it was an actual migration, and not merely a short-term displacement as was thought in the early stages of the evacuation. Disasters had long been associated with short-term displacements, and the possibility of return for those displaced. The case of Katrina destroyed this assumption: in fact, about half of the population did not return – for diverse reasons – and what was initially conceived as an evacuation became for many a permanent relocation.

What does this mean for advocacy coalitions? Presenting the case of Katrina as a case of environmental migration bears heavy significance for the alarmist coalition: it represents evidence that developed countries can also be hit by the impacts of climate change, and that it is therefore in their own interest to mitigate their carbon emissions. On the other hand, those who blame the Army Corps of Engineers for the failure of the levees, or the federal and local authorities for the slow reconstruction process are more likely to side with the sceptical coalition, and to emphasise the responsibility of the authorities in the massive displacement of populations. Hence the local population tends to adopt a sceptical view (in the sense of advocacy coalitions), whereas external observers are more likely to present a more alarmist discourse. Once again, the conceptualisation of migration is a social construct, shaped by beliefs and interests.

Conclusion

Overall, the environment-migration nexus is a complex and evolving one. Its conceptualisation remains highly debated, and structured by the opposition between the alarmist and sceptical coalitions, which revolve around each of the key elements touched upon above. The dominant discourse on environmental migration, remains anchored in a determinist perspective: environmental migration is most often conceptualised as a forced, collective displacement. The emergence of the topic in the media and policy discourses is widely associated with this view, and therefore with the dominance of the alarmist coalition over the sceptical coalition.

I have tried to delineate here the main definitions, concepts and distinctions that I use in this research. With regard to the definition, I proposed a distinction between environmental displacees, whose movement is compelled, and environmental migrants, who move voluntarily. Environmental migration, as a concept, encompasses both types of migration flows. Hopefully such a distinction also allows for clarification of the different estimates and predictions that have been made so far. With regard to the environmental causes of migration, multi-causality seems to be the most pertinent theory, and also the one that has garnered the most academic support. Environmental causes are now widely acknowledged as a proximate driver of migration, but also one that intermingles with other social, economic and political variables. Finally, with regard to migration patterns, I have attempted to provide a visual and comprehensive representation of the main distinctions that inform the debate. These distinctions are best understood as continua that relate to each other, rather than as independent categories.

Alarmists present broader definitions with larger numbers, and insist on the prime causality of environmental factors. Sceptics present a narrower definition (or refuse to engage in the definition debate), and insist on the multi-causality of migration. As said earlier, the current dominant conceptualisation of the topic is based on the alarmist view, which doesn't allow for a differentiation between the different types of migration patterns outlined above. Therefore, these different types are confused with each other and environmental migration is often

envisioned as a uniform type of migration, which neglects the complexity of the environment-migration nexus.

On the policy level, this would assume that all migration flows associated with environmental changes could be addressed by the same set of policies. I shall now examine the different policy responses that address environmental migration, and whether the alarmist-dominated view of the nexus is reflected in the development of normative frameworks. In other words, I will seek to examine whether and how the ideational linkage between environment and migration has evolved towards a policy linkage between environmental and migration policies.

Part 3

Environmental Policies

*“At the frightful sight of their smoking ashes,
Will you say: "This is the result of eternal laws
Directing the acts of a free and good God!"
Will you say, in seeing this mass of victims:
"God is revenged, their death is the price for their crimes?"
What crime, what error did these children,
Crushed and bloody on their mothers' breasts, commit?
Did Lisbon, which is no more, have more vices
Than London and Paris immersed in their pleasures?
Lisbon is destroyed, and they dance in Paris!”*

Voltaire, *Poem on the Lisbon Disaster*, 1756

And now? Bury the dead and feed the living.

Attributed to Sebastião José de Carvalho, Marquis of Pombal,
Prime Minister of Portugal,
in the wake of the Lisbon Earthquake, 1755

Introduction

One of the key goals of this work is to provide a theorised synthesis of environmental and migration policies and normative frameworks dealing with environmental migration. Norms, needless to say, are rooted in specific contexts, periods, and ideologies. I will not analyse the process of norm formation, but rather concentrate on the policy responses that develop within these normative frameworks. I shall start this part of my analysis with an examination of environmental policies, predominantly focusing on policies addressing disasters and the impacts of climate change.

How has migration been addressed by environmental policies? This part of the research discusses the different policy responses related to the natural disasters and climate change, in a chronological fashion, and attempts to show the place of migration concerns in their development. Disasters are discussed first, in Chapter 5. They represent the biggest form of environmental stressors, and the chapter aims to analyse how displaced people have been dealt with in disaster reduction strategies. The discussion begins with a comparative analysis of two historical disasters: the 1666 Great Fire of London – one of the first disasters in which policies were implemented to deal with the displaced – and the 1755 Lisbon Earthquake – the first ‘modern’ disaster and the birth date of the social construction of risk. Building upon this historical foundation, the analysis follows the evolution of disaster management since the 1950s, and the national and international mechanisms that have been implemented to deal with disasters, and, in particular, peoples displaced by disasters, as well as the actors involved in disaster management.

Chapter 6 begins with a brief analysis of the development of environmental law since the 1972 Stockholm Conference on the Human Environment. It looks at the key legal principles relating to environmental change, and how these principles inform debates on the climate regime. It then turns to global warming, considered to be the most significant of recent environmental changes. Since migration flows are often presented as a devastating consequence of global climate change, the chapter examines how these migration flows, and adaptation policies in particular, have been addressed by the international climate change regime.

Chapter 5

Natural Disasters

“Disasters are very political events.”

James Lee Witt, former director of FEMA⁵⁹, April 1996⁶⁰

Introduction

Natural disasters are an obvious – perhaps the most obvious – cause of environmentally-induced forced displacements. The role of slow-onset environmental change in migration factors is debated, whereas the contribution of natural disasters to migration is less contested. Natural disasters are the most visible, typically more spectacular and brutal form of environmental change; whereas slow-onset changes, although they have the potential to radically transform some regions, are often more insidious and less visible. Logically, before states were concerned with slow-onset environmental changes such as pollution and the loss of biodiversity, they were concerned with natural disasters. Policies implemented to deal with

⁵⁹ Federal Emergency Management Agency, the national agency responsible for disaster management in the United States.

⁶⁰ Quoted in (Shughart II 2006: 31)

disasters evolved considerably throughout history, but I shall try to highlight here the aspects that are concerned with the displacement of populations. Disaster management policies can roughly be divided into four different, chronological phases: mitigation, preparedness, response and recovery (Haddow and Bullock 2004). Mitigation is concerned with all long-term efforts aimed at reducing the risk of disaster, while preparedness relates to the development of action plans in preparation for an anticipated disaster. The response phase involves emergency services and humanitarian assistance. Finally, the recovery phase deals with the restoration and reconstruction of affected areas, including the return of those displaced by the disaster and the possible payment of compensation.

These phases succeed each other in disaster management, but were not developed concomitantly: early disaster policies dealt simply with disaster responses, and strategies for disaster reduction and prevention were developed later. This section will address three different state methods of dealing with disasters. First, I will describe the evolving role of the state in disaster response, using the Great Fire of London and the Lisbon Earthquake as starting points. Second, as the role of vulnerability in disasters became increasingly evident, states developed strategies to reduce and prevent disasters, mostly at the international level. This trend is significant, since it aims at institutionalising solidarity beyond the national level. Thirdly, the issue of recovery will be addressed through compensation and insurance mechanisms.

1. The Foundations of Disaster Response

Disasters were initially viewed as acts of God⁶¹, over which people and states had little control (Steinberg 2000; Wijkman and Timberlake 1984). Consequently, early disaster policies focused on disaster response and recovery, and not on prevention and mitigation. For long, the model that prevailed in disaster policies could be characterised as Noachian: disasters were unavoidable, and the role of the state was to substitute for Noah and his ark, and rescue as

⁶¹ An 'Act of God' today is a legal term defining an event outside human control, similar to a case of *force majeure*. In the seventeenth and eighteenth centuries however, divine intervention was presumed to explain the occurrence of such events.

many victims as possible. The biblical story of the Deluge had a lasting impact upon the development of disaster policies, as shown eloquently by Dynes (2003a).

The early history of disaster policies is usually linked to the Lisbon Earthquake of 1755, which deeply transformed the perception of disasters and how states responded to them. I argue, however, that policies dealing with people displaced by disasters can be traced back to the 1666 Great Fire of London, which marked, in my opinion, the birth of concern for the displaced in situation of disasters, as well as of resettlement policies.

1.1. The Great Fire of London of 1666, and Concern for the Displaced

The Great Fire of London is one of the first documented major disasters. It started as a small fire in a bakery shop, and after four days of burning eventually destroyed most of the city (Tinniswood 2003; Hanson 2001). The exact number of casualties is unknown, but is believed to be quite small, since most of the city's inhabitants managed to escape the fire. Abroad, the fire was widely perceived as a divine revenge against the English, in retribution for the burning of the small Dutch town of Terschelling during the Second Anglo-Dutch War, an event remembered as Holmes' Bonfire.

Eye-witness accounts of the disaster were recorded by two prominent London diarists, Samuel Pepys and John Evelyn. Both commentators recall the chaotic evacuation patterns that followed the outburst of the fire: most people remained within the city's walls, fleeing from refuge to refuge, with their belongings. Many thought they had found a safe haven within Saint Paul's Cathedral, before the building was set alight by the scaffolding that surrounded it. London was then encircled by a large Roman wall, and it was only at dawn on the second day of the fire that people began to realise the need to flee beyond the walls. Escape by river was difficult: the riverfront was on fire, and the services of ferrymen had become very expensive, allowing only the richest to secure a place in barges and light boats. Most of people escaped northwards and eastwards through the eight gates of the city walls:

Here, we saw the Thames covered with goods floating, all the barges and boats laden with what some had time and courage to save as, on the other side, the carts, &c. (sic), carrying out to the fields, which for many miles were strewed with moveable of all sorts, and tents erecting to shelter both people

and what goods they could get away. Oh, the miserable and calamitous spectacle! (Evelyn 1854: 10)

Evacuation procedures were extremely chaotic, and panic scenes frequently erupted at the city's gates. Cart owners in surrounding regions flocked to London in order to rent their vehicles, colliding with people trying to escape. Chaos further escalated when the police decided to close the gates of the city, in the hope of turning the focus of people from fleeing and rescuing their belongings to fighting the fire. The decision proved catastrophic, and the gates were soon re-opened. The chaotic scenes at the crowded gates bore dramatic consequences, as people blocked the narrow passages and greatly impeded the progress of fire-fighting squads. Unable to progress through the city, fire engines were unable to prevent the spread of the fire. Lack of leadership and failure to acknowledge the extent of the blaze were also crucial factors in the lack of proper emergency response. The mayor of London, Thomas Bloodworth, fled the city the day after the fire started, and King Charles II had to take over the command of the rescue operations, which was delegated to his brother, the Duke of York.

Those who escaped the inferno gathered in what appears to be refugee camps at the North of London. Evelyn recalls his visit to the camps in these terms:

The poor inhabitants were dispersed about St George's Fields, and Moorfields, as far as Highgate, and several miles in circle, some under tents, some under miserable huts and hovels, many without a rag, or any necessary utensils, bed or board, who from delicateness, riches, and easy accommodations in stately and well-furnished houses, were now reduced to extremest misery and poverty. (...) I then went towards Islington and Highgate, where one might have seen 200,000 people of all ranks and degrees dispersed and lying along by their heaps of what they could save from the fire, deploring their loss; and though ready to perish for hunger and destitution, yet not asking one penny for relief, which to me appeared a stranger sight than any I had yet beheld. His Majesty and Council indeed took all imaginable care for their relief, by proclamation for the country to come in, and refresh them with provisions. (Evelyn 1854: 12-15)

Both Pepys and Evelyn were horrified by the scenes of distress and desperation at the encampments. Evelyn mentions that the displaced were refreshed with provisions – it is worth noting, however, that these provisions were for sale, and no emergency aid was

distributed. Market prices had soared, and the priority of the authorities was to ensure continuous food production and supply.

A rumour regarding the origin of the fire soon spread out in the camps: it was claimed that the fire had been started by foreign terrorists, and a group of 50,000 French and Dutch immigrants were marching on the camps in order to ‘finish what the fire had begun’. The rumour was fuelled by the Second Anglo-Dutch War, and scenes of generalised panic, resulting in several deaths, erupted at the camps (Tinniswood 2003: 131-135).

These events led King Charles II to fear that there would massive rebellion and political unrest if the displaced were to return to London. Most people had lost all their possessions, fire-fighting and evacuation efforts had been slow and ineffective, and the population was looking for scapegoats. Hence the displaced were encouraged to move away from London and resettle elsewhere in the country. Charles II proclaimed that ‘all Cities and Towns whatsoever shall without any contradiction receive the said distressed persons and permit them the free exercise of their manual trades’ (Tinniswood 2003: 213).

This internal displacement is significant: it did not occur as a direct result of the fire, but was shaped by political motives and targeted policies. My research suggests that the Great Fire of London was the first disaster in which population displacements were a concern in the official emergency response. A similar concern was present one century later, during the 1755 Lisbon Earthquake, but this disaster would radically change the way disasters were perceived by society.

1.2. The Lisbon Earthquake of 1755, and the Social Construction of Risk

On November 1st, 1755, Lisbon was struck by a major earthquake, which is now believed to have been of magnitude nine on the Richter scale. It destroyed most of the city’s buildings, and was followed by a tsunami. The disaster is often considered the first ‘modern’ disaster (Dynes 2003b), because of the lasting impact it had upon society. This impact manifested itself through a profound transformation of the role of the state, and the way disasters were dealt with. The Lisbon earthquake is a turning point because it was the first disaster that

prompted a coordinated disaster response by the state, and the first earthquake whose causes were scientifically analysed and discussed, rather than being attributed to the will of a supernatural being (Ray 2004).

The Marquis of Pombal, Portugal's prime minister, organised and supervised the emergency response. With regard to those displaced, Pombal relied on the Church to provide temporary housing and food items: 'churches became the centre of temporary facilities for those displaced' (Dynes 1997: 15). An anonymous German engraving from 1755 shows a camp housing the displaced in the outskirts of Lisbon in ruins. The camp is administered by priests, and scenes of looting and criminal activity are depicted.



Fig. 6 - 1755 German copperplate image, *The Ruins of Lisbon* (Museu da Cidade, Lisbon).

It was also feared that many inhabitants would leave the city and resettle in another region of Portugal. Eager to pursue the development and reconstruction of Lisbon, Pombal instructed the governors of provinces that had received displaced people to send them back to Lisbon (Dynes 1997: 15). Once again, migration patterns following the disaster were determined by the policies implemented – except that those of the Lisbon Earthquake were the exact opposite of those of the London Fire.

For the first time in history, the state emergency response was accompanied by recovery policies, which included preventive efforts to avoid future disasters. After the quake, Pombal appointed several military engineers to make inventories of property rights and draw plans for a new city. Unlike London, which was rebuilt in almost identical form after the fire, Lisbon was deeply transformed in the course of the reconstruction process. Streets were widened, the waterfront was levelled and more flexible, quakeproof materials were used in the new buildings.

The policies designed as a consequence of the Lisbon Earthquake marked a turning point: for the first time in history, 'the state accepted the responsibility for mobilizing the emergency response and for developing and implementing a collective effort for reconstruction' (Dynes 1997: 28). To a large extent, contemporary disaster policies are the direct heirs of Pombal's policies, which set a model for disaster management: the state was no longer exclusively concerned with the disaster response, but also with prevention and recovery. The realisation of this responsibility was made possible thanks to a radical shift in the perception of disasters associated with the birth of the modern state.

Before the Lisbon quake struck, the dominant European explanatory framework for disasters was epitomised by Leibniz' theodicy of the 'best possible world'. Theodicy was offered as a solution to the apparent paradox between the suffering of human beings and belief in a benevolent, omnipotent God. Leibniz and his followers argued that disasters were part of a divinely designed 'pre-established harmony'; they concluded that the Lisbon quake was not a catastrophe, but rather served God's purpose, since He had necessarily created the best of all possible worlds.

The place of disasters and monstrosities in nature received much attention in Enlightenment thought, hence the Lisbon Earthquake prompted widespread questioning of the meaning of disasters. The fact the quake occurred on All Saints' Day, and that most churches of the capital were destroyed further reinforced this line of thinking. Voltaire, in particular, reacted viscerally against Leibniz' theodicy, and ridiculed his views through the character of Pangloss in *Candide*, a play set against the backdrop of the Lisbon disaster (Voltaire 2007 (1759)). Pombal also rejected a theodicean explanation, insisting that the event must have a 'natural' explanation, and was not a signal sent by God, as his arch-rival Malagrida claimed.

Rousseau, however, disagreed and claimed that men, and not nature, were to blame for the disaster. Reacting to Voltaire's *Poem on the Lisbon Disaster*, he wrote him on 18 August 1756:

*Moreover (...) the majority of our physical misfortunes are also our work. Without leaving your Lisbon subject, concede, for example, that it was hardly nature that there brought together twenty-thousand houses of six or seven stories. If the residents of this large city had been more evenly dispersed and less densely housed, the losses would have been fewer or perhaps none at all. Everyone would have fled at the first shock. But many obstinately remained (...) to expose themselves to additional earth tremors because what they would have had to leave behind was worth more than what they could carry away. How many unfortunates perished in this disaster through the desire to fetch their clothing, papers, or money?*⁶² (Masters and Kelly 1990: 110).

Rousseau was one of the first thinkers to address risks as social constructs, and to blame men, and not God, for natural disasters. Rousseau did not seek to excuse nature or justify God's actions, but insisted on the mankind's potential to prevent disasters and reduce their impacts. With the realisation that men are responsible for the disasters comes the acknowledgement that they can prevent them. Thus Rousseau created the Lisbon model, in which risks were no longer a fatality, but rather a social construct that could be mitigated (Larrère and Larrère 1997: 208). The social construction of risks marks a turning point in the evolution of the state, and coincides with the emergence of modern states (Manent 2007). In this regard, the Lisbon Earthquake can be viewed as a landmark event in the Enlightenment, which deeply transformed men's relation to their environment.

Just as the rise of modern states was marked by the autonomy of political thought and decisions from supernatural forces, the Lisbon disaster set a model for modern and coordinated disaster response, paving the way for contemporary disaster management. This response was made possible by the fact that disasters were no longer considered fatalities with supernatural causes; instead they were construed as social constructs, and notions of risk and vulnerability were placed at the core of future disaster policies from this point onwards.

⁶² Jean-Jacques Rousseau, 'Lettre à Voltaire sur la Providence', 18 August 1756.

2. From Charity to Solidarity: an Overview of Major Evolutions in Disaster Policies

Following the chaotic and disorganised response that surrounded the Great Fire of London, the policies that addressed the Lisbon Earthquake set a model for future disaster management that would not significantly evolve until the beginning of the twentieth century. This century, marked by two world wars and an increased number of disasters, experienced a number of evolutions in the organisation of disaster relief, leading to the current regime.

2.1. The Growing Importance of Disaster Prevention

The recognition that disasters were potentially avoidable risks rooted in social structures considerably expanded the scope of disaster policies. States were not only mandated to respond to disasters, they also had to prevent them. However, in the last decades of the twentieth century, although the number of natural hazards remained relatively stable, the number of disasters rose sharply (Guha-Sapir et al. 2004). This apparent paradox can only be explained by the increased vulnerability of peoples facing natural hazards: more people were living in the affected regions, with fewer resources to adapt.

From the late 1970s, the sharp increase in disaster casualties and damages prompted a deep questioning of disaster policies, which at the time were focused almost exclusively on emergency relief and humanitarian aid. The 1970s and 1980s were marred by a series of devastating natural disasters, including the 1970 cyclone in Bangladesh (300,000 victims), the 1976 Tangshan earthquake in China (290,000 victims), the 1985 Armero eruption in Colombia (25,000 victims), and the 1984-85 famine in Ethiopia. Technological disasters and accidents also became more numerous, with the accidents of Seveso (1976), Three-Mile Island (1979), Bhopal (1984) and Chernobyl (1986). Soon the state of emergency became permanent, and it was realised that a solely humanitarian response could not suffice to deal with disasters.

2.1.1. *Paradigm Changes*

Two academic paradigm shifts occurred simultaneously in the aftermath of these disasters. The first entailed abandoning the chimerical pursuit of absolute security and risk eradication. Technological scientism was rejected, and instead risk management was privileged as a way to apprehend risks in their relation with their social environment (Dourlens et al. 1991). Risk management involves a systemic approach to risk that acknowledges that it cannot be eliminated, but may be prevented. The second rejected a deterministic approach to disaster, and introduced the concept of vulnerability. Vulnerability is defined as a set of conditions that increase an individual's or a community's likelihood of being affected by a disaster (Blaikie et al. 1994). The acknowledgement of vulnerability implies the development of disaster prevention, which is no longer solely a matter of urban planning and engineering, but also of social policy and development (Nathan 2004).

Both paradigm shifts were instrumental in the movement away from humanitarian emergency relief to disaster reduction, the latter being a wide concept that encompasses all aspects of disaster prevention and mitigation. The concept of disaster reduction was adopted by the United Nations in the 1990s, and that decade was declared 'International Decade for Natural Disaster Reduction', culminating in the first World Conference on Natural Disaster Reduction, held in Yokohama in 1994. Disaster reduction relies not only on state actions, but also on actions emanating directly from people. It is therefore a process with a more 'bottom-up' focus: whereas crisis management views people as powerless, vulnerable victims, disaster reduction mobilises peoples' resources and knowledge.

2.1.2. *Resettlement Policies*

With regard to migration and displacement, the 'top-down' approach of disaster reduction has often been associated with resettlement. This option, however, is often seen as the last resort. It is usually highly unpopular with local populations and provokes social disruption in the resettlement area. Furthermore, it yields variable results in terms of efficiency. Nonetheless, it is sometimes privileged at the expense of other prevention strategies.

In Sri Lanka, a country prone to disasters, the ministry for disaster relief services is currently coupled with the Ministry of Resettlement⁶³. In Burma, another country highly vulnerable to disasters, relief services and resettlement are part of a single department within the Ministry of Social Welfare, Relief and Resettlement⁶⁴. In Indonesia, natural disaster relief and refugee relief are coordinated by a single coordinating agency, Bakornas, but refugee relief is often assimilated into resettlement programmes (Age 2005). Resettlement is especially implemented with regard to flood prevention: such examples include Vietnam, Mozambique (EACH-FOR 2008) or Malaysia. In the An Giang province of Vietnam, approximately 20,000 households have been marked for relocation into nearby residential clusters until 2020. Research conducted in the area reveals that people about to be relocated ‘[fear] that when they move to the residential clusters their social networks [will] be destroyed and they [will] not be able to secure a daily income’ (Dun 2008: 8). Before they can move into the residential cluster, people need to buy a plot of land, in which they are assisted by a government loan. The loan, however, does not suffice to cover the purchase price and people often have to get into further debt in order to afford housing. Resettlement is also a common policy to deal with flood disasters in Malaysia: Chan, however, notes that such schemes are not always efficient, and that systematically there is a trade-off between flood prevention and the induced social disruption (Chan 1995).

2.2. *Mutualising Risk*

Recognition of the state’s responsibility for disasters resulted in two important outcomes: the creation of national agencies for disaster management, incorporating different aspects of disaster reduction and recovery; and the payment of damage compensations for the victims.

⁶³ See <http://www.resettlementmin.gov.lk/> for an overview of the Ministry’s organisation and activities.

⁶⁴ More details on the department can be found at <http://www.myanmar.gov.mm/ministry/MSWRR/index.html>, although the website is often unresponsive.

2.2.1. The Creation of National Disaster Management Agencies, and their Plans for the Displaced

Many countries now have a dedicated agency in charge of dealing with disasters: the simple fact that such agencies exist implies acknowledgement of the state's responsibility to protect its citizens in case of a disaster. The principle for such protection is stated in Article 3 of the Universal Declaration of Human Rights, which reads that 'Everyone has the right to life, liberty and security of person'. The organisation of such protection is usually part of civil defence, which was initially concerned with the protection of civilians during wars, but has since evolved towards a wider protection role. Some countries have created a specific agency separate from the civil defence department, while others have made such protection a new priority for existing civil defence departments.

In the US, the Federal Emergency Management Agency (FEMA) was created in 1979 by President Carter, who sought to gather all services concerned with disaster management under a common umbrella (Mushkatel and Weschler 1985). FEMA replaced the Federal Disaster Assistance Administration, which was part of the Department of Housing and Urban Development. Its creation was intended to 'strengthen federal leadership in emergency management, particularly in efforts to avert disaster losses' (May 1985: 40). FEMA's role is to coordinate an emergency response to disasters that overwhelm state and local authorities, thus it highlights the shared responsibilities for disasters between different levels of government. The Agency was independent until its incorporation into the newly created Department of Homeland Security in 2003.

Some countries highly prone to disasters have created a ministry dedicated to disaster management. This is the case for Bangladesh, where a Ministry for Disaster Management and Relief was created in the early 1990s, before being transformed into a Ministry of Food and Disaster Management. The Ministry developed a Comprehensive Disaster Management Programme in 2003. Japan, notoriously prone to earthquakes, has also established a Ministry for Disaster Management; as have Mongolia, Uganda and Sri Lanka.

Most national agencies and departments have developed comprehensive plans of action that include many of the different aspects set out in the Yokohama Strategy and the Hyogo Framework for Action (World Conference on Natural Disaster Reduction 1994, 2005), which crystallised the paradigm shift from disaster relief to comprehensive disaster management,

including prevention and mitigation. Most of these plans include provisions for emergency evacuation procedures and temporary housing arrangements, but fail to address long-term housing needs. Amongst the plans publicly available, the one developed by FEMA – called the Integrated Emergency Management System, or IEMS – stands out for two specific reasons:

- Unlike previous, hazard-specific national plans, IEMS applies that all types of hazard, recognising that they all share similar characteristics and require similar responses;
- IEMS contains provisions for long-term housing; several services and grants are incorporated for people with longer-term housing needs.

These grants and services are designed to help victims rebuild their homes or find permanent replacement homes. In order to be eligible, the applicant's home must be her primary residence, must have been destroyed or damaged by the disaster, and is required to be insufficiently covered by an insurance scheme. It should be noted, however, that FEMA provides funding for the construction of a new permanent home 'only in insular areas or remote locations specified by FEMA, where no other type of housing assistance is possible' (Federal Emergency Management Agency (FEMA) 1980). In addition, the agency maintains a housing portal on the Internet, designed to help those displaced by a disaster find a place to stay. The database lists properties for rent provided by several governmental agencies, as well as private organisations and individuals⁶⁵. FEMA also offers grants to pay for rental costs on a temporary basis. As part of disaster assistance, the agency also runs a programme aimed to help those who lose their jobs due to a disaster: the Disaster Unemployment Assistance (DUA) scheme provides unemployment benefits as well as services to help find new employment. In the early 1980s, FEMA also tried to implement a plan targeted at relocating people from large cities in case of a nuclear attack or other major disaster. The plan, called Crisis Relocation Planning (CRP), aimed to provide a framework for collaboration between federal, state and local governments regarding the relocation of people. Though federal funding was forthcoming, the programme was abandoned because of local reluctance to implement it (May 1985).

Overall, national approaches to disaster management have shifted from a variety of disaster-specific strategies to comprehensive, multi-hazard strategies. This shift is based on the recognition that all disasters share common characteristics, and that similar responses can

⁶⁵ The database can be searched at <https://asd.fema.gov/inter/hportal/home.htm>

apply to different types of disasters. Most of these plans, however, do not contain provisions regarding long-term displacement, and usually cater only for short-term housing and other needs. Only FEMA developed a strategy for long-term displacement: but Hurricane Katrina called into question the feasibility of the strategy.

2.2.2. *Payment of Damage Compensation*

The payment of compensation for damages wreaked by a disaster is traditionally dependent on acknowledgement of responsibility for the disaster. In the case of man-made disasters, this responsible party is usually evident, and principles of retributive justice apply. According to the 'polluter-pays' principle, those responsible for the disaster are required to pay damage compensation to the victims. Numerous historical examples attest, however, that mediation by the state is often required before compensation is handed over (Marcus 2008). The polluter-pays principle is currently undergoing a rapid expansion, most notably under the influence of the development of tort law reform in the United States, and the acknowledgement of the concept of 'environmental prejudice' in France during a trial related to the Erika' oil spill in Brittany.

Instances of natural disasters do not allow for easy acknowledgement of responsibility: accordingly, many/most industrialised countries have set up government-sponsored disaster insurance programmes. Such programmes vary greatly in scope, but share the common goal of compensating for damages not covered by private insurance schemes. Moss identifies three different phases of the government involvement as risk managers, and notes that each phase addresses different risks as their societies move through different stages of development. In the first phase, risk assumption by the government is limited to risks associated with industrial development; the second phase covers risks associated with the employment of labour; finally, a third phase expands coverage to environmental risks, such as natural disasters (Moss 2004).

In most countries, this third phase occurred after World War II, and resulted in the setting up of disaster funds aimed at mutualising risk among citizens. As mentioned above, these funds are very diverse, and typically reflect the political ideology and organisation of the country where they are implemented. In the United States, the federal government's involvement in

disaster financing is minimal, with no mandatory insurance programme. The National Flood Insurance Programme, established in 1968, is the only federal programme, while individual states have developed their own disaster-specific programmes, such as the California Earthquake Authority or the Hurricane Catastrophe Fund in Florida. At the other end of the political spectrum, France's National Disaster Compensation Scheme, CAT NAT, established in 1982, is a classical example of risk-sharing between public and private sectors: all insurance policies⁶⁶ contain a mandatory, government-fixed, 9 per cent surcharge to cover for losses resulting from natural disasters. This surcharge is applied to all citizens, irrespective of whether they live in a risk-prone area or not. The Fund kicks in after commercial insurance schemes have compensated up to 150 per cent of the damage.

Despite their differences, these funds have in common the fact they do not provide compensation for displacements that result from disasters: they cover personal and property losses, but not the costs related to relocation. Hence the funds imply that people displaced by disasters are expected to return home after a short period, since they do not provide compensation for resettlement-induced costs. More importantly, similar funds do not exist in developing and emerging countries, where most natural disasters happen. Moss (2004) argues that these governments have not yet reached the third phase of government risk management; lack of funding might be a simpler explanation for the absence of such funds, but this question lies beyond the scope of this research.

2.3. The Emergence of New Actors

Until the Lisbon earthquake, religious organisations, and not the State, was the initial respondent to disasters. From the eighteenth century onwards, states have taken on increasing responsibility for the management of disasters. In the 1970s, however, as disaster management became internationalised, a number of other actors emerged and started playing an expanded role in disaster management. Beyond the United Nations, whose role in disaster management matches its internationalisation, other actors such as NGOs, experts and the international media gained a wider role at the scene of disaster relief.

⁶⁶ With the exception of life-insurance policies.

2.3.1. *The United Nations System*

Since its creation in 1945, the United Nations has been very active in disaster management through its diverse branches and agencies, despite the fact that the charter of the organisation makes no distinction between humanitarian assistance per se and economic and social co-operation, as noted by Stephens (1978: 33). In fact, disaster management is not explicitly part of the UN mandate, but has been a significant component of its activities from its very inception.

UN involvement in disaster management is characterised by the fragmentation of its activities: with the exception of the short-lived UN Disaster Relief Organisation (UNDRO), disaster responses by UN agencies have never been centralised and are scattered between different actors.

The UN Development Programme (UNDP) and Environment Programme (UNEP) have both developed specific branches to deal with disasters, the Bureau for Crisis Prevention and Recover and the Post-Conflict and Disaster Management Branch respectively. Agencies such as the World Food Programme (WFP) and the Food and Agriculture Organisation (FAO) have long been involved in food security and the provision of emergency food supplies, while the UN Children's Fund⁶⁷ is usually the UN agency most consistently associated with emergency relief operations (Stephens 1978). The World Bank, through its Disaster Management Facility, is a major donor to programmes of disaster prevention and reconstruction.

Among UN agencies, the role of the UN High Commissioner for Refugees (UNHCR) is of particular interest to this research. Its role in natural disasters has increased consistently over the last few years, despite not being part of its mandate. This evolution will be further described in the next section and following chapter.

In the early 1970s, the UN sought to establish an embryo organisation of international governance in the field of disaster management. The Office of the United Nations Disaster

⁶⁷ Interestingly, the original name of the agency was the 'United Nations International Children's Emergency Fund', hence its acronym. UNICEF was created in 1946 and initially established as a three-year temporary body aimed at post-war reconstruction. It soon became a permanent agency, with an extended mandate and autonomous fund-raising capacities.

Relief Coordinator (UNDRO) was created in 1971 as a ‘focal point in the United Nations system for disaster relief matters’ (United Nations General Assembly 1971). UNDRO, however, was severely understaffed, and was never able to fulfil its role of emergency relief coordinator; it was replaced by the UN Office for the Coordination of Humanitarian Affairs (OCHA) in 1991, as part of the Department for Humanitarian Affairs. In addition to being the UN focal point for disaster relief, the OCHA mandate includes coordination of humanitarian responses and policies aimed at preventing disasters. Nathan notes that OCHA’s role is geared towards disaster relief rather risk management, a task devoted to the International Strategy for Disaster Reduction (ISDR) (Nathan 2004: 27). The ISDR’s role is to centralise and disseminate data on disasters worldwide, as well as to coordinate efforts in disaster prevention and mitigation.

OCHA and ISDR also supervise two platforms where UN agencies and NGOs discuss and coordinate their efforts: the Inter-Agency Standing Committee (IASC), created in 1992 and supervised by OCHA, is the primary mechanism for the inter-agency coordination of humanitarian assistance; the Inter-Agency Task Force on Disaster Reduction, supervised by ISDR, is a discussion forum for risk management gathering various UN agencies, regional organisations and NGOs. The IASC is currently the main forum for discussion of the humanitarian assistance available to displaced peoples, since one of its roles is to identify areas where gaps in mandates or lack of operational capacity exist (United Nations General Assembly 1993).

2.3.2. Private Organisations and NGOs

Over the years, international NGOs have played a greater role in disaster management. This role is complementary to, and sometimes in competition with, the role played by national governments and the United Nations system.

Among the NGOs involved in disaster management, the most prominent are undoubtedly the International Committee of the Red Cross (ICRC) and the International Federation of Red Cross and Red Crescent Societies (IFRC), both commonly referred to as the Red Cross. The organisation was founded in 1863, in the aftermath of the battle of Solferino. Like many UN agencies, the initial goal of the Red Cross was to protect victims of armed conflicts. After the end of World War II, however, the scope of its operations shifted to encompass natural

disaster relief in addition to conflict relief. The IFRC publishes annually one of the most authoritative reports in the field, the *World Disasters Report*. Other major NGOs in the field include Doctors Without Borders, Christian Aid, Care International, Caritas Internationalis, the Lutheran World Federation, Oxfam, Save the Children, the World Council of Churches, and World Vision International. Approximately half of these organisations⁶⁸ are religious organisations, and most of them – with the exception of Doctors Without Borders and Christian Aid – compose the Steering Committee for Humanitarian Response (SCHR), an alliance of major relief organisations for information sharing and policy coordination. The Steering Committee is itself a standing member of the IASC, as are the ICRC and the IFRC.

In a context in which public funding is declining, the involvement of private companies in public-private partnerships for disaster reduction is increasingly solicited. Some of these private companies have also developed research capacity: *Munich Re* and *Swiss Re*, the world's leading reinsurers, are concerned with the consistently growing impacts of disasters, and have become major promoters of disaster reduction. *Munich Re* is now a member of the Inter-Agency Task Force on Disaster Reduction, as well as a major donor for research on disasters. One of the world's leading research centres on disaster reduction and vulnerability, the Institute for Environment and Human Security of the United Nations University (UNU-EHS), in Bonn, works in close cooperation with the German reinsurer. UNU-EHS played a key role in promoting the topic of environmental migration on the international agenda, and organised the first international conference on the topic, which took place in Bonn on 9-11 October 2008: *Munich Re* was one of the key sponsors of the event. More recently, the company donated £3 million to the newly established Grantham Research Institute on Climate Change at the London School of Economics and Imperial College.

Overall, the NGOs and private organisation sector has been instrumental in raising awareness of the topic of environmental migration, whereas the UN system initially kept silent on the issue: reports from both the Red Cross (2001) and Christian Aid (2007) have highlighted the plight of 'environmental refugees', and received a great deal of attention from the media, policy-makers and scholars alike.

⁶⁸ Christian Aid, Caritas Internationalis, the Lutheran World Federation, the World Council of Churches, and World Vision International.

2.3.3. Other Regional and International Organisations

Regional organisations have also set up disaster management facilities. In Europe, the European Commission Humanitarian Aid Office (ECHO), established in 1992, centralises and channels humanitarian assistance provided by member states: this amount of financial assistance is considerable, and represents roughly one half of the world's total humanitarian aid budget. Other regional organisations⁶⁹ promote disaster reduction through workshops, education programmes and the implementation of local strategies. In addition, regional banks provide pre- and post-disaster funding.

Finally, the International Organisation for Migration (IOM), which is not affiliated with the UN system, has also developed intervention capacities in disaster management. Initially created to assist with the resettlement of people uprooted by World War II, it evolved into a global migration agency in the 1980s and 1990s: as the organisation expanded, so did the scope of its missions. Environmental migration has recently become a focus of the organisation, as well as an important item on the agenda of the International Migration Dialogue, an IOM-promoted policy forum. This interest reflects the increasing involvement of IOM in situations of natural disasters, following the 2004 tsunami and the 2005 Kashmir earthquake: in 2007, an overwhelming majority of its 'flash appeals' for funding were directly related to natural disasters. IOM is also a standing member of the IASC.

2.3.4. Donor Governments

Western governments are, by far, the largest providers of disaster aid internationally; as a result, they have considerable influence on disaster reduction policies. They have set up specialised agencies⁷⁰ to direct the funding, which usually mix long-term development aid and emergency assistance. Davis and Seitz (1982) have shown the importance of economic efficiency in the allocation of this aid, hence the great emphasis on disaster prevention and mitigation. Furthermore, the allocation of the funds reflects the donor government's national interests, and is largely determined by the country's foreign policy (Nathan 2004).

⁶⁹ Such organisations include the Organisation of American States (OAS), the Organisation of South East Asian Nations (ASEAN), the South Pacific Commission (SOPAC), and the African Union (AU).

⁷⁰ USAID in the United States, DFID in the United Kingdom, GTZ in Germany, and the Agence Française de Développement in France, to name just a few.

2.3.5. *The International Media*

Every year, the NGO Doctors Without Borders publishes a report on forgotten crises, or the ‘most under-reported humanitarian stories’. The existence of such a publication serves to illustrate the importance of the international media in the governance of disaster management. The media is often instrumental in raising awareness and donations for emergency situations. It can also prompt the international community or a government to act towards providing relief to people affected by disaster. The 1985 LiveAid concert significantly raised the international profile of the then-ongoing famine in Ethiopia; Green also reports that German assistance towards a previous famine in the same country was largely the result of a year-long campaign in *Stern* magazine, and concludes that ‘it is doubtful that there ever would have been an Ethiopian famine operation had the press not intervened’ (1977: 41). More recently, the 2004 Indian Ocean tsunami prompted considerable coverage and fund-raising efforts in the media, resulting in an estimated 13.5 US\$ billion in disaster relief aid (Tsunami Evaluation Coalition 2006)

In a similar vein, the international media has devoted considerable attention in recent years to environmental migration, particularly in relation to climate change. The perspective adopted is consistently alarmist, and scholars from the sceptical coalition are often dismissed at the expense of their alarmist counterparts. Numerous press articles, television broadcasts, documentary films⁷¹, and even a coffee-table book (Collectif Argos 2007) were devoted to the topic. These appearances in the media were instrumental in raising awareness about the topic among scholars and policy-makers alike.

2.3.6. *Experts*

It is necessary here to distinguish between experts and researchers: experts may be researchers, but they act in a special capacity, since they have been mandated by a government to provide technical information to inform policy decision. Hence they engage directly and

⁷¹ Among others, ‘Über Wasser: Menschen und gelbe Kanister’ by Udo Maurer, as well as the series ‘Sale temps pour la planète’ by Hervé Corbière and Morad Ait-Habouche, are particularly noteworthy.

deliberately in the policy process, whereas researchers are not necessarily intentionally part of the process.

The role of experts in disaster management dates back to the Lisbon earthquake, when Pombal entrusted a group of architects, city planners and engineers with the task of redesigning the city layout in a way to reduce its vulnerability to disasters. Experts have since expanded their role to encompass all aspects of disaster management, risk awareness in particular. Nathan notes that the field of awareness raising is now dominated by scientific referents, which seek to replace popular, local knowledge and traditions about disaster management (2004: 12).

The assessment of disaster risks is now extensively left to experts, who are also in charge of identifying the populations at risk of displacement. Although this intensive reliance on expertise has certainly help refine the identification and understanding of disaster risks, public debate on ways to deal with these risks has increasingly been hijacked by a ‘government of experts’, which is particularly powerful in the field of disaster management.

The role and importance of experts in political decision-making has long been a contentious topic, not just within the confines of disaster management and risk assessment. The social construction of the risk implies that this risk is embedded in scientific rationality; for example, soon after the Lisbon earthquake, Pombal established a scientific committee with the mission of understanding and analysing the causes of the disaster. Political decision-making based on scientific expertise should ideally integrate science as part of the public policy debate, but Larrère and Larrère assert that the debate is often annihilated by scientific authoritarianism, used by policy-makers to justify decisions that may prove unpopular with their constituents (1997: 220-221). Hence experts are consenting victims of ‘consensus blackmail’, a situation in which uncertainties and disagreements cannot be exposed for fear that they would undermine the decision-making process. Yet controversies are essential to the progress of science and to informed decision-making.

Given their importance to the decision-making progress, the social responsibility of experts is considerable, and their relationship to policy-makers needs to be questioned. Science is at the centre of disaster: Serres (1999) opines that eighteenth century theodicy has been replaced by an *epistemodicy*, in which the fear of risk is fed by both the advancement of science and its

inability to provide certainties about it. He concludes that although scientists have a duty to identify risks, the decision on how to cope with it should rest with policy-makers.

2.4. *The Internationalisation of Disaster Management*

Although formal cooperation mechanisms for disaster management were not implemented until the 1970s, the deployment of international cooperation in the face of disasters is not a recent idea. In the aftermath of the Lisbon earthquake, ships loaded with relief supplies were sent from England, Hamburg and Sicily (Quenet 2005: 450). The first, large-scale international relief effort was organised during World War I, when Herbert Hoover agreed to head an international endeavour aimed to providing relief supplies to the victims of the war, and called the Commission for Relief in Belgium.

The interwar period saw the first and only attempt to provide disaster relief assistance in the form of a treaty, the International Relief Union (IRU) (Macalister-Smith 2007). Interestingly, the IRU was one of the few organisations in the field that was not established in the aftermath of war: its founding stemmed from the Messina earthquake of 1908 (Macalister-Smith 1985: 18). In many ways, the IRU was the civil equivalent of a military alliance: member states pledged to come to each other's aid of each other in case they were hit by a disaster due to *force majeure*. The idea behind the organisation is credited to an Italian senator and national Red Cross president, Giovanni Ciruolo. Ciruolo presented his idea in different meeting and conferences, until the League of Nations formally endorsed the project and convened an international conference, where 42 countries⁷² signed the treaty.

The principle behind the IRU was highly innovative: international assistance was no longer a matter of goodwill and charity, but a matter of common responsibility guaranteed by a treaty. Plagued by a permanent shortage of staff and resources, and ignored by governments, the Union failed to live up to its promises and instead concentrated on stimulating research on disaster prevention until it was finally dissolved in 1968. The experience of the IRU has now been largely forgotten, and the principle of providing international disaster assistance through a treaty has never been revived. It must be noted, however, that the convention establishing the IRU did not oblige states to take on people displaced by disasters, and excluded

⁷² Of these forty-two countries, thirty eventually ratified the treaty.

humanitarian interference: Article 4 states that ‘intervention by the International Relief Union in any country is subject to the consent of the government thereof’ (League of Nations 1927).

At a time when the IRU was practically exhausted, the Second World War saw the creation of another relief organisation, which would precede the creation of the United Nations proper: the United Nations Relief and Rehabilitation Administration (UNRRA), initiated in 1943 by Franklin D. Roosevelt to provide assistance to the war-torn allied countries. A major focus of the work of UNRRA was assistance to refugees, which included the set-up and administration of camps. UNRRA was in existence for four years only, and later transferred most of its functions to other UN agencies, in particular the International Refugee Organisation.

Following the foundation of the United Nations, disaster assistance was split between several agencies, including UNICEF and the World Health Organisation. The Office of the United Nations High Commissioner for Refugees, founded in 1951, was originally set up as a non-operational office focused on the legal protection of refugees⁷³. In the after-war period, international disaster assistance became increasingly complex and fragmented. In addition to existing agencies, a number of ad-hoc bodies were created in order to deal with specific disasters. Such bodies included the United Nations Relief and Works Agency (UNRWA), founded to care for Palestinian refugees, the UN Korean Reconstruction Agency, the UN Civilian Operations Mission in Congo, as well as the UN East Pakistan Relief Office, initially aimed at coordinating assistance for the victims of a cyclone that ravaged modern-day Bangladesh in November 1970, but later focused on the East Bengali refugees who fled to India following the outbreak of civil war (Stephens 1978: 56).

International disaster assistance started to restructure itself in the 1970s and 1980s. These decades were marred by a series of major disasters, which increased the need for a coordinated international response. The catastrophes that occurred at the turn of the 1970s, in particular, provided the background for general agreement that the role of the United Nations in disaster relief should be expanded. At that time, disasters were widely seen as unpredictable and unpreventable, and disaster relief was the prime responsibility of the affected state: ‘Not one single international governmental organisation had within it a permanent body that dealt with disasters or disaster preparedness’ (Kent 1983: 694).

⁷³ The origins, role and evolutions of UNHCR will be discussed in further detail in the next chapter.

A report of the UN General Secretary, entitled *Assistance in Cases of Natural Disaster*, recommended that countries affected by disasters should be able to rely on the assistance of the international community, and implicitly acknowledged that the ad-hoc bodies set up by the UN were insufficient to deal with the increasing number of devastating disasters. The need for a coordinated international structure was met with the creation of the UN Disaster Relief Office (UNDRO) in 1971. As a focal point for disaster relief matters, UNDRO was entrusted with two core missions: ‘To mobilize, direct, and coordinate external aid (...), and promote the study, prevention, control and prediction of natural disasters’ (United Nations General Assembly 1971). From its birth, UNDRO – like the IRU – was hindered by problems of staffing and funding, and was never able to effectively coordinate relief efforts. Furthermore, its relationship with other UN agencies (UNDP in particular) and NGOs (the Red Cross in particular) was fraught with continuous tensions and jealousy: ‘The Office faced considerable competition from other UN agencies for relief fund raising and often did not have the full cooperation of other UN agency field staff’, notes Green (1977: 32).

During the 1970s, the UN passed a number of important resolutions to reinforce the international disaster regime. The 1974 Declaration on the Establishment of a New Economic Order, in particular, contained a special funding programme aimed at providing emergency relief to the most seriously affected developing countries. Despite significant expansion in the mid-1970s, UNDRO failed to achieve a real coordinative position, and was replaced in 1991 by the Office for the Coordination of Humanitarian Affairs (OCHA), part of the newly created Department for Humanitarian Affairs. One of the motivations for the resolution establishing OCHA was the deep concern about ‘flows of refugees’ and the ‘mass displacement of people’ (United Nations General Assembly 1991). This concern for the suffering of displaced people materialised in the creation of an Inter-Agency Standing Committee (IASC), a platform of exchange and policy-making involving diverse UN agencies and other organisations, including UNHCR and the International Organisation for Migration (IOM). The inclusion of these two agencies reflects the willingness to address the plight of those displaced in natural disasters. ‘Climate change and migration’ was explicitly on the agenda of the 71st meeting of the Working Group of the IASC, held on 18-20 June 2008.

The 1990s were declared the International Decade for Disaster Risk Reduction, and saw the creation of numerous regional offices for disaster assistance, including the European Community Humanitarian Office, the *Comité Andino para la Prevención y Atención de Desastres* in

Latin America, as well as the *Centro de Coordinación para la Prevención de los Desastres Naturales en América Central*. The highlight of the decade, however, was undoubtedly the convening of an international conference on disaster reduction in Yokohama in 1994. The conference attached key importance to the role of vulnerability and other socio-economic factors in disaster reduction, and the Yokohama Strategy – the main outcome of the conference – specified that disaster prevention and development were more important than disaster response (World Conference on Natural Disaster Reduction 1994).

The International Decade for Disaster Reduction was marked by the increasing specialisation of actors: almost all UN agencies developed a branch for disaster reduction, and NGOs gained wider currency. The decade gave birth to yet another UN organisation⁷⁴, the International Strategy for Disaster Reduction (ISDR), a platform designed to foster and facilitate international cooperation amongst multiple stakeholders in the field of disaster reduction. In the present day, disaster management at the UN-level is roughly between disaster relief, overseen by OCHA, and disaster prevention, coordinated by ISDR.

This myriad of actors constitutes the embryo of a governance system for natural disasters, but one that is not yet strongly structured. The system remains highly fragmented, increasingly specialised, and marred by institutional rivalries. While concern for people displaced by natural disasters has become more central to disaster management efforts over time, with attention devoted to the issue on discussion agendas, and the inclusion of agencies dealing with refugees and migrants in the system, no concrete mechanism has yet been implemented, and the system remains organised according to sovereign states, despite increasing internationalisation.

3. The Current International Regime of Disaster Management

Although disaster prevention and relief remain primarily a matter of national policies, recent years have witnessed the emergence of an international system – some would say a governing structure – to deal with disasters on a global level. What are the normative frameworks shaping this system, and how does it care for those displaced by disasters?

⁷⁴ Note that the term ‘organisation’ was carefully avoided.

3.1. An Overview of Disasters Worldwide

According to the Emergency Events Database (EM-DAT) maintained by the Centre for Research on the Epidemiology of Disasters (CRED) at the University of Louvain, a total of 414 disasters were reported in 2007, resulting in 16,487 casualties and affecting more than 211 million people (Scheuren et al. 2008). This figure confirms an upward trend in the occurrence of disasters, which has been identified since the start of the systematic recording of disasters in the early twentieth century: the number of people killed in disasters has been steadily decreasing since the mid 1970s, while the number of affected people⁷⁵ has been on the rise. Overall, despite the upward trend in the occurrence of disasters, the number of victims (people killed and people affected) has remained quite stable, meaning that the average number of victims reported per disaster is decreasing. It is not clear whether this decrease can be attributed to improvement in the reporting of disaster, or to better preparedness of the population; the question remains unanswered as the search for better statistical methods on disaster reporting continues.

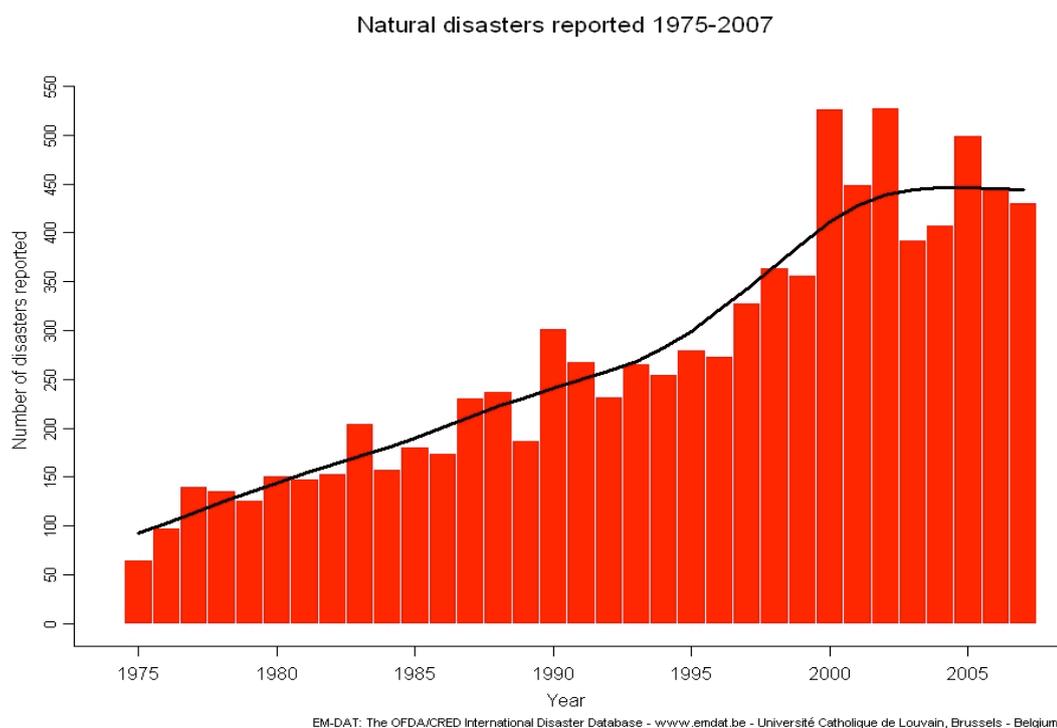


Fig. 7 – Number of natural disasters reported, 1975-2007. Source: EM-DAT, OFDA/CRED International Disaster Database.

⁷⁵ ‘Affected people’ are defined as those requiring assistance during a disaster, including the people displaced and evacuated.

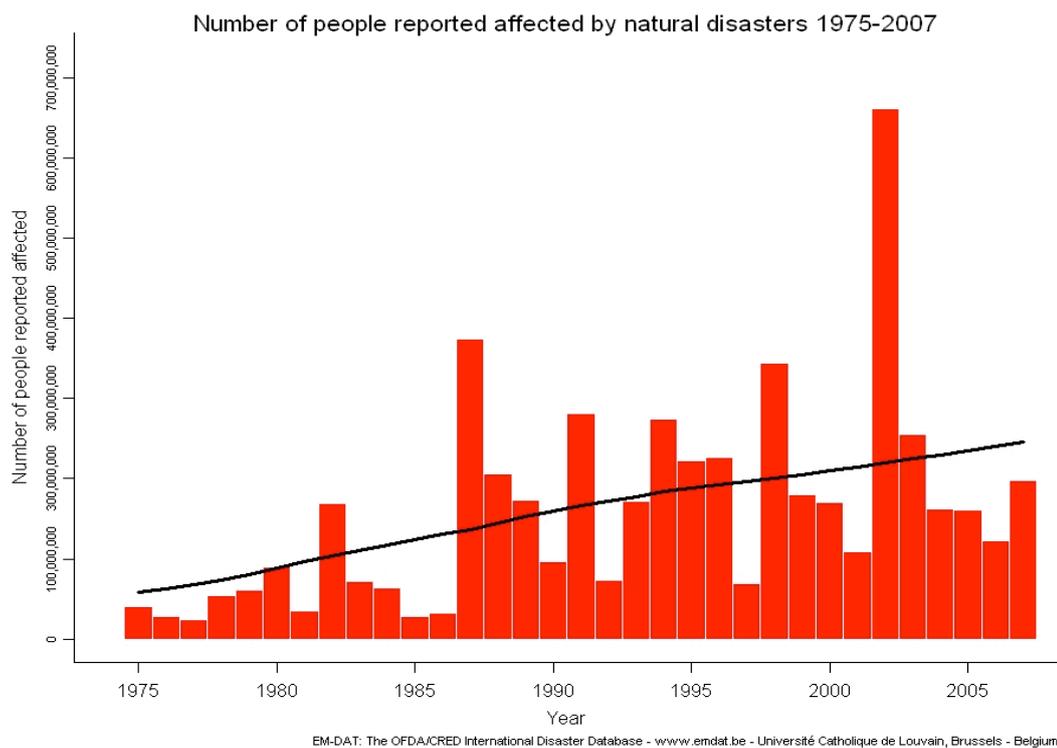


Fig. 8 - Number of people affected by natural disasters, 1975-2007. Source: EM-DAT, OFDA/CRED International Disaster Database.

Not all countries are equally affected by disasters: most disasters occur in South East Asia, a region that also reports the largest numbers of victims. Between 1974 and 2003, the 10 disasters with highest numbers of people affected all occurred in either China or India, suggesting the importance of demographic growth to the exposure to disaster risks. Of the total number of people killed by natural disasters between the mid-1990s and the mid-2000s, more than 75 per cent were in Asia (Guha-Sapir et al. 2004: 29). Overall, developing countries are disproportionately affected by disasters, although OECD countries report the highest economic losses. In developing countries, the poor are the hardest hit by disasters, since they tend to live in more hazard-prone and/or overpopulated areas, a claim that has long been substantiated by studies on environmental racism in the United States (Downey 1998; Boer et al. 1997).

Not all victims receive the same level of assistance: certain types of disasters are more likely to attract international assistance than others. During the period from 1990 to 1999, the amount of international assistance for disaster relief more than doubled, from US\$ 2.1 billion in 1990 to US\$ 5.9 billion in 2000. This aid, however, was not evenly distributed, nor was it

distributed in proportion to human need. People affected by drought received an average of US\$ 2.8 per capita in international aid, while people affected by floods received US\$ 7.4 per capita on average, and people affected by wild fires and tidal waves received more than US\$ 500 per capita (Guha-Sapir et al. 2004: 50). The latter disasters tend to be brutal, large-scale events, and attract more spectacular media interest – and hence more financial assistance – at the expense of objective criteria of need.

Finally, no comprehensive data exist for people displaced by disasters: statistics are generally related to the number of fatalities, the number of people affected, and the extent of economic losses. The only way to apprehend displaced people from a statistical point of view is through data on affected people, which also include people displaced and evacuated. Though the media frequently report on people made homeless by disasters, no comprehensive statistical effort has been undertaken to systematically collect data on these people. Nonetheless, it would seem that the acquisition of accurate, specific data on displaced people is a necessary preliminary step for the design and implementation of adequate policy responses.

3.2. Normative Frameworks

Normative frameworks on disaster management remain disparate, highly fragmented, and dominated by the classic tension between national sovereignty and world governance. International norms are most often recommendations and guidelines, without holding binding value. National frameworks, on the other hand, are often uncoordinated with each other, even though ISDR has aimed to foster coordination in recent years.

At the international level, the most ambitious document is undoubtedly the Hyogo Framework for Action 2005-2015, appropriately subtitled ‘Building the Resilience of Nations and Communities to Disasters’. The document, which is the main outcome of the World Conference on Natural Disaster Reduction, held in Kobe (Japan) on 18-22 January 2005, follows the path of the Yokohama Strategy. Today it is the principal international framework for disaster management, setting out priorities for the period 2005-2015. It is a document of soft law, that is, without binding force, although many countries have incorporated its priorities into their national disaster action plans.

The Hyogo Framework draws heavily upon the concept of vulnerability, and sets itself three strategic goals:

- 'More effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels' (...);
- Development and strengthening of institutions, mechanisms and capacities at all levels (...), that can systematically contribute to building resilience to hazard ;
- The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities' (World Conference on Natural Disaster Reduction 2005).

The document makes a series of recommendations to national governments for better disaster reduction: only one of these recommendations addresses the issue of displacement, and governments are advised that programmes for displaced persons should not increase risk and vulnerability to hazards. The document, however, does not elaborate upon whether this recommendation applies to temporary camps and/or housing, or permanent relocation or resettlement, or both. However, it does make clear that states have the 'primary responsibility to protect the people and property on their territory from hazards and (...) to give high priority to disaster risk reduction'. In cases where reasonable measures to prevent disasters have not been taken, Walter Kälin, Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons, recommends that displaced people should have the right to claim compensation from the government and public officials (Office of the United Nations High Commissioner for Human Rights 2005). With regard to disaster relief, the Hyogo Framework encourages – but does not impose – mutual assistance, and recommends the promotion of 'a culture of insurance in developing countries'.

The Hyogo Framework is supported by the Global Facility for Disaster Reduction and Recovery (GFDRR), a fund managed by the World Bank on behalf of the ISDR. The GFDRR provides funding for projects aimed at reducing vulnerability to natural hazards, especially in the global South. Funding, however, remains modest – approximately US\$ 78 million have been pledged so far – but the mechanism also contains the first global disaster recovery fund, the Standby Recovery Financing Facility, created in 2006. This facility consists of two funds: a fund for long-term recovery technical assistance, and a fund that can be

immediately activated when a disaster strikes. The overarching goal of the facility is to make disaster recovery financing easier to predict, although it also recognises the central role national governments play in this process. Though this is not explicitly stated, the fund could also be used to facilitate the return of those displaced by disasters, and to aid the reconstruction of their homes.

Besides the Hyogo Framework and its Global Facility for Disaster Reduction and Recovery, other regional agreements also aim to foster international cooperation in disaster management. The Inter-American Convention to Facilitate Disaster Assistance, signed in 1991, outlines the conditions of mutual disaster assistance amongst its member states. Some national plans for disaster assistance are more explicit than others with regard to forced displacement and refugees: in addition to the Office for Foreign Disaster Assistance (OFDA), the United States established in 1962 an Emergency Refugee and Migration Assistance Fund (ERMA), a contingency fund of US\$ 100 million to be used at the discretion of the President. Though the fund aims to respond to the objective of preventing or minimizing the human costs of conflict and natural disasters, it appears that the fund is primarily directed to refugees displaced by conflicts, ignoring those displaced by natural disasters (Margesson 2006).

Other general principles of international law can also provide relevant normative frameworks for disaster management. Such principles include:

- The principle of precaution, formally established at the 1992 Rio Earth Summit, which contains an obligation to act to prevent natural disasters;
- Human rights, including the most fundamental right, the right to life;
- The duty to inform other states in case of disaster, particularly in cases of pollution, also established at the 1992 Rio Earth Summit and since reiterated at numerous regional conventions.

Overall, international disaster law remains weak and fragmented, and resorts almost exclusively to soft law. It is not yet a consistent body of law, even though disaster management has been increasingly institutionalised and internationalised under the impulse of ISDR. The development of binding international law on the subject remains hampered by

national sovereignty: recent history shows that there are still numerous occasions when a country struck by a disaster refuses international assistance⁷⁶.

Furthermore, existing normative frameworks do not address directly the issue of disaster-related displacement. As shown above, the displaced are all but absent from disaster statistics, and they are equally absent from normative frameworks. Over time, these frameworks have placed greater emphasis on social vulnerability and community resilience without providing effective, systematic protection and assistance to those displaced. The next section highlights the role of international organisations and agencies in providing this protection in the absence of formal, normative provision.

3.3. International Organisations and the Protection of those Displaced by Natural Disasters

Over time, international organisations dealing with refugees and migrants have been increasingly solicited to provide protection and assistance to those displaced by disasters, even though such role is usually not part of their initial mandate. This is especially true for UNHCR, but also for IOM.

3.3.1. UNHCR

The UN Refugee Agency has long been an important actor of disaster relief. Its action, however, has been confined to theatres of wars and civil conflicts, and has only recently extended to the field of natural disasters. A turning point in this evolution was UNHCR's intervention in the aftermath of the Asian tsunami, at the end of 2004. Prior to this intervention, UNHCR's policy was not to become involved in situations of natural disasters, as it had limited experience of responding to them. At a discussion event on the topic of environmental migration held in New York in May 2007, a UNHCR representative justified this policy by the fact that people displaced by disasters were not part of UNHCR's mandate, and were already taken care of by other organisations (Gorlick 2007). The role of the UN Refugee Agency in situations of disasters was therefore limited to people displaced by wars

⁷⁶ The United States initially refused international assistance after Hurricane Katrina, as did the Burmese government after Cyclone Nargis, and the Chinese government after the Sichuan earthquake.

and civil conflicts. UNHCR was originally conceived as a non-operational agency, and even sought the abolition of its Emergency Fund in the 1960s (Kent 1983: 496).

The tsunami was UNHCR's first major intervention in a situation of natural disaster, and prompted wider reflection on its role in such situations. The rationale for the agency's intervention in Indonesia and Sri Lanka was manifold: first, there was a moral imperative to assist those in need faced with one of the world's worst ever disasters. As then-UN High Commissioner for Refugees, Ruud Lubbers, described 'the magnitude of this disaster is so enormous and shocking that we will do everything we can to join the international community in bringing help as rapidly as possible to the victims of these gigantic waves' (United Nations High Commissioner for Refugees 2004). The duty to help was reinforced by UN Secretary-General Kofi Annan's call to all UN agencies to join the relief effort, as well as UNHCR's previous presence and expertise in the region.

Furthermore there was a 'long-term protection imperative of maintaining positive relations with countries where UNHCR needed to carry out its traditional mandate' (Lambert and Pougin de la Maisonneuve 2007: 1). As stated above, the agency had a well established position in Sri Lanka. The success of future operations of refugee protection in the region would doubtless have been compromised by a passive attitude of UNHCR at a time when the country was confronted with its largest disaster ever. The situation in Indonesia was more sensitive, due to the civil war raging in the Aceh province: here the tsunami operation was also a way for UNHCR to enhance its presence in the country, in the case of a possible return of refugees from Malaysia to the Aceh province.

Finally, strategic considerations were also part of the agency's decision to intervene. In an independent review of the tsunami operation, Lambert and Pougin de la Maisonneuve note that there was a 'strategic organisational imperative, at a time of UN reform, of indicating a practical organisational capability which would be valued whatever the eventual outcome of such reform' (2007: 1). Indeed, the tsunami operation happened at a time when UNHCR's role within the UN system was questioned. The operation's evaluation report details the reasons for this questioning, and suggests that UNHCR should take a more proactive role in situations of natural disasters:

Over recent years, there has been a significant drop in the global number of refugees, UNHCR's traditional beneficiaries. In parallel, there has been a rise in the number and impact of natural disasters and in the numbers of internally displaced people. In the days following the Tsunami there was huge support, and pressure, for a response from all humanitarian actors, backed up by an unprecedented injection of funding. In this context and at a time of considerable change within the UN system, UNHCR could demonstrate that it had a good capability to deliver, both in its protection mandate and in the area of emergency and transitional shelter. (...)

UNHCR's current policy is not to become involved in natural disasters. However, as has happened in recent major disasters (the Tsunami and the South Asia earthquake), it is likely that response capacity will be a key consideration in deciding who should respond. Recognising this, and bearing in mind its relationships with other emergency shelter actors, UNHCR should make it clear that it will be prepared to respond, or provide support to a response, in major natural disasters. (...) In exceptional circumstances, should it be requested to lead a response, it should be prepared to do so. It is important to clarify this to avoid the need for distracting internal debates at the time of a major sudden-onset disaster. (Lambert and Pougin de la Maisonneuve 2007: 9 & 39)

Hence the decision by UNHCR to respond to the tsunami disaster was not only justified by the scale of the disaster and of public outcry, but also by internal motives, which related to the agency's presence in the region and strategic considerations about its future role in the UN system.

At this stage, three observations can be made about UNHCR's involvement in natural disaster relief efforts:

1. The tsunami operation was not planned: not because the tsunami was unpredictable, but because UNHCR's policy was not to intervene in cases of natural disasters. Although the operation was overall rather successful⁷⁷, it was largely improvised. The initial response was modest: the agency initially decided upon an aid package of US\$ 7.8 million in Indonesia. The budget was later increased to US\$ 40 million, and a flash appeal was finally issued, requesting US\$ 75 million – about ten times the amount of the initial commitment. In the emergency phase of the relief effort, UNHCR assisted roughly 250,000 people with shelters in Sri Lanka and Indonesia. In later transitional phases, it coordinated the provision of shelters to about 300,000 people, mostly in Sri

⁷⁷ Except for the Aceh province, as detailed below in point 4.

Lanka, and successfully advocated for an equal treatment of people affected by conflict and by the tsunami. None of these programmes had been previously coordinated with local governments, which led to several difficulties with the Indonesian government in the Aceh province.

2. Though the tsunami response was not part of UNHCR's mandate, and therefore not planned, the agency's involvement in disaster relief has considerably increased since the tsunami. Less than a year after the Indian Ocean disaster, a violent earthquake struck Pakistan, prompting another intervention by UNHCR. The intervention was justified on similar grounds as the tsunami operation, as synthesised on the ad-hoc page of UNHCR's website:

The UN refugee agency has traditionally played a very minor role – if any at all – during natural disasters. Its mandate is for refugees – the product of deliberate persecution or war – with a recently expanded role for people displaced within their own countries by similar man-made causes. However, within a couple of days of the earthquake, it became clear that UNHCR's services would be needed for the second natural disaster in under a year (it also launched a major operation after the December 2004 tsunami in Asia). There were two main reasons for this: firstly, after 25 years managing major operations in Pakistan for the care and maintenance – and subsequently repatriation – of millions of Afghan refugees, it was still one of the biggest operational agencies on the ground. Secondly, after decades of setting up and running refugee camps all over the world, it is the UN system's specialist on the provision of emergency shelter and camp management. (United Nations High Commissioner for Refugees 2005)

Following the Pakistan earthquake, the refugee agency intervened in several other disasters: during the Kenya flooding in November 2006, and more recently during after Cyclone Nargis hit Burma in May 2008. The agency's response to natural disasters has not yet become systematic, but can now be qualified as regular – a trend that finds its origin in the 2004 tsunami response. The response, however, remains ad-hoc, and has not been formalised and systematised.

3. Finally, UNHCR's assistance remains limited to the provision of emergency and transitional shelters, not permanent housing. After the initial emergency response, the

Sri Lanka government asked UNHCR to coordinate the provision of transitional shelters, which it successfully did. Things went differently in Indonesia, where the agency was in charge of providing emergency and permanent shelters, but not transitional shelters (which were set up directly in wooden barracks by the Indonesian government). Because of management problems and tense relationships with the government, the delivery of permanent shelters was far lower than the initial targets, and it was recommended that UNHCR no longer be involved with the provision of permanent shelters, because severe problems were encountered and the agency did not perform well overall (Lambert and Pougin de la Maisonneuve 2007). In subsequent disasters, UNHCR provided emergency shelters (tents in particular) and supplies, but did not attempt to engage in long-term reconstruction efforts. Thus it appears that the agency's involvement in disasters has focused primarily on emergency response, rather than on reconstruction building.

3.3.2. International Organisation for Migration (IOM)

Along with UNHCR, the International Organisation for Migration (IOM) focuses specifically on the needs of displaced populations. The IOM Constitution does not explicitly include assistance to populations displaced by disasters, but article 1.b. states that the organisation should 'concern itself with the organized transfer of refugees, displaced persons and other individuals in need of international migration services for whom arrangements may be made between the Organization and the States concerned, including those States undertaking to receive them' (International Organization for Migration 1951), which can be interpreted as an implicit mandate to care for those displaced by natural disasters.

As in the case of UNHCR, IOM has increasingly been involved in natural disasters over time. In contrast to UNHCR, however, the migration organisation seems to be more concerned with disaster prevention, preparedness and reconstruction. Whereas UNHCR concentrates its efforts on the provision of shelters, food and emergency supplies, as well as on the legal protection of refugees and IDPs, IOM adopts a more holistic approach, which includes the provision of health services, professional training, disaster risk management, prevention of human trafficking and construction of permanent homes and shelters.

The tsunami catastrophe also constituted a seminal event in the organisation's approach to natural disasters. An IOM report on the tsunami response noted that the international effort appeared to have been characterized by 'an excessive emphasis on the emergency response and an over-supply of goods to some groups of victims, whilst missing some more marginal groups, and a relative failure to move to the reconstruction phase' (Naik et al. 2007: 29). IOM provided different types of assistance in the aftermath of the tsunami, moving beyond a simple emergency response to engage in reconstruction efforts. Since the tsunami, the organisation has assisted in a wide number of other disasters.

Overall, IOM interventions in situations of natural disasters are more formalised and systematic than UNHCR's, in large part thanks to its wider mandate. However, a notable shift has also occurred within the organisation since the tsunami disaster: whereas assistance to people displaced by disaster used to be somewhat of a peripheral activity for the organisation, it is now becoming a core aspect of its activities.

3.4. The Operational Guidelines on Human Rights and Natural Disasters

In the absence of normative frameworks, organisations have stepped up to provide operational responses to natural disasters. These responses have consisted of ad-hoc, unplanned but increasingly frequent interventions in the case of UNHCR, while for IOM they represent a planned, holistic and increasingly important sphere action. These operations have been analysed and assessed at great length, such as the extensive work of the Tsunami Evaluation Coalition (Telford and Cosgrave 2006).

The assessments of these on-the-ground responses translated into a policy document entitled Operational Guidelines on Human Rights and Natural Disasters, edited by the Inter-Agency Standing Committee (2006). The guidelines were drafted by Walter Kälin, Representative of the UN Secretary-General on the Human Rights of Internally Displaced Persons (RSG), after the 2004 tsunami and the 2005 Hurricane Katrina, and later enriched by the inputs of member agencies of the IASC.

The documents outline four types of protection that ought to be guaranteed to people affected by disasters: the protection of life, security of the person, physical integrity and dignity; the protection of rights related to basic necessities of life; the protection of other

economic, social and cultural rights; and finally the protection of other civil and political rights. The guidelines also address second-generation human rights, and not only the most basic, first-generation human rights.

The first type of protection relates directly to the displacement of populations following a disaster. The guidelines here stress the importance of free movement within the country, forbid of forced resettlement, and enjoin the obligation to apply the Guiding Principles on Internal Displacement to those displaced within their country:

A.1.4 When the natural disaster has occurred, persons affected by it should be allowed to move to other parts of the country and to settle there. This right may not be subject to any restrictions except those which are provided by law, and are necessary to protect national security, the safety and security of affected populations, public order (ordre public), public health or the rights and freedoms of others.

A.1.5 Persons—including evacuees—who have been ordered or forced to flee or to leave their homes or places of habitual residence as a result of a natural disaster or its effects, or have left in order to avoid them, and have not crossed an internationally recognized State border should be treated as belonging to the category of internally displaced persons covered by the 1998 Guiding Principles on Internal Displacement.

A.1.6 After the emergency phase, persons displaced by the natural disaster should be granted the opportunity to choose freely whether they want to return to their homes and places of origin, to remain in the area to which they have been displaced, or to resettle in another part of the country. (Inter-Agency Standing Committee 2006: 18)

The document further stresses the freedom of movement and the right to return:

D.2.1 In accordance with their right to freedom of movement, persons displaced by natural disaster should be provided with the information necessary to exercise their right to decide freely where they want to live—whether they want to return to their homes, to integrate where they are staying during their displacement or to resettle in another part of the country.

D.2.2 Appropriate measures should be taken as soon as possible to establish conditions conducive to sustainable return in safety and dignity. Conditions are considered sustainable if:

(i) People feel safe and secure, free from harassment and intimidation, as well as from unmitigated risks of further calamitous effects produced by natural hazards;

(ii) People have been able to repossess their properties or homes, and these have been adequately reconstructed or rehabilitated;

(iii) People can return to their lives as normally as possible, with access to services, schools, livelihoods, employment, markets, etc. without discrimination. (Inter-Agency Standing Committee 2006: 30)

These guidelines are undoubtedly the most advanced effort to address the issues of people displaced by disasters directly; however, they have not yet been approved by any legislative body, and therefore cannot be considered a normative framework.

In order to understand the process that led to the development of these guidelines, I will consider the IASC to be a policy forum, and its member organisations to be part of competing advocacy coalitions. If we recall the terms of the debate between the sceptical and alarmist coalitions, on a policy level the former advocated a better use of the existing instruments, whereas the latter favoured the development of new norms and tools. Within the IASC, agencies with strict mandates, such as UNHCR, ranked with the sceptics, while NGOs and agencies with a broader mandate, such as IOM, ranked with alarmists. This positioning was not solely determined by their mandate, but also by their approach to disasters and thus the way they saw their role in emerging international disaster governance: UNHCR considers disaster interventions to be exceptional extensions of its mandate, whereas NGOs and IOM see them as part of their core activities. One should not underestimate, however, the strength of internal debates within both organisations – and in particular within UNHCR – which will be developed in the next chapter.

The development of the operational guidelines was the results of two concurring factors:

- First, the perturbation of the system by external events. The tsunamis, hurricanes and earthquakes which hit parts of Asia and the Americas in 2004-2005 were explicitly cited as the events that precipitated the adoption of the guidelines. These disasters were unprecedented in their scale and the damage and suffering they induced.
- Second, the action of a policy broker, Walter Kälin, who initiated the effort and mediated between the two coalitions through a participative process. Both coalitions had a chance to review and modify the Operational Guidelines through the policy

forum constituted by the IASC. Kälín, as a policy broker, successfully sought to reach a compromise that could result in a policy output.

This policy output has not yet established itself as a standard for disaster management operations; it has not been much publicised, and nor has it been transposed in a resolution of the UN General Assembly, which would make it a normative framework. The reason for this low profile has to be found in the continuing opposition between the two advocacy coalitions: the document is the result of a mediated compromise, a compromise based on the fact that the operational guidelines would not be a normative framework, but rather a soft law document. The sceptical coalition opposed the idea that the guidelines could become a norm, and managed to impose its views. Before the document is able reach a higher level, similar mediation will be necessary in other policy areas.

These guidelines and recommendations, however, are not always applied, as evidenced by the failing policy responses in the case of hurricane Katrina.

4. Empirical Illustration: Disaster Management of Hurricane Katrina

‘Brownie, you’re doing a heck of a job’ – these words addressed by President George W. Bush to FEMA Director Michael Brown during a field visit in Mobile, AL five days after the hurricane landfall (White House Press Secretary Office 2005a) spurred an immediate and widespread uproar. The same day President Bush made these remarks, local New Orleans newspaper *The Times-Picayune*’s headline read ‘Help Us, Please’. It would take an additional 48 hours before rescue teams finally reached the flooded city. Different stages of mismanagement of the crisis can be distinguished here: first, the lack of evacuation planning for New Orleans’ most vulnerable residents; second, the belated and sometimes inadequate relief efforts in the immediate aftermath; and finally, the slow and sometimes inefficient recovery efforts. Failures were too numerous to be listed here exhaustively; it is nevertheless useful to identify some key points at which the discrepancies between disaster planning and its applications were most blatant.

4.1. *Perceptions of the Failures*

The evacuation was the key target of criticism, from media, commentators, and evacuees themselves. The experience of the evacuation varied greatly according to the characteristics of the evacuees, but those who had the worst experience of their evacuation also had a tendency to blame FEMA and local authorities more severely. Much criticism focused on the military rather than the local, state or even federal administration. The military were the first external presence in the city four days after the hurricane hit, and their role was to secure the city and enforce law and order, rather than actually providing help to the residents. Leah Hodges was particularly critical during her hearing before the Select Bipartisan Committee:

My family was ordered to evacuate our home. We were directed to evacuation points. Beforehand, I, my mother, my brother and two sisters visited a nursing home where the elderly clients had been abandoned by the owners and staff. There were five elderly persons there; the others had been evacuated earlier, perhaps by family. The day before the flood, the manager had come and told everyone they had to get out. Taking the keys to the bus that the home used to transport the senior citizens, the manager left them stranded. We rescued them. We shared all our food and provisions. When we approached the police and asked for help, they refused to help us. Instead, they threatened to shoot my baby brother.

We were then lured to the so-called evacuation points. This was several days after the hurricane had struck. The city was flooded. Soldiers had showed up with M16s and military weapons. They had declared New Orleans and Jefferson Parish a war zone. They loaded us onto military trucks after they told us they would take us to shelters where our basic needs would be met.

We were dropped off at a site where we were fenced in, and penned in with military vehicle. The armed military personnel brought in dogs. There we were subjected to conditions only comparable to a concentration camp. (...)

We were just three miles from an airport, but we were detained there for several days. Many of those who were there when we arrived had already been there several days. On any given day there were at least ten thousand people in the camp. On my last day there, I would estimate there were still three thousand detainees. By that time, nearly all the white people had been selected to evacuate first. They were put on buses and shipped out, leaving the remaining population 95 per cent black. (...)

The camp was so big, and people were scattered. People were deliberately kept apart. One woman was not allowed to see her two children.

At the camp, they lied and told us all the buses were going to the same place. They wouldn't tell us when the buses were coming. Meanwhile, my Mother sat in the blazing hot sun...

On the last day they refused to give food and water to the ill for 24 hours.

People died in the camp. We saw the bodies lying there.

They were all about detention, as if it were Iraq, like we were foreigners and they were fighting a war. They implemented war-like conditions. They treated us worse than prisoners of war. Even prisoners of war have rights under the Geneva Convention.

(Written testimony for the record by Leah Hodges 2005)

The evacuation trajectories and itineraries were also more complex than initially thought, and sometimes involved return to New Orleans before further displacement. The displacement of the following evacuee is particularly exemplary of the complex trajectories that were sometimes followed:

I was watching reports about the hurricane on Saturday, and then my son called and said 'We might have to leave'. We left on Sunday⁷⁸ at 5 AM. We drove to Jackson, Mississippi, because my son had a good friend there, and we could stay in his house. It took us twelve hours to get there. I thought we'd be gone for three days, so I didn't pack anything: I even packed a swimsuit, because I knew there was a swimming pool! We had been there before. We stayed in Jackson for one week, then we flew to Boston, to stay with my daughter. Everybody was very kind with us over there. Katrina people were celebrities! Everybody wanted to help us and talk to us. I didn't know exactly what had happened to our house before I saw a report on CNN about our neighbourhood. There was a Shell station at the corner of the street, and I saw that only the top of the gas station was emerging from the water. That's when I realised that my house was gone. That was a hundred times worse than you could possibly imagine. I signed up with the Red Cross, and I received some clothes in Boston.

⁷⁸ 28th August 2005, the day before the hurricane made landfall.

But I wanted to see my house, and we couldn't go back to New Orleans. That was horrible. It took seven weeks before I could fly back with my daughter to New Orleans, to see the house. We stayed with friends in New Orleans for a couple of days, then my daughter flew back to Boston and I flew to California to stay with relatives. I stayed there for about six weeks, and FEMA sent me a cheque there. (...)

If it wasn't for cell phones, we wouldn't have survived. All the main lines were down, so the cell phones carried us through. (...)

I don't blame local officials, I think it's primarily the fault of the Corps of Engineers⁷⁹. I was interviewed by NBC when we were in Jackson. NBC was trying to push me to put the blame on the government, but I didn't want to. They never ran the interview.

(Arcenia Crayton)

4.2. Analysis of the Failures

The bipartisan committee set up to investigate the failures in the management of Katrina pointed to different problems with the evacuation planning, which include:

- A failure to implement the lessons learnt from the Hurricane Pam evacuation exercise, conducted in 2004. This failure is also stressed by van Heerden and Bryan (2006: 146). A hurricane such as Katrina had been dreaded for years, and the Pam exercise was designed as a rehearsal for a possible complete evacuation of the city.
- The delay in the issuing of a mandatory evacuation order. As said earlier, this order was delayed by Governor Blanco and Mayor Nagin until 19 hours before the hurricane's landfall, despite adequate prior warning. This delay, as well as Mayor Nagin's decision to shelter but not evacuate the remaining population, in tandem with individual decisions, led to an incomplete evacuation, resulting in preventable deaths, great suffering and further delays in relief.

⁷⁹ The Corps of Engineers was in charge of the design, construction and maintenance of the levees that failed.

- Overall, the lack of proactive federal response drew heavy criticism and uproar. Amongst the failures listed were the inadequate information and advice given to President George W. Bush, the incompetence of the then-FEMA Director Michael Brown, and miscommunication. In particular, the failure to invoke the Catastrophic Incident Annex⁸⁰ prevented the full implementation of the National Response Plan, including a switch from a reactive to a proactive mode of operations.
- The lack of coordination and communication between different federal agencies and local authorities was also stressed as one of the key reasons that impaired effective and timely response. These communication problems have been extensively documented in almost all books published on the disaster (Brinkley 2006; McQuaid and Schleifstein 2006).
- The sheltering process was acknowledged as inadequate and haphazard: relocation plans did not provide adequate shelters, and the shelters of last resort were not carefully selected. Furthermore, delays due to manufacturing limitations led to delays in getting evacuees out of the shelters and into temporary housing. This problem is also addressed by Nigg, Barnshaw and Torres (2006).

Overall, the majority of failures identified by the Select Bipartisan Committee report were attributed to a lack of communication, preparation and communication. Many observers, however, saw racism as the root cause of the inefficiency (Dyson 2006). As a matter of fact, most of the residents trapped in New Orleans were black and poor – as mentioned above, social vulnerability was a major factor hindering the evacuation (Cutter 2006). The image of Katrina’s victims rapidly took on the traits of those trapped in New Orleans: black, poor, angry and desperate, leading to accusations of racism in the government’s response to the disaster. ‘It was not long before some black leaders in New Orleans and around the country began to cast the inept handling of the crisis in racial terms’ (van Heerden and Bryan 2006: 129). These accusations were sometimes fuelled by the Mayor himself, most notably by his ‘chocolate city’ speech (“Transcript of Nagin's speech” 2006).

⁸⁰ The introduction to the Catastrophic Incident Annex states that: ‘The Catastrophic Incident Annex establishes the context and strategy for implementing and coordinating an accelerated, proactive response to an incident where there are mass casualties and destruction within the City boundaries from a single event.’

The Gretna Bridge incident catalysed the accusations of racism in the handling of the crisis by authorities. On September 1st, three days after the disaster, a group of people, the vast majority of whom were black, tried to walk away from New Orleans and enter the small town of Gretna, south of New Orleans. In order to do so, they had to cross the Crescent City Connection bridge, where they were turned down by police officers, who fired shots above their heads and refused to let them enter the predominantly white city of Gretna (2006: 469). The incident was widely reported as criminal and racist. As van Heerden put it, 'I picture a different welcome if they had all been white' (van Heerden and Bryan 2006: 130). Other accounts of the incident, however, tell a different story and reveal that the main motivation for shutting down the access route to Gretna was that the small city was already overwhelmed by evacuees and could not take any more of them, being ill-prepared to welcome them and provide them with basic necessities (Colby 2005).

Many of the evacuees I met did not perceive the response as racially biased, and many accepted the official conclusion that the inefficient response was more the result of a lack of coordination, leadership and communication. Terroll Williams testified before the House of Representatives that '[he didn't] think the federal response was radically motivated in any way - [he thought] the Federal Government was simply unprepared and incorrectly staffed for a natural disaster.' (Statement of Mr Terrol Williams 2005). As I will show in the next section, I argue that perceptions of the evacuation and its handling were primarily a reflection of each evacuee's experience.

Many scholars have provided hypotheses to explain why the government did not respond adequately to the disaster. Sobel and Leeson, for example, provide six explanatory hypotheses (Sobel and Leeson 2006):

- The tragedy of the anti-commons, a problem that occurs when too many individuals have the power of exclusion, i.e., there are too many actors in the decisions process;
- Errors resulting from under cautiousness and over cautiousness;
- Political manipulations in order to get more votes;
- The imperfect disclosure of the actors' preferences, partly imputable to the media;
- Glory seeking by government officials;
- Short-sightedness.

Shughart adds that the setting of Katrina is no different from any other political problem, and that therefore 'no one should have expected government to be any more effective when confronted with natural disaster than it is in more mundane circumstances' (Shughart II 2006: 55).

This resulted in a strange paradox: although the evacuation of the city overall was a relative success, it was the incompleteness of the evacuation, abundantly shown in the media, that triggered public uproar concerning management of the disaster. The evacuation rate was far above the most optimistic predictions of evacuation planning experts (van Heerden and Bryan 2006), but the fact that about 70,000 individuals remained stranded in the city in appalling conditions was the focus of the most vehement criticism of the disaster management. I argue that the reason was that the evacuation was racially and socially stratified, exposing massive inequalities in vulnerability. These inequalities had been grossly neglected, and this negligence was perceived as racism. In the abovementioned survey conducted for *The Washington Post* by the Kaiser Family Foundation and Harvard University, 68 per cent of the respondents claimed race and poverty had impacted on the speed of the rescue efforts ("Survey of Hurricane Katrina Evacuees" 2005).

The issue of racism in the organisation of the evacuation will most likely remain a hotly disputed topic, and deeply affect race relations in the city of New Orleans. It has even lead to belief in a surprising conspiracy theory, among some members of black community organisations I met, particularly in the Lower Ninth Ward⁸¹, that the levees had been blown up on purpose. According to the theory, whites had used dynamite on the levees when they saw the hurricane approaching, in order that the black neighbourhoods would be flooded, the black population would be chased away, and they would be able to regain control over the city. This conspiracy theory actually found its origin in an episode related to hurricane Betsy, which devastated New Orleans and the Gulf Coast in September 1965. Some levees had been intentionally breached by the authorities at that time, in order to divert the water and salvage most of the city from complete flooding, thus 'sacrificing' some neighbourhoods for the sake of most of the city. The episode is recalled in Colten (2004). Although the rumour, in the

⁸¹ The Lower Ninth Ward was probably the neighbourhood hit the hardest by the flooding. It was a 98 per cent black neighbourhood, and has not yet been rebuilt.

case of Katrina, is not supported by any empirical evidence⁸², its impact on race relations in New Orleans has been profound.

Overall, it appears that the policy response to the disaster was strongly biased towards emergency management, at the expense of assistance to rebuilding and relocation. As noted by Fussell (2006):

The ideology of disaster management disempowered the people it was supposed to help. (...) Disaster professionals were focused on distributing food, clothing and medical supplies and neglected to provide phones, computers and social workers to assist people in utilising their own resources.

4.3. Conclusion

I argue that the focus on emergency relief in response to Hurricane Katrina was shaped by the conceptualisation of environmental migration following a natural disaster as a temporary movement with almost immediate return. According to this conceptualisation, migrants were perceived as helpless victims rather than resourceful migrants. This resulted in a policy response that focused on emergency assistance, and ignored two key elements:

- The absence of assistance towards rebuilding;
- The absence of assistance towards relocation.

Overall, both rebuilding and relocation policies were characterised by great uncertainty, reinforced by media representations. As a result of this uncertainty, people remained confined in a state of displacement.

⁸² Unlike what happened with hurricane Betsy in 1965, many white or mixed neighbourhoods of New Orleans were equally flooded this time, including Lakeview or Uptown, the only notable exception being the French Quarter.

Conclusion

Natural disasters are very political processes: each of them sets into motion a machinery of norms and policies, which are embedded in assumptions about the role of the state to protect its citizens from insecurity. The increased numbers of disasters has forced the international community to rethink its approach to disaster: this approach is now more international and institutionalised than it has ever been. However, international normative frameworks for disaster management remain weak, non-binding and disparate, though the Operational Guidelines on Human Rights and Disasters represent significant progress. This is currently the most advanced document addressing the situation of people displaced by disasters, but its scope remains limited: the responsibility for protection of displaced people lies within their home, disaster-struck, nation, and the document does not impose any obligations on the international community. Furthermore, despite being inspired by the Guiding Principles on Internal Displacement, the Operational Guidelines do not benefit from the same status in international law, and cannot even be considered as soft law, as they have received approval only from an operational working group, and not any legislative body.

The same working group is currently discussing how migrants uprooted by the impacts of climate change might be legally protected and assisted, and insider sources report that debates within the group are particularly fierce, crystallising around the two competing advocacy coalitions. Agencies are not policy-indifferent, and are also concerned for their future role in disaster management.

Despite the greater acknowledgement of social vulnerabilities and the prevention imperative, disaster management remains largely focused on emergency operations, with little consideration of the long-term needs of those displaced. Displacement is often viewed as temporary, and few contingency plans exist for long-term displacement and possible eventual relocation. In the rare cases where such plans exist, such as in the United States, their application can be defective, as recalled Fussell recalls in the case of Katrina (2005):

The ideology of disaster management disempowered the people it was supposed to help. (...) Disaster professionals were focused on distributing food, clothing and medical supplies, and neglected to provide phones, computers and social workers to assist people in utilising their own resources.

Disaster management continues to construct environmental migration as a temporary displacement, rather than a long-term or permanent relocation. Hence, despite some recent progress, it continues to limit itself to an emergency response for displaced people, and fundamentally biases the conceptualisation of the displacement as short-term, whereas empirical evidence proves otherwise, as exemplified by the case of Katrina.

Chapter 6

Environmental Changes and Global Warming

“The climate is healthy but lacking in variety. Shade temperatures rarely range outside 75° to 90°F day or night, and there is a regular S.E. Trade Wind. The lack of variety in day and night temperatures and of a noticeable change in season is found monotonous by expatriates and tends to be rather enervating.”

*Extract from The Gilbert and Ellice Islands. A short guide (1967, p. 3),
a small booklet on Tuvalu for the use of British settlers.*

Introduction

Natural disasters are obviously the most brutal of all environmental changes. They are intrinsically related to an encounter between environmental changes and social vulnerability, and are addressed by a specific body of norms and policy instruments, as well as different actors than those involved in environmental protection. At the administrative level, disaster management units often depend upon the Ministry of the Interior, rather than the Ministry for Environment.

In a nutshell, natural disasters are best understood as a special case of environmental change, addressed by specific machinery. Other types of environmental changes, usually slow-onset changes, are addressed by other policy instruments and frameworks, which have steadily expanded since the 1970s. It would have been impossible to review here instruments and policies related to all types of environmental changes. I have thus made the choice to focus on

what appears today as the most serious of all environmental changes, global warming. Unsurprisingly, most of the debates on environmental migration relate around climate change, as mass displacements are often described as one of the possible and most dramatic consequences of climate change.

However, prior to the discussion on the current climate regime and how it addresses environmental migration, I will consider some of the major principles of environmental law, underpinning the current climate regime, and assess to what extent they address – or fail to address – the issue of population movements associated with environmental changes.

1. The Environment as a Matter of International Politics

Initial concerns about the protection of the environment are related to the acknowledgement of the finitude of nature. The notion of limit is central to the development of international environmental law: nature is viewed as an exhaustible resource that must be protected. This notion was first introduced by Malthus in his famous *Principle of Population* (1999 (1798)), which argued that as population grows at a geometric rate, while available food grows at an arithmetic rate, natural resources will soon be exhausted and will no longer be able to feed the world's ever-growing population. Malthus' theories were highly influential amongst his peers: Ricardo developed the *Law of Diminishing Returns* (2004 (1817)), which shows that agricultural yield decreases as population grows, and acknowledges that natural resources are exhaustible; Mill was the first to question the concept of infinite growth, and proposed the stationary state, in which natural resources would be used in a sustainable way (2008 (1848)).

It was not until the 1970s, some 150 years later, however, that these issues will found a place on the international agenda. The development of international environmental law was marked by a series of milestones coinciding with the convening of major international conferences on environmental issues by the United Nations (Gillespie 1997; Birnie and Boyle 2002).

The conference that placed the environment on the global political agenda was the United Nations Conference on the Human Environment, which was convened in Stockholm in June 1972. Though the conference focused on technical environmental matters rather on social and economic issues related to the environment, the relationship between human societies and

their environment was the underpinning theme of the debates, which resulted in a global plan of action: the Declaration on the Human Environment, or Stockholm Declaration (Seyfang 2003). The Declaration contained a series of principles and recommendations that laid the foundations for international environmental law. The Declaration itself was a rather hybrid document, attempting to mix inspirational statements for governments' environmental policies with more specific, legal guidelines for the design of these policies (Sohn 1973). The conference also created the United Nations Environment Programme (UNEP), the first UN agency entirely devoted to environmental issues.

International environmental law developed, to a large extent, upon the principles laid out in the Stockholm Declaration. Such principles included the right to an environment of quality (Principle 1), the protection of wildlife and biodiversity (Principle 4), a sustainable use of resources (Principle 5), or 'the responsibility to ensure that activities within [a state's] jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction' (United Nations Conference on the Human Environment 1972)

In the years leading up to the conference and immediately after it, a large number of countries created a Ministry of Environment, or a dedicated environmental agency, to supervise the implementation of the action plan agreed in Stockholm⁸³. Malthusian preoccupations resurfaced that same year with the highly-publicised publication of the Meadows Report, commissioned by the Club of Rome, which portrayed a gloomy predicament for the future of humanity, and recommended that economic growth be slowed down and ultimately halted (Meadows et al. 1972).

The publication of the Brundtland Report in 1987, entitled 'Our Common Future', marked another milestone in the development of international environmental law. The report, drafted by the World Commission on Environment and Development, coined the term 'sustainable development', which it defined as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987). Sustainable development is not only concerned with environmental issues, but lies at the confluence of three intertwined pillars: social

⁸³ To give a few examples from OECD countries, France created a Ministry in charge of nature protection and the environment in 1971, the United Kingdom created a State Secretariat for the Environment in 1970, and the US Environmental Agency was created in 1970.

development, economic development, and environmental development. Sustainable development has since become an overarching goal of numerous policies and development projects. The same year the Montreal Protocol on Substances that Deplete the Ozone Layer was signed, still considered the most successful international environmental agreement to date, and one of the first binding elements of nascent environmental law.

The Rio Earth Summit, which is the third important milestone of international environmental law, was built upon the concept of sustainable development, and followed on the Stockholm Conference. Convened in 1992, it was hailed as a major success, and resulted in the adoption of two major conventions: the UN Convention on Biological Diversity (UNCBD), aimed at tackling the loss of biodiversity, and the UN Framework Convention on Climate Change (UNFCCC), which initiated the fight against global warming. In addition, the Rio Conference also resulted in the adoption of Agenda 21, a wide-ranging action programme aimed at fostering sustainable development worldwide. Finally, the Rio Declaration on Environment and Development is a continuation of the Stockholm Declaration, which reaffirms 27 principles to foster sustainable development. These principles include, *inter alia*, the precautionary principle; compensation for the victims of environmental change; and the no-harm rule, which states that states have a responsibility to ensure that they do not cause damage to the environment of other states. Unlike the two prior conventions, Agenda 21 and the Rio Declaration are elements of soft law, and non-binding.

Although subsequent conferences were organised⁸⁴, these three events can be credited with transforming environmental concerns into a global political issue, and with laying the founding principles of international environmental law.

2. Addressing Environmental Changes through Law

International environmental law is primarily concerned with the mitigation of environmental changes, and slow-onset changes in particular. International agreements address the loss of biodiversity, the progress of desertification, the depletion of the ozone layer, and global

⁸⁴ Most notably the World Summit on Sustainable Development, held in Johannesburg in 2002.

warming. These changes are usually characterised by their global scale: the state alone is no longer able to safeguard the environment, and mechanisms of international cooperation are therefore needed. The internationalisation of economic externalities has made the provision of environmental protection an intrinsically international endeavour. Environmental protection is now widely seen as a global public good, whose provision can only be achieved through international agreements (Kaul et al. 1999a).

These agreements have not yet directly addressed the issue of environmental migration. None of the abovementioned treaties, recommendations or guidelines actually mentions that people could be forced or willing to migrate because of environmental changes. This omission can be explained by the fact that international environmental law is founded on a number of key principles, which inform the debate and conceptualisation of environmental migration.

2.1. The Precautionary Principle

The precautionary principle, which came to prominence in the 1990s, is now a customary principle of environmental law. The principle was delineated as follows in the Rio Declaration (principle 15):

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. (United Nations Conference on Environment and Development 1992).

The principle is broadly understood as a general obligation not to undertake any action that could possibly cause damage if there are uncertainties about the consequences of the action. Kriebel *et al.* identify four central components in the application of the principle: ‘taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making’ (2001: 871).

The principle, however, can also be interpreted in a more proactive way: rather than being simply a general obligation of prudence, it can also be understood as a more active obligation to prevent harm and damage. The principle derives from the German *Vorsorgeprinzip*, which is best translated as ‘foresight principle’ and involves an duty of prevention (Freestone and Hey 1996). In the case of environmental migration, a broader interpretation of the principle could imply that states have the legal duty to prevent any environmental change that could possibly induce forced displacement – even in cases when the linkages between environmental change and migration are not proved. This nuance is important, since many authors have argued that linkages between environmental change and migration have yet to be proven by empirical evidence (Black 2001; Castles 2002). With a broad understanding of the precautionary principle, the linkage between environmental change and migration – the harm – would not need to be empirically proven: the simple possibility that this linkage might exist would be sufficient for the state to be obliged to prevent the damage from happening, and to mitigate its effects should the damage eventually occur.

2.2. *Environmental Responsibility*

Principle 21 of the Stockholm Declaration, reprinted in the preamble of the UNFCCC and in the Rio Declaration, imposes responsibility for environmental harm upon the state: states bear the prime responsibility for environmental damage they cause beyond their borders. Principle 21 was debated thoroughly when it was drafted (Sohn 1973), and the scope of state responsibility has been, and continues to be, a matter of fierce debate. Case law was instrumental in the evolution of this responsibility from a limited formulation to a customary principle of international law: ‘What began as a so-called “soft law” declaration in 1972 has become (...) an important catalyst in the evolution and development of international environmental law (Taylor 1998: 77).

Environmental responsibility includes the obligation to prevent harm, but also the obligation to pay compensation to victims of environmental damage, as stated in the Principle 13 of the Rio Declaration:

States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of

environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction. (United Nations Conference on Environment and Development 1992)

This obligation to compensate is directly derived from the polluter-pays principle, which requires that the polluting party pay for harm done to the environment. Although the polluter-pays principle has been applied to private companies on many occasions and has experienced significant developments in recent years⁸⁵, its application to states remains limited. The principle, however, has been invoked in a number of cases: Bangladesh has repeatedly accused India of provoking flooding on its territory because of the construction of dams on the Ganges River (Salman 1998); and the case that Tuvalu intended to make against the United States and Australia before the International Court of Justice in the early 2000s was also based on harm (sea-level rise) caused by the actions of the defendants (emitting greenhouse gas)⁸⁶. These cases, however, did not lead to the payment of compensation.

Overall, environmental responsibility remains constrained by state sovereignty, and the international community is still struggling to construct a notion of shared, global environmental responsibility. Though the UNFCCC and the Kyoto Protocol acknowledge the principle of common but differentiated responsibilities, the principle has not yet been applied to the people affected by climate change or to any environmental change. For now, state responsibility remains strictly conceived as an obligation from state to state, and not as an obligation from a state, or a cluster of states, towards the affected population. Such an expansion of meaning would allow people displaced by environmental change to claim compensation from the state(s) responsible for the harm, which could help meet migration costs – provided such a responsibility is established. For now, such a development is hardly conceivable, and a global environmental responsibility remains largely theoretical, with little practical application.

⁸⁵ The most significant development in recent years is certainly the acknowledgement of the concept of ‘ecological prejudice’ by a French tribunal, with reference to the Erika oil spill that occurred on the coast of Brittany in 1999. The owner of the responsible freighter, the oil company Total, was charged with paying a €375,000 fine in compensation towards local municipalities, for failing to prevent environmental harm.

⁸⁶ The case was eventually dropped. Chapter 6 features further discussion of this issue.

2.3. *Environmental justice*

The concept of environmental justice emerged in the United States in the 1980s, in reaction to what was perceived as ‘environmental racism’, that is, the fact that minority communities were living in more degraded environments. A number of studies showed that racial minorities were more likely to live in a hazardous and/or polluted environment (Boer et al. 1997; Downey 1998), and therefore had a higher social vulnerability to environmental change. Furthermore, environmental racism also implied that areas inhabited by minorities were more likely to be selected for the location of polluting industries, hazardous activities, or waste dumps.

At the global level, it has been pointed out that developing countries are disproportionately affected by environmental changes, and global warming in particular, although they often bear minimal responsibility for these changes (Müller 2001; Roberts and Parks 2007). In the case of climate change, the worst impacts and highest temperature rise will take place in the global South, meaning that the countries most affected will be those that have the least historical responsibility⁸⁷ for global warming. Furthermore, these countries are also developing countries, and thus have the least capacity to adapt to a changing environment.

Principles of justice and equity have been increasingly important in negotiations on the climate change regime, and most observers consider that equity will need to be a central component and a necessary condition of the new, post-Kyoto climate regime. Many advocate that justice and equity concerns should not only be a core component of the mitigation efforts, but should also comprise part of the talks on adaptation to climate change (Adger et al. 2006b; Paavola and Adger 2002). The different conceptions of environmental justice in the context of climate change will be discussed in the next section.

Furthermore, environmental changes and hazards also aggravate pre-existing patterns of global inequality, such as poverty or health issues. This is particularly the case for climate change (Watkins 2007) and natural disasters (Blaikie et al. 1994), but other environmental hazards also have a toll on global inequality: Satterthwaite (2003), for example, has shown the impact of

⁸⁷ Although greenhouse gas emissions from emerging countries are quickly rising, these countries’ historical responsibility for current climatic changes, which is directly related to the accumulation of carbon in the atmosphere over time, remains minimal.

biological pathogens, chemical pollutants and other hazards on poverty in urban areas of Africa, Asia and Latin America.

Nations that have been early victims of climate change have evoked the principle of environmental justice frequently in debates about environmental migration: Tuvalu, for example, has repeatedly insisted upon its infinitesimal contribution to global warming. In the context of climate change, the concept of environmental justice has evolved from an issue of racial discrimination to a global, wide-ranging matter of North-South equity.

2.4. *Human Security*

The first principle of the Stockholm Declaration states that ‘Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being’ (United Nations Conference on the Human Environment 1972). The right to a sound environment is often considered a third-generation human right: a right of soft law, which cannot really be enforced on the ground (Taylor 1998: 196).

At present, no existing United Nations instrument expressly states the existence of a human right to a sound environment, but some commentators argue that such a right can be derived from Article 3 of the Universal Declaration of Human Rights, which guarantees a right to life. Respect of the right to life, it is argued, necessarily implies protection of the environment, which creates a right to a sound environment. This connection is the rationale for the abovementioned first principle of the Stockholm Declaration. There is, however, growing pressure to recognise the right to a sound environment as a separate human right of its own, and not just one derived from the human right to life⁸⁸. Ultimately, should such a right be created, it would be difficult to enforce. Nevertheless, the right has particular resonance in the context of environmental migration, since one can safely assume that the right to a sound environment implies the right not to be displaced because of environmental disruption, and even possibly the right to relocate to a new, sounder environment when livelihoods are affected by environmental disruption.

⁸⁸ See for example Resolution 45/94 (1990) of the UN General Assembly, which reads: ‘(...) All individuals are entitled to live in an environment adequate for their health and well-being; and calls upon Member States and intergovernmental and non-governmental organisations to enhance their efforts towards ensuring a better and healthier environment.’

3. Climate Change

In recent years, the debate on migration induced by the effects of climate change has consistently overshadowed the debate on migration triggered by other kinds of environmental disruptions. Many conferences, workshops and documents aimed at raising public awareness in recent years have focused exclusively on migration flows induced by climate change, prompting some authors to worry that this focus might lead to the neglect of other types of environmental migration (Lassailly-Jacob 2006).

Four key reasons account for this myopic focus on migration triggered by climate change:

- Firstly, climate change encompasses a wide range of environmental changes, making it difficult to distinguish between the events related to climate change and those that are not. Hence any migration linked to environmental change – with few exceptions⁸⁹ - can be described as a consequence of climate change;
- Secondly, climate change is expected to dramatically increase the number of environmental migrants, both because many environments will become increasingly degraded, but also because other environments are expected to become more favourable⁹⁰. There is, therefore, a new dimension to the scale of the problem;
- Thirdly, negotiations concerning the future climate regime are currently ongoing. Authors who make the case for the development of new normative frameworks often consider the possibility of including an additional protocol to the UNFCCC (Biermann and Boas 2007). There is therefore an incentive for policy-oriented research to focus on climate change-induced migration;

⁸⁹ Such exceptions include earthquakes, tsunamis and volcano eruptions.

⁹⁰ This is the case, in particular, of Siberia and Northern Canada, which may become new destination areas for migration in the near future.

- Finally, most of the funding possibilities for research in the field, as well as media requests, are currently related to projects on the impacts of climate change. This creates a strong incentive to orient research in this direction.

The following section will examine the place of environmental migration in the current climate change regime, as well as in the negotiations that are due to result in the new, post-Kyoto regime. The impacts of climate change on migration will first be discussed briefly, before turning to an analysis of the current normative frameworks – the UNFCCC and the Kyoto Protocol – and the evolution of debates on climate policies.

3.1. The Impacts of Climate Change on Migration

Climate change will affect societies through an extensive range of impacts. The magnitude of these impacts depends, to a large extent, on the efforts currently undertaken to curb greenhouse gas emissions and to mitigate global warming. Hence predicting these impacts, particularly on a regional level, is a daunting task, since a lot of uncertainties remain (Barnett 2001a; Webster et al. 2003). In order to account for these uncertainties, the Intergovernmental Panel on Climate Change (IPCC) has classified predictions of climate change impacts into different families of scenarios, according to the various policies that could be implemented and different hypotheses about climate sensitivity.

Amongst these impacts, four seem most likely to have effects on migration patterns, although these effects are not certain and are highly discussed (Black et al. 2008; Piguet 2008). I will briefly mention these impacts, without discussing their possible effects on future migration flows, which is beyond the scope of this research:

3.1.1. Extreme Weather Events

Climate change is likely to increase the number and the magnitude of extreme weather events. These events include heat waves, tropical cyclones, droughts, and flooding. The latest IPCC

report predicts, by the end of this century, a ‘*very likely*’⁹¹ increase in hot extremes, heat waves and heavy precipitation’, a ‘*likely*’ increase in tropical cyclone activity’, with ‘less confidence in the decrease of tropical cyclones’, as well as ‘*very likely*’ precipitation increases in high latitudes and ‘*likely*’ decreases in most subtropical land regions’ (Intergovernmental Panel on Climate Change 2007d: 8). In addition, it is expected that annual water run-off and precipitations will increase at high latitudes, whereas water resources will decrease in mid-latitudes and tropics, as well as in arid regions. The IPCC notes that the increase of droughts and tropical cyclone activity both present a potential for population migration (Wilbanks et al. 2007).

The increase of extreme weather events has been directly linked to an observed increase in the number of natural disasters: Ferris (2007) notes that ‘while some of the increase in the frequency of natural disasters is undoubtedly the result of better data collection (...) there does seem to be evidence that the number and severity of hydro-meteorological events are increasing’.

3.1.2. *Water Shortage*

Water shortages will be caused by a series of cumulating factors: droughts, contamination of freshwater by seawater due to sea-level rise, and the melting of mountain glaciers over the long term. The IPCC forecasts that ‘freshwater availability in Central, South, East and Southeast Asia particularly in large river basins is projected to decrease due to climate change which, along with population growth and increasing demand arising from higher standards of living, could adversely affect more than a billion people by the 2050s’ (Intergovernmental Panel on Climate Change 2007c: 10). The quantity of water stored in glaciers and snow cover is also expected to decline, reducing the freshwater availability of regions supplied by meltwater from mountain ranges. But the situation is expected to be most difficult in Africa, where an estimated 75 million to 250 million people will be at risk of water shortage due to climate change by 2020. Given that this water shortage will be associated with higher demand, especially in big cities, water-related problems are very likely to be exacerbated (Watkins 2007).

⁹¹ ‘Very likely’ denotes a probability of occurrence between 90 per cent and 99 per cent, while ‘likely’ denotes a 66 per cent to 90 per cent probability.

The effects of water shortage on migration patterns remain heavily contested: some authors argue that droughts and desertification are a major push factor for migration (Hammer 2004; Leighton 2006)⁹², while others contend that people affected by droughts have a choice between different coping strategies, including migration, though international migration usually tends to decrease during these periods (Black 2001). In any case, the nexus between drought and migration is not straightforward (Kniveton et al. 2008). Findings from the EACH-FOR project confirm that desertification can affect migration patterns in different directions: Van der Geest (2008) found that contemporary North-South migration in Ghana was environmentally motivated, but decreased during the worst droughts; Afifi (2008) also identified droughts as an important push factor that influence both internal and international migration in Niger.

3.1.3. *Sea-Level Rise*

The most obvious consequence of climate change with regard to environmental migration, however, is sea-level rise. Although sea-level rise will not be uniform across the globe, largely because of El-Niño Southern oscillation, most studies agree that the rise will be about 1 metre by the end of the century (Hansen et al. 2006; Church et al. 2004). The IPCC notes that

Many millions more people are projected to be flooded every year due to sea-level rise by the 2080s. Those densely-populated and low-lying areas where adaptive capacity is relatively low, and which already face other challenges such as tropical storms or local coastal subsidence, are especially at risk. The numbers affected will be largest in the mega-deltas of Asia and Africa while small islands are especially vulnerable. (2007c: 12)

Unlike extreme weather events, sea-level rise is more predictable, and populations at risk can be more easily identified, thus facilitating the implementation of adaptation plans. Given that coastal and deltaic areas are usually very densely populated, the potential for migration is particularly high (Klein and Nicholls 1999; Nicholls et al. 2007).

⁹² Hammer argues that one million people were displaced as a result of the 1985 drought in Niger, and that 'hundreds of thousands of people from rural Sahel regions are displaced every year as a consequence of environmental change and desertification' (2004: 434); Leighton makes a similar case for North-East Brazil.

It also worth mentioning that sea-level rise may be much higher than the above estimate, perhaps up to 7 metres, in case of deglaciation of the Greenland and West Antarctic ice sheets. There is medium confidence that this event will occur over a period of time ranging from centuries to millennia.

3.1.4. Pull Factors

Some other impacts of climate change, whose linkages to migration seem less obvious, have not been considered here⁹³. It should be noted, however, that climate change will also result in a number of positive effects, mostly at higher latitudes. Agricultural yields are expected to increase in Siberia and Northern Canada, while heating costs will be reduced. Although these effects are not often considered in the literature⁹⁴, it is possible that the more favourable environment of these regions will make them an attractive migration destination in the not-so-distant future.

When discussing these climate change impacts and their linkages to migration flows, one should keep in mind that these impacts will not be felt uniformly across continents. The table below summarises how these impacts will be distributed in different regions of the world.

Africa	<ul style="list-style-type: none"> ○ By 2020, between 75 and 250 million of people are projected to be exposed to increased water stress ○ By 2020, in some countries, yields from rain-fed agriculture could be reduced by up to 50% ○ Agricultural production, including access to food, in many African countries is projected to be severely compromised ○ By 2100, projected sea level rise will affect low-lying coastal areas with large populations ○ By 2080, an increase of 5 to 8% of arid and semi-arid land in Africa is projected
Asia	<ul style="list-style-type: none"> ○ By the 2050s, freshwater availability in Central, South, East and South-East Asia, particularly in large river basins, is projected to decrease ○ Coastal areas, especially heavily populated mega-delta regions in South, East and South-East Asia, will be at greatest risk due to

⁹³ This is the case with heat waves or the spreading of tropical diseases, for example.

⁹⁴ With the exception (Schwartz and Randall 2003)

	<p>increased flooding from the sea and, in some mega-deltas, flooding from the rivers</p> <ul style="list-style-type: none"> ○ Climate change is projected to compound the pressures on natural resources and the environment associated with rapid urbanisation, industrialisation and economic development
Europe	<ul style="list-style-type: none"> ○ Negative impacts will include increased risk of inland flash floods and more frequent coastal flooding and increased erosion (due to storminess and sea level rise) ○ In Southern Europe, climate change is projected to worsen conditions (high temperatures and drought) in a region already vulnerable to climate variability, and to reduce water availability, hydropower potential, summer tourism and, in general, crop productivity
Latin America	<ul style="list-style-type: none"> ○ Changes in precipitation patterns and the disappearance of glaciers are projected to significantly affect water availability for human consumption, agriculture and energy generation ○ Productivity of some important crops is projected to decrease and livestock productivity to decline, with adverse consequences for food security; overall, the number of people at risk of hunger is projected to increase ○ By 2050, increases in temperature and associated decreases in soil water are projected to lead to gradual replacement of tropical forest by savanna in eastern Amazonia
North America	<ul style="list-style-type: none"> ○ Warming in western mountains is projected to cause decreased snowpack, more winter flooding and reduced summer flows, exacerbating competition for over-allocated water resources ○ In the early decades of the century, moderate climate change is projected to increase aggregate yields of rain-fed agriculture by 5 to 20%, but with important variability among regions ○ Coastal communities and habitats will be increasingly stressed by climate change impacts interacting with development and pollution
Small islands	<ul style="list-style-type: none"> ○ Sea level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards ○ Deterioration in coastal conditions, for example through erosion of beaches and coral bleaching, is expected to affect local resources ○ By 2050, climate change is expected to reduce water resources in many small islands to the point where they become insufficient to meet demand during low-rainfall periods

Table 3 – Regional impacts of climate change. Adapted from (Mimura et al. 2007a), Chapters 9, 10, 12, 13, 14 and 16.

As mentioned above, the empirical linkages between these impacts and migration patterns remain little known. Although some reports, such as the Stern Review on the Economics of Climate Change, make the bold prediction that ‘by the middle of the century, 200 million more people may become permanently displaced due to rising sea levels, heavier floods, and more intense droughts’ (Stern 2007: 56), the IPCC does not venture such precise forecasts:

Estimates of the number of people who may become environmental migrants are, at best, guesswork since (a) migrations in areas impacted by climate change are not one-way and permanent, but multi-directional and often temporary or episodic; (b) the reasons for migration are often multiple and complex, and do not relate straightforwardly to climate variability and change; (c) in many cases migration is a longstanding response to seasonal variability in environmental conditions, it also represents a strategy to accumulate wealth or to seek a route out of poverty, a strategy with benefits for both the receiving and original country or region; (d) there are few reliable censuses or surveys in many key parts of the world on which to base such estimates (e.g., Africa); and (e) there is a lack of agreement on what an environmental migrant is anyway. (Wilbanks et al. 2007: 365)

The IPCC report also notes that ‘migration, usually temporary and often from rural to urban areas, is a common response to calamities such as floods and famines (...), and large numbers of displaced people are a likely consequence of extreme events’ (Wilbanks et al. 2007: 365). If the number of extreme events increases, it seems only logical that migration will increase as well.

3.2. The Current International Climate Change Regime

Since the signature of the UN Framework Convention on Climate Change (UNFCCC) in 1992, a considerable number of climate policies, instruments and institutions have emerged to tackle global warming. These form what is commonly called ‘the international climate change regime’. The two milestone elements sustaining the regime are the UNFCCC and the 1997 Kyoto Protocol, but other instruments and agreements, such as the 2001 Marrakech Accords and the 2007 Bali Roadmap, are also core elements of the regime.

Since the UNFCCC entered into force in 1994, the fight against climate change has taken two different directions, which have at times been opposed to each other. One was concerned with mitigation, that is, the reduction of greenhouse gas emissions, while the other dealt with adaptation to the impacts of climate change. Adaptation to climate change has long been considered a failure of mitigation, a ‘hypothetical possibility best kept in the background lest it reduce the felt urgency of mitigation’ (Wilbanks et al. 2003: 30), and mitigation has

consistently been prioritised over adaptation – a situation that continues today, to a large extent.

In the past couple of years, as it has become progressively apparent that a number of climate change impacts could not be avoided, many voices, from developing countries in particular, have called for a greater emphasis on adaptation. At the same time, adaptation was perceived as an effective strategy to reduce the negative impacts of climate change – Tol *et al.* (1998) remark that some authors would even see it as better response strategy than mitigation – and also as a way to achieve climate justice, and thus convince developing countries to accept a mandatory reduction of their carbon emissions (Roberts and Parks 2007). Environmental migration is most concerned with adaptation, whether as a failure of adaptation or a successful adaptation strategy.

This section will attempt to describe the significant evolutions of the international climate change regime, and how it has gradually come to address the issue of adaptation. A second part will analyse the place of adaptation in the main instruments of the regime.

3.2.1. The Evolution of the Regime

Though the greenhouse effect was detected by Fourier in 1824 and the linkage between carbon emissions and the rise of temperature had been shown by Arrhenius in 1896, it was not until the 1950s that the first measurements of carbon dioxide concentration in the atmosphere were undertaken, under the leadership of Revelle. It would take another forty years before political action was taken to address the issue. A historical perspective on the global climate change regime tells, above all, the story of the transformation of a scientific concern into a political issue.

3.2.1.1. Towards a Scientific Consensus

The first World Climate Conference was organised in 1979, but its organisers failed to attract any policy-makers. The first event in which policy-makers participated was a workshop in Villach (Austria), in 1985. The workshop was convened by UNEP and the World

Meteorological Organisation (WMO); its conclusions were that significant climate change was highly probable (Weart 2004).

Meanwhile, developments in computer engineering allowed science to make considerable progress on the modelling of global warming, and scientific consensus on the reality of climate change was growing. By the end of the 1980s, a number of international conferences had recommended that greenhouse gas emissions should be cut, and that a comprehensive convention on the protection of the atmosphere be drafted (Bodansky 1993). The Toronto Conference, held in 1988, confirmed the scientific consensus that climate change was a reality, and that anthropogenic greenhouse gas emissions were its prime driver.

3.2.1.2. Climate Change as a Political Issue

In 1987 and 1988, a series of congressional hearings on climate change were held in the US Congress, initiated by President Reagan. The testimony of climate modeller James Hansen before the congressional committee had a profound impact on the political treatment of climate change, and is generally considered as the birth date of climate change as a political issue. From then on, governments started playing a greater role, notably through the creation of the Intergovernmental Panel on Climate Change (IPCC) in 1988. The panel was jointly established by UNEP and the WMO, and was entrusted with the task of assessing and synthesising publications and research on the science of climate change and its impacts. The IPCC is one of the largest scientific bodies ever established, gathering around 2,000 scientists.

The IPCC produced its first assessment report in 1990, in which it estimated that global mean temperature would increase by about 0.3° C per decade if no effort to curb greenhouse gas emissions were undertaken. The report raised the possibility of climate change triggering mass population displacements (McTegart et al. 1990).

3.2.1.3. An International Response

Negotiations over the UNFCCC began in 1990, and were concluded in Rio in 1992. Initially there were two competing approaches with regard to the scope of the Convention: one modelled on a general framework, addressing the atmosphere as a whole; the other focusing

more specifically on climate change. The latter approach eventually won out, and agreement was reached relatively quickly, thanks to the pressing deadline of the quickly approaching Rio summit.

The Convention was a framework agreement, establishing general obligations such as the exchange of relevant information. The Convention did not include any binding targets for carbon emissions, but included a number of several key items and principles:

- The overarching principle of the Convention was that of ‘common but differentiated responsibilities’: countries were divided into the categories of developed countries⁹⁵ and developing countries, and it was agreed that only developed countries (held most responsible for climate change), would be required to carry out mandatory emission reductions;
- The funding mechanisms were the most controversial aspect of Convention negotiations, but were finally settled at Bali in 2007. Developing countries were keen to secure additional financial commitments from developed countries to help them implement the Convention. Developed countries intended to channel these funds through the Global Environmental Facility, a joint body of the World Bank, UNEP and UNDP, while developing nations wanted to establish a new fund – over which they would have more control. The issue might appear very technical at first, but it was in reality a debate over who should control additional money flows.
- Finally, the Convention established the principle of permanent negotiation: the framework was vague and ambiguous enough to allow quick and unanimous ratification, and the fine details of the agreement – including mandatory targets and enforcing mechanisms – would be negotiated later, during rounds of negotiations called ‘Conference of the Parties’, or COP.

⁹⁵ These countries were listed in the first annex to the convention, hence were subsequently called ‘Annex I countries’, whereas developing countries were named ‘non Annex I countries’.

3.2.1.4. Towards the Kyoto Protocol

The UNFCCC came into force in 1994, and Conference of the Parties started the year after in Berlin. Two years later, in 1997, the US Senate passed the Byrd-Hagel resolution, which forbade US negotiators from entering any agreement that would not include binding targets for developing nations and would harm the US economy. From this moment, it was clear that the US would not ratify the Kyoto Protocol, which was in the process of being shaped. The resolution stated that ‘the exemption for Developing Country Parties (from any mandatory emissions reduction) is inconsistent with the need for global action on climate change and is environmentally flawed’, and called upon negotiators not to sign the Protocol (Byrd and Hagel 1997).

The Protocol was agreed at the third Conference of the Parties, held in Kyoto in December 1997. The Protocol aims to implement the UNFCCC, and sets the objective of an overall 5 per cent reduction of greenhouse gas emissions, relative to 1990 levels. This objective is to be achieved through mandatory but differentiated commitments to reduce greenhouse gas emissions for developed countries. In addition, in order to facilitate the respect of these commitments, some flexible mechanisms have also been devised, allowing developed countries to trade emission quotas (carbon market) or to buy emission credits by financing ‘green’ projects in developing countries (clean development mechanisms).

Though the need for adaptation funding is explicitly mentioned in the Protocol (article 10), the sources for such funding are left deliberately vague. The text barely mentions that ‘a share of the proceeds from certified project activities⁹⁶ is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation’ (article 12). This, observes Barrett, ‘sounds like a tax’ (1998: 31).

⁹⁶ These ‘certified project activities’ relate to the abovementioned clean development mechanisms, which allow developed countries to obtain carbon credits by financing projects that help reduce the greenhouse gas emissions from developing countries. These projects have to be approved by the World Bank before they can be implemented. Though these mechanisms were initially conceived as a channel of resource transfer from the North to the South, only a small minority of projects (3 per cent) were implemented in Africa, the large majority being developed in China, India, South Korea and Brazil, where there was a higher potential for emission credits, due to higher levels of greenhouse gas emissions.

3.2.1.5. The Slow Rise of Adaptation

Until the ratification of the Kyoto Protocol, and despite the works of the Second Working Group of the IPCC⁹⁷, adaptation had barely been addressed in the climate change regime, and developing countries had been, to a large extent, left out of the process. As new studies on the impacts of climate change were issued, including the IPCC's Third Assessment Report, released in 2001, the sense that climate change was already underway became widespread, and many voices, especially in the South, urged the international community to develop adaptation mechanisms. The Alliance of Small Island States (AOSIS)⁹⁸, in particular, was particularly vocal in claiming adaptation funding, since its member states were amongst those most exposed to the impacts of climate change. Development scholars joined their voices to those of the governments of developing countries, arguing that adaptation should be considered as a facet of development in the context of climate change (Adger et al. 2003; Tol et al. 1998; Wilbanks et al. 2003).

The 2001 Marrakesh Accords, which took place within the framework of the seventh Conference of the Parties, established two new funds for adaptation, governed by the Global Environment Facility (GEF):

- A Least Developed Countries Fund, aimed at assisting least developed countries to develop the national adaptation programmes of action;
- And a Special Climate Change Fund, aimed at providing financial assistance to developed countries which were faced with the first impacts of climate change.

Both funds fall under the Convention, and are supposed to be supported by voluntary contributions by OECD governments. More significantly, an Adaptation Fund was also created under the Kyoto Protocol⁹⁹, to support concrete adaptation projects.

⁹⁷ The Second Working Group of the IPCC deals with climate change impacts, adaptation and vulnerability.

⁹⁸ The AOSIS is a regional organisation aimed at representing the interests of small island states in climate negotiations.

⁹⁹ Unlike the two above-mentioned funds, which were created under the UNFCCC.

The following year, the Delhi Declaration on Climate Change and Sustainable Development reaffirmed the need to connect mitigation and adaptation, stating that although mitigation remained a high priority, urgent action was required to advance adaptation measures.

3.2.1.6. Recent Developments

Adaptation gained a momentum at the 2005 Montreal conference, with the launch of the Nairobi Work Programme. Until then, adaptation under the UNFCCC was limited to the three above-mentioned and limited funds and a couple of fragmented programmes, the most visible of which being the establishment of National Adaptation Plans of Action by the Least Developed Countries (Garnaud 2009: 1)

The twelfth Conference of the Parties, in 2006, was held for the first time in sub-Saharan Africa, in Nairobi. The pressure to increase funding for adaptation was high, and it was agreed that the Adaptation Fund under the Kyoto Protocol would be financed through a 2 per cent levy on clean development mechanisms transactions. However, no other specific commitment was made in Nairobi, leaving developing country representatives and NGOs angry and disappointed. The Bali Roadmap, agreed the following year, did not contain more specific elements, aside from a call for further enhancement of cooperation to support ‘urgent implementation’ of adaptation measures. It was also recognised that economic diversification could form an aspect of adaptation strategies. However, for the first time, adaptation was treated on an equal footing with mitigation, and slowly ceased to be perceived as a failure of the latter (Garnaud 2009).

At the Poznan conference (COP 14), held in late 2008, adaptation was a top concern for many stakeholders, and the progress of the discussions on adaptation was often hailed as a major success of the conference. Most of the discussions on adaptation, however, revolved around the operationalisation of the Adaptation Fund, including direct access to the Fund from developing countries. Currently, discussions on adaptation remain hindered by three ‘taboos’, identified as such by Garnaud (2009: 4):

- the first one is the differentiation of adaptation projects from other development project;

- the second one is concerned with the allocation of the resources from the Adaptation Fund, and on the mechanisms for this allocation (first-come first-served, proportionality, etc.);
- and the final ‘taboo’ relates to whether adaptation funding should be considered as development aid, or as a compensation, representing the acknowledgement of an environmental responsibility by industrialised countries.

3.2.2. *A Regime Focused on Mitigation and Dominated by Governmental Actors*

At this stage, three concluding remarks can be made regarding the evolution of the international climate change regime:

1. Overall, the process has remained largely focused on mitigation, and has put little emphasis on adaptation. Despite repeated calls to develop this aspect of the fight against climate change, normative frameworks remain vague and instruments to enforce them scarce. As for the three funds designated to provide funding for adaptation, they remain chronically under-funded, since they largely depend on voluntary contributions by member states, and not on mandatory commitments.
2. Concerns for migration are completely absent from the current process. Although migration, both as a consequence of climate change and an adaptation strategy, is mentioned in the IPCC reports and the Stern Review on the Economics of Climate Change, this concern has not been translated into the UNFCCC, the Kyoto Protocol, or any instrument or mechanism related to these agreements. Yet members of the alarmist coalition place high hopes in international talks on climate for the development of new mechanisms to address climate-related migration. Biermann and Boas (2007) recommend that a new Protocol be added to the UNFCCC to protect ‘climate refugees’, almost all recent works and reports on the topic urge the implementation of adaptation measures to reduce migration pressure, and a recent conference held in the European Parliament, attended by both scholars and policy-makers, went as far as to recommend that the IPCC establish a special ad-hoc group

to study climate-induced population displacements ("Declaration on climate migrations" 2008). At this stage, however, there is no sign that migration will be placed on the agenda of climate negotiations in the near future.

3. A remarkable feature of the evolution of the climate change regime is the active role played by scholars as policy entrepreneurs. Bodansky (2001: 37) rightly notes that the distinction between governmental and non-governmental actors was blurred during the agenda-setting phase, in which scientists acted as policy-makers in their own right. The story of the climate change regime is also the story of successful scientific lobbying to put an issue on the global agenda. Throughout the process, scientists continued to play an important role, most notably through the IPCC – on the agenda-setting side – and their frequent inclusion as advisers in governmental delegations – on the policy-making side. Scientists were soon joined by NGOs, which have been increasingly numerous in attending the sessions of the Conferences of the Parties. Although both climate scholars and NGOs form part of the alarmist coalition, the international climate change regime remains dominated by governmental actors, who usually belong to the sceptical coalition, which may explain why migration has not yet found a place on the regime's agenda.

3.3. Migration as an Adaptation Strategy

Most of the literature addressing the impacts of climate change has portrayed migration as a devastating consequence of global warming, and environmental migrants as unwitting victims of environmental disruption. Authors working on adaptation strategies, however, take another view on migration, and describe it as effective adaptive response to environmental stressors (Adger et al. 2003; McLeman and Smit 2006; Paavola and Adger 2002). For example, Adger *et al.* write:

Migration [...] is a coping mechanism used throughout history by societies as part of their resource utilization strategies and as a means of coping with climate variability. Indeed migration, including to urban centres, continues to play an important role in livelihood resilience to the present-day in many parts of the developing world. There is a substantial degree of certainty that areas of the present day

developing world will face greater incidence of extreme weather events in the future. If desirable migration is not available to those affected, it may ultimately increase the necessity of displacement migration, typically undertaken as a last resort when other coping strategies are exhausted. (2003: 189)

This represents a significant paradigm shift: migration is no longer viewed as an adaptation failure, but as an adaptive response. Quite on the contrary, ignoring migration as an adaptive response is characterised as inaction in a typology of adaptive responses (Adger et al. 2006a: 8). McLeman and Smit (2006) stress that migration is only one possible adaptive response among others, and argue against environmental determinism by constructing a model of migration in response to climate change, which examines the cases when migration is the best available adaptation option.

In order for migration to develop as an adaptation strategy, however, several policy needs must be taken into consideration, including the provision of adequate and sufficient resources to destination areas so that migrants do not represent an additional burden on scarce resources, relaxation of migration barriers, and compensation for the costs of migration. Such policies would require significant adaptation in the post-Kyoto regime.

Scholars have pointed that current discussions and frameworks on adaptation didn't account sufficiently for equity and climate justice: though an equitable distribution of the burden is a central concern for mitigation policies, this aspect has been absent from adaptation policies, which are still based on a voluntary, goodwill approach (Adger et al. 2006a). Baer notes that

It seems likely that Northern governments are resistant to explicit claims for "polluter-pays" liability for adaptation investments because there is a clear link between current responsibility for adaptation and eventual liability for compensation for actual climate damages. Northern governments might reasonably fear that acknowledging such claims would obligate Northern countries to the largest share of a potentially enormous financial liability. (2006: 132)

Hence the development of equitable adaptation strategies, to account for and compensate the costs of migration, is deeply linked to the acknowledgement of a global climate justice, in which Northern governments accept responsibility and liability for climate impacts. This

would require a broader definition of equity, not limited to mitigation but including adaptation.

However, current discussions of the future climate regime, which should be finalised at the end of 2009, are still focused on mitigation as the highest priority, and are unlikely to address adaptation thoroughly. It has been agreed in Bali to impose mandatory emission cuts on all countries, including developing ones. Clever bargaining on the part of developing nations could see them accepting emissions reductions in exchange for stronger commitment to adaptation from Northern countries. For now it is too early to tell.

4. Empirical Illustration: Environmental Policies in Tuvalu

To the outside world, the government of Tuvalu has consistently supported an alarmist view of migration between Tuvalu and New Zealand as a forced displacement triggered by climate change. In domestic policies however, the government's position on migration has been considerably milder.

4.1. *External Policies*

Following its membership to the United Nations in 2000, Tuvalu has consistently emphasised the risk of its being submerged by rising sea-levels. On the international scene, Tuvalu has worked at being perceived essentially through the prism of environmental migration, as one of the world's most vulnerable geographies to climate change, and at defining its inhabitants primarily as the first 'climate refugees'.

This policy choice was heralded by Enele Sopoaga, then Tuvalu ambassador at the United Nations. Following his arrival in New York in 2001, Sopoaga quickly took up the vice-chairmanship of the AOSIS, which provided him with a platform to make the plight of Tuvalu heard.

This position at the AOSIS represented a formidable opportunity for us. Nobody had ever heard of Tuvalu before, and my duty was to alert the world about what was happening in Tuvalu. The

visibility of the AOSIS changed a lot of things for Tuvalu. (...) My role at the United Nations was to attract the attention of the problems of our country, and the AOSIS was a great way to do it. After a couple of years, everybody knew about Tuvalu.

(Enele Sopoaga)

The AOSIS was clearly perceived as a window of opportunity for the small nation, and Sopoaga soon became a leader of the alarmist coalition on a policy level. The reasons for such a posture were threefold:

- First, the international context was favourable: the need to foster international cooperation in and support for the processes of adaptation to the impacts of climate change was recognised. The issue had been little explored in climate negotiations, and the concept of environmental migration was a convenient vehicle for promoting this idea;
- Second, Tuvalu saw – and continues to see – its participation in the United Nations and other organisations as an investment. Being entirely dependent upon foreign aid, it was hoped that participation in international forums would raise the profile of Tuvalu and ‘put the country on the map’. Participation in the United Nations, moreover, represents a considerable cost for Tuvalu, and was only made possible thanks to the royalties of the ‘.tv’ domain name. Environmental migration was therefore also considered to be a convenient ‘marketing instrument’, used to justify the investment in participation to the UN and other international bodies;
- Finally, there was also a sense of isolation in the face of climate change. While Tuvalu’s neighbours are able to count on the direct help of the countries with which they had a colonial history, Tuvalu, being independent, knew that it could not count of such supports, and would instead need to rely on mechanisms of international cooperation.

Barnett and Adger rightly observe that there is little difference between the people and the state itself when it comes to environmental vulnerability: ‘Small atoll countries have a high degree of ethnic homogeneity and high population density, meaning there is little political distance between the people and the nation-state’ (2003: 327). Should Tuvalu disappear under

the waves, the international community would be confronted with the unprecedented case of a country's physical disappearance. But, as said above, a massive emigration could also threaten national sovereignty and the very existence of the country.

Tuvalu has consistently insisted upon the moral obligation of the international community to compensate for damages induced by climate change. In this regard, premature resettlement might weaken Tuvalu's case for compensation. All Pacific Island countries seem conscious of the risk to their national sovereignty posed by climate change, and the Alliance Of Small Island States (AOSIS) has been emphasizing this risk for years. For instance, it is noteworthy that Pacific countries insisted at a 1999 regional workshop on the implementation of UNCLOS¹⁰⁰, held in Tonga, that maritime zones and airspaces should be retained under international law 'as a useful asset for displaced people'.

In recent years, however, Connell observes that there has been 'a shift from responsibility to litigation' (2003: 103), with Tuvalu striving to claim compensation and reparation for environmental damages that could potentially be solved domestically. Connell describes an increased tendency to blame the global system rather than foster solutions to environmental issues, leading him to conclude that climate change has become a 'garbage can' for Tuvalu, encompassing all environmental issues and diverting attention from the addressing challenges of economic development and adequate strategies that could mitigate current environmental problems.

4.2. Domestic Policies

At the domestic level, environmental migration, either as an adaptation strategy or a threat facing the population, has consistently been downplayed in favour of the development of adaptive capacities. It is only in recent years that the Tuvaluan government has started to envision migration as a possible adaptation strategy, and has begun to encourage emigration as a way of 'giving people a choice before it is too late'. Furthermore, as noted above, the pro-emigration policy also fulfils two other goals of alleviating population pressure, and increasing the income from remittances. However, the government refuses the notion of planning a full evacuation of the island

¹⁰⁰ United Nations Convention on the Law of the Sea.

The evacuation of the population is not the priority right now, we want to focus on adaptation strategies. If we need to evacuate eventually, we will do so in time, but for now we believe it will be possible to stay. (...) We just try to facilitate migration agreements, so that people can have the choice and leave if they want to.

(Kelesoma Saloa)

Internationally, policies and measures of adaptation to the impacts of sea-level rise and climate change rarely include migration as a coping strategy: in 1999, following the signing of the Kyoto Protocol, the National Communication of Tuvalu to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) listed adaptation projects, the improvement of information and education on climate change and the development of renewable energies, as well as some policies by sector, but there was not a single mention of migration (Tuvalu Government 1999). Migration is only mentioned once, as a last resort option, in Tuvalu's 2008 National Adaptation Programme, a document detailing domestic policies directed at coping with the impacts of climate change:

The overall impacts of climate and sea-level change will likely increase, and determined by the interaction and synergy between adverse effects and on-going climate and sea-level changes. Implementation of adaptation measures and strategies in Tuvalu, therefore, should take a "no-regrets" approach. The least cost adaptation options are consistent with this approach, however the highest cost options are those that would not be identified as no-regrets strategies and relate to the most severe effects, and greatest vulnerabilities and urgency. A last resort to adaptation would be migration and resettlement should the worst-case scenario occur. (Tuvalu Department of Environment 2007)

The development of this minimalist perspective on migration contrasts dramatically with perceptions of Tuvalu at the international level. What can explain such a discrepancy?

The first explanation is that an alarmist approach on the domestic level would clash with the views of the majority of the population. Most Tuvaluans refute the idea that Tuvalu might eventually cease to exist. The government is therefore trying to find a fine balance between the risk of abandonment and a sustainable migration policy. No anecdote illustrates this better than the negotiation of Tuvalu's inclusion into the Pacific Access Category scheme in

2002. The Prime Minister of New Zealand, Helen Clark, offered an initial quota of 300 migrants to the then Prime Minister of Tuvalu, Saufotu Sopoanga, who admitted that he had asked for a reduction of the quota to 75 migrants because he was afraid that the island would 'empty itself too quickly'.

The case of the small, neighbouring island state of Niue is very relevant in this regard: emigration from Niue has been so important that the population left on the island is now currently about 1,500, threatening its very existence. Unsurprisingly, Niue made an offer to Tuvalu to take on some of its population.

They're desperate to attract some migrants, they don't even have enough players to form a national rugby team. That's the only reason why they offered to take on the whole Tuvaluan population. But Niue is as threatened by sea-level as Tuvalu is.

(John Connell)

Another explanation lies in the adverse effect that migration can have on sustainability, since Tuvalu's adaptation strategies are consistently presented within the frame of environmental migration. Farbotko (2005) has already shown how constant portrayal as victims of climate change can disempower people, and prevent them from developing adaptive strategies and coping capacities. Barnett and Adger also note that 'rates of international migration from atoll countries threatened with climate change may pass a critical threshold that constitutes danger for a society' (Barnett and Adger 2003: 328). Historically, migration has always contributed to the resilience and development of Tuvalu, but Barnett and Adger argue that 'ultimately a threshold may be reached which pushes the social system from previously sustainable international migration into complete abandonment' (2003: 328). The authors go on to identify two specific dangers related to massive migration flows:

1. A loss of confidence in the future among individuals can undermine the sustainable use of current resources, since future resource availability is no longer a concern. The activities of the French NGO 'Alofa Tuvalu' can serve as an example of this danger: the goal of 'Alofa Tuvalu' is to foster sustainable development in Tuvalu, *inter alia* through the development of renewable energies and the sustainable use of resources. An administrator of the association, Fanny Héros, reports that the NGO often faces the criticism that its projects are worthless, since the country is doomed to be flooded anyway.

2. A reduction of foreign aid and investment, if investors are no longer convinced that the atolls will be able to sustain human life in the future. This risk is also identified by Connell (2003), and is definitely a concern of the Tuvaluan government, which is eager to foster future development projects and increase international support.

Tuvalu has therefore taken a dual approach to environmental migration: its alarmist stance in external policies contrasts with a sceptical view in domestic adaptation policies. The opposition between the two advocacy coalitions is not channelled through different actors, but rather through different levels of policy-making – although the independence of the UN mission vis-à-vis the capital Funafuti should not be underestimated.

The existence of two different strategies might appear contradictory, but can be justified by the competing demands of the national and international agenda. On the national level, the government seeks to avoid giving the impression of ‘abandoning’ Tuvalu, and thus fosters adaptation strategies. This strategy seeks to downplay the risk of an eventual evacuation, because of the possible abovementioned adverse effects. On the international level, Tuvalu strives to garner support for its cause, and to maximise the possibility of obtaining assistance for adaptation and possible compensation for the damage caused by global warming in climate negotiations. Thus there is a strong incentive to maximise the risk of environmental migration in external policies. Because of this dual strategy, the same migration flow can be conceptualised as a failure of adaptation at the international level and as a risk-reduction strategy at the internal level.

Conclusion

Since the 1970s, general normative frameworks have developed to address environmental changes – including natural disasters. Many of the general principles underpinning international environmental law have become customary law, as attested by the development of case law in this field. Migration movements, however, have only been addressed marginally by this quickly expanding body of norms and principles.

Environmental changes as a whole are now overshadowed by global warming; this phenomenon can be conceived of as global pollution of the atmosphere resulting in a large number of impacts, including disasters. Climate change is addressed through a complex international regime, made up of binding laws, funds and institutions. This regime has mostly focused on the source of the problem, the emission of greenhouse gases, rather than on the different adaptive strategies that could be developed to cope with the impacts of the change. Migration is increasingly recognised as one of these possible strategies, but this aspect remains overshadowed by the view of migration as a failure of adaptation. Although migration appears to be a core aspect of global climate change, it is not yet on the agenda of the ongoing talks on the future climate change regime.

It is remarkable that, although disaster management and climate policy overlap so much when it comes to environmental migration, both fields are currently unconnected to each other. Ferris (2007) notes that

Those working on climate change and on disaster risk reduction are often talking past each other. (...) The Climate Change convention only mentions disasters in terms of countries that are the most vulnerable to climate change, including nations with disaster-prone areas. Those working on disaster management usually don't refer to climate change (perhaps because of the perception that there's nothing that can be done about it). While climate change policy is almost exclusively discussed at the global level, disaster risk reduction (DRR) is guided by an international framework but requires national or sub-national action with a particular stress on building resilient communities. Those working on natural disasters see disaster risk reduction as a way of mitigating the effects of disasters and for the past decade, considerable energy has been devoted to these DRR initiatives. Those working on climate change are beginning to talk not just about preventing further climate change but also about adaptation mechanisms by which communities can adapt to the changed environment.

With regard to the emerging international governance of the environment, a major challenge ahead lies in integrating disaster management, environmental law and climate policies. These three areas remain currently quite oblivious to each other, although they intersect in many different fields, including that of environmental migration. This fragmentation can certainly explain why environmental migration is addressed marginally, and not comprehensively, by these frameworks and policies.

A number of recent initiatives aim to fill this gap. For example, on the national level the 2009-2012 Federal Plan for Sustainable Development of Belgium includes the issue of environmental migration, and proposes the creation of an *ad hoc* advisory group to examine the policies and action that Belgium should implement in the coming years to address the issue¹⁰¹. On the international level, a new initiative has recently been created in the form of the Climate Change, Environment and Migration Alliance (CEEMA), founded by the UN Environment Programme, the Institute for the Environment and Human Security of the United Nations University (UNU-EHS), Munich Re Foundation¹⁰², and the International Organisation for Migration. As a testimony of its willingness to act upon environmental policies, CEEMA will be launched at World Water Forum to be held in Istanbul in April 2009. The goal of the alliance is ‘to mainstream the environmental and climate change considerations into the migration management policies and practice and to also bring migration issues into the world’s on-going environmental and climate change discourse’, through awareness raising, a forum for policy dialogue, and the provision of practical support to the most vulnerable countries. It will be interesting to observe whether CEEMA will function primarily through environmental or migration policies – or both.

Three out of its four founding members belong to the environmental field, while one (IOM) belongs to the migration field. The composition of the Alliance is a testimony to how the field of environmental migration lies at the crossroad of environmental and migration policies. After reviewing the evolution of policies and frameworks in the environmental field, it seemed only logical to conduct the same exercise for the migration field. This is the purpose of the next part of the thesis.

¹⁰¹ The plan can be consulted online at <http://www.plan2009.be>. Refer to the action 2.3.15 for the proposals on environmental migration.

¹⁰² Emanating from the Munich Re insurance group; the Munich Re Foundation aims to raise awareness and promoting a better understanding of risks.

Part 4

Migration Policies

“Sovereignty is nowhere more absolute than in matters of emigration, naturalization, nationality, and expulsion.”

Hannah Arendt, *The Origins of Totalitarianism* (1973: 278)

Introduction

After reviewing policies and norms relevant to natural disasters, climate change and environmental change as a whole, the next step is to review the legal and political instruments provided in the field of asylum and migration. Institutional frameworks dealing with forced migration have undergone rapid development over the second half of the 20th century, a development that accelerated from the asylum crisis of the 1990s. On the other hand, the international governance of (voluntary) migration has yet to see daylight, and thus won't be treated here.

Chapter 7 examines the evolution of the international refugee regime, through its various instruments and actors, and through the prism of the refugee definition. The Geneva Convention remains the paramount of refugee protection, and I shall try to show why it should be seen as political rather than a humanitarian construct, and how this reconsideration can help the conceptualisation of environmental migration. I shall highlight in particular the political forces and interests behind the evolution of the refugee regime, and the stakes at play.

Chapter 8 looks at asylum and mobility policies, with a focus on Europe. The complementary protection schemes that have been implemented in Europe and the United States are also treated in this section. Some space is also devoted to showing the development, from the early 1990s, of a normative framework to address internal displacement – this process should hopefully prove very insightful for the current debates on the instruments that could best address environmental migration.

Chapter 7

The International Refugee Regime

“The problem of refugees cannot be considered in the abstract, but, on the contrary, must be considered in the light of historical facts.”

Extract from a statement made by the representative of France to the United Nations Conference of Plenipotentiaries on the Status of Refugees and Stateless Persons, Geneva, 16 July 1951.

Introduction

A common argument often raised in conferences and workshops is that environmental ‘refugees’ are actually not refugees, because they do not meet the criteria of the Geneva Convention. As Burson has pointed out (2008), this view is over simplistic: ‘Caution needs to be exercised before rigid and immutable distinctions are drawn between environmentally displaced persons and those to whom the Convention’s protection regime can extend’. As this section will show, a more careful analysis of the norms and institutions of the international refugee regime reveals the protection and assistance mechanisms that can apply to those displaced by environmental changes.

At the same time, the regime associated with the Geneva Convention has repeatedly been called into question, particularly since the asylum crisis that started in the late 1980s (Garvey 1985; Dacyl 1995; Hathaway 1997). Critiques of the regime have argued that reforms are necessary to make the regime relevant again, and that it is not able, in its current state, to accommodate the large numbers of forcibly displaced people who are not covered by the

current refugee status. Furthermore, the restrictive asylum policies in most OECD countries, in tandem with a sharp increase in the number of displaced worldwide, has prompted some critics to call for a more interventionist approach to refugee flows (Roberts 1998).

This section examines how the international refugee regime has addressed the issue of environmental displaces historically and the most significant evolutions in this regard. Section 1 looks at the evolution of refugee protection through the various stages of the evolution of the regime, while Section 2 discusses the protection of environmental displaces within the framework of the 1951 Geneva Convention and its additional 1967 Protocol, as well as the protection mechanisms implemented by other regional conventions. A final section looks at the role of the principal institutional actor of refugee protection, the United Nations High Commissioner for Refugees (UNHCR), in providing protection and assistance to those displaced because of environmental disruption.

1. The Origins of International Refugee Protection

Before the drafting of the Geneva Convention as the cornerstone of the international refugee regime, other international arrangements existed to address the issue of people displaced outside the borders of their country. Refugee protection developed from the seventeenth century onwards, until the creation, in the modern era, of the first international refugee regime, which was created in the intra-war period under the auspices of the League of Nations.

1.1. First International Arrangements

It was not until the emergence of modern states in the seventeenth century that refugees became an international issue. The Peace of Westphalia, in 1648, marked the start of an era in which sovereignty was the key principle of relations between states. Rulers sought to impose territorial unity within the borders of their state, and persecuted those who were seen as deviating from the national norm (Loescher et al. 2008: 6). International refugee protection

thus originated as a way to deal with religious minorities, those who did not share the faith of their ruler: the Peace of Westphalia recognised an individual's right to emigrate to another country if persecuted on religious grounds (Orchard 2005). The right to leave and seek refuge in another country, however, was not yet a right to settle and remain in the country of destination.

It was only after the revocation of the Edict of Nantes by Louis XIV, in 1685, that the term *refugee* emerged, with reference to the masses of protestant Huguenots who were forced to leave France. It is estimated that approximately 200,000 fled to England, 30,000 to Germany, and another 20,000 to Holland. The flight of the Huguenots prompted states to recognise that people uprooted from their country needed some form of legal protection, rooted in domestic law. The Huguenots were welcomed in England and Germany, and later naturalised (Grahl-Madsen 1966: 10). This early modern refugee regime was characterized by three important elements: refugees were differentiated from other migrants, their right to leave their country was recognised, and the basis for their legal protection was established in national legislation (Orchard 2008). At this time, the right to leave a country – guaranteed thanks to the Peace of Westphalia – was recognised only for religious refugees; hence religion was historically the first acknowledged grounds of persecution.

At the beginning of the eighteenth Century, Vattel (1752) made the case for an extension of the right to seek refuge, arguing that the individual had a natural right to leave his country for three reasons:

- Economic, if he could no longer find subsistence in his own country;
- Societal, if society failed to fulfil its obligations towards citizens;
- Legal, if laws were enacted that threatened the fundamental liberties of the individual.

Vattel also recognised that those leaving their country would require protection from another state. Nevertheless, according to his argument, asylum remained a privilege granted by the receiving state, and not a right of the refugee.

The French Revolution saw the emergence of another type of refugee, the political refugee. In the aftermath of the French Revolution, an estimated 129,000 refugees fled France: not only members of the clergy and nobility, but also political opponents to successive rulers of France (Zolberg et al. 1989: 9). The French Revolution marked the start of a revolutionary

period throughout Europe, with increased numbers of refugees. However, refugees fleeing revolutionary turmoil were perceived differently by receiving states on several counts. They were thought more likely to seek temporary asylum and return to their origin countries once the political conditions became more favourable; states were afraid that political activists among the refugees would trigger revolutionary movements abroad; and finally, states did not know how to deal with demands issued by origin states to be return refugees. As Orchard argues, ‘this added complexity meant that states needed to develop new processes to deal with refugees, processes which became norms designed to stabilize state expectations towards refugees and increase the ability of states to cooperate’ (2008: 111).

In the aftermath of the French Revolution, a significant number of countries, most notably the United States and the United Kingdom, offered asylum to those fleeing persecution. As flows of refugees increased, a large number of states engaged in bilateral negotiations over the status of refugees; the resulting legislation contained the first elements upon which international refugee law would later build. Such laws included France’s *Loi Relative aux Etrangers réfugiés qui résideront en France*, promulgated in 1832, which enacted full refugee protection, or Belgium’s 1833 *Loi sur les extraditions*, which forbade the extraditions of political refugees; these acts were soon followed by corresponding legislation or treaties in most European countries.

Overall, the French Revolution brought about two significant shifts in the practices of refugee protection:

- Political refugees, and not only religious refugees, were recognised.
- The ‘right to leave’ evolved towards a ‘right to stay’, through the development of national legislation on refugees, and treaties on extradition, which would later serve as a basis for the foundations of international refugee law.

This regime, however, was largely based on ad hoc solutions, and an international mechanism to protect and assist refugees was yet to be created. This would happen in the aftermath of World War I, under the auspices of the League of Nations.

1.2. *The League of Nations*

The creation of the League of Nations in 1919 marked the start of the development of international rules for the treatment of refugees. After the Great War, there were approximately 800,000 Russian refugees, mostly in Eastern Europe, and the Council of the League had no choice but to act. At the same time, nationalism was on the rise on many European states, and restrictive immigration policies, based on race and national passports, were implemented throughout Europe: those forced to leave their country facing increasing difficulty in finding elsewhere, and needed international protection. Many such refugees had become stateless following the collapse of their former empires. Left without documentation or refuge, their existence was felt to be a threat to European regional security.

The Russian refugee crisis was not a problem that could be treated on the national level – governments were ill-equipped for an influx of destitute people whose dubious legal status made them a political problem (Holborn 1975: 5) – but had to be dealt with at the international level. In order to fill the protection gap and alleviate a potential source of tension, Allied powers acknowledged the need for an international organisation to address the Russian refugee problem (Loescher 1994).

In 1921, the Council of the League of Nations decided to convoke a Conference on the issue, and the President of the Council appointed Dr Fridtjof Nansen, the Norwegian conquerer of the North Pole, as the first High Commissioner for Refugees. Nansen's mandate was initially limited to Russian refugees, but was later extended to include Greeks, Bulgarians, Armenians, and Turks. Nansen managed to convince European governments to pass a series of international agreements protecting refugees fleeing disintegrating empires, and implementing multilateral protection mechanisms, such as the famous Nansen passport: the first refugee travel document. Refugee protection was no longer provided by national policies, but rather by binding international law.

These first instruments of international refugee law adopted a group category approach: a refugee was defined as someone outside her country of origin who did not receive the protection of this country. Both conditions were required for someone to be classified as a refugee (Goodwin-Gill 1996: 4).

After the death of Nansen in 1930, the High Commissioner's Office for Refugees was discontinued, and replaced by the Nansen International Office for Refugees. The Nansen Office continued the missions undertaken by Nansen: to secure the protection of refugees via international agreements, and to provide assistance to them during emergency situation, taking on an operational role.

A first refugee convention, addressing directly the status of refugees, was adopted in 1933. The Convention was the first agreement to 'articulate the principle that refugees should not be returned involuntarily to their country of origin' (Beck 1999: 603), thereby establishing the principle of 'non-refoulement'. Nonetheless, it had some important limitations: it applied only to refugee groups that were already under the protection of the League of Nations, and was upheld by sixteen nations (Orchard 2008: 177). Several other agreements were drawn up in 1936, 1938 and 1939 to address the situation of refugees fleeing Nazi Germany, but these instruments failed to prevent the Holocaust.

Overall, Loescher notes that 'the international refugee response prior to the Second World War did not constitute an effective regime' (1994: 354). The main reasons for this lie in the reluctance of Western states to adopt a universal definition of refugeeism, since these states preferred to work to deal with refugees on a case-by-case basis. Overall, the lack of international commitment to a durable refugee solution, as well as anti-immigration sentiments and policies in most Western countries, greatly impeded the development of a true refugee regime.

Following the Second World War, new refugee organisations were established to deal with the tens of millions of people displaced by the war. In 1943, the United Nations Relief and Rehabilitation Agency (UNRRA) was created by the Allied Powers to supervise the return and resettlement of those displaced. UNRRA was largely under US control, and not formally affiliated with the United Nations, which was created two years later in San Francisco. Loescher *et al.* contend that UNRRA 'was in no sense a refugee organisation', and even 'played an active part in the controversial forcible repatriation of large numbers of people in Europe' (2008: 10).

Upon UNRRA's termination in 1947, it was replaced by the International Refugee Organisation (IRO). Unlike UNRRA, the IRO was not so much concerned with relief,

rehabilitation and repatriation, as with resettlement. States had recognised that refugees had a right not to be repatriated against their will: between 1947 and 1950, the IRO had resettled more than one million people to the United States, Canada, Australia, Israel and Europe (Gallagher 1989). Most importantly perhaps, states adopted a universal definition of refugee, based on individual persecution or fear of persecution because of race, religion, nationality or political opinion: 'In so doing, Western powers made refugee eligibility dependent upon the circumstances of the individual rather than membership in a group, and accepted the individual's right to flee from political persecution' (Loescher et al. 2008: 11).

This definition based on individual grounds marked a radical change in the approach to refugees: the international community had never tried to provide a universal definition for refugees, and had always dealt with specific, identified groups. According to the past definition, one had to belong to one of these groups in order to be recognised as a refugee; it was now possible to be recognised as a refugee because of individual persecution or fear of persecution. As a result of this shift, the IRO found itself resettling not only those who had been displaced by the war, but also significant numbers of East European citizens who left their country in search of political asylum.

The organisation had a fixed term, and was terminated in 1950. Despite the organisation's achievements in resettling people, there were still large numbers of displacees throughout Europe. In addition to Second World War refugees, large numbers of people had been uprooted throughout the world because of the Cold War and new conflicts erupting in India, Korea, Palestine and China. By 1950, the international community recognised that there was an urgent need for a new refugee agency, but the US was unwilling to continue funding it as it had done for UNRRA and IRO. As a result, the international community decided to create a new organisation, the United Nations High Commissioner for Refugees (UNHCR), supported by a new Refugee Convention, adopted in 1951. Both the organisation and the convention remain the cornerstones of the international refugee regime today, and their evolution is described in detail in the subsequent sections.

Overall, the progress made towards refugee protection since the Peace of Westphalia was significant, and can be summarised by the following major shifts:

- The 'right to stay' was recognised in addition to the 'right to leave': the right to enjoy

asylum in another country, away from persecution, would later be engraved into the Universal Declaration of Human Rights;

- States gradually accepted that refugee protection had to be guaranteed by binding international instruments, and could not be left to domestic immigration policies;
- Finally, a universal definition of refugees emerged, based on individual, not collective, grounds. Furthermore, the definition was based on persecution or the fear of persecution, and no longer on the failure of the origin state to provide assistance.

2. The 1951 Geneva Convention and its 1967 Protocol

The drafting of the Geneva Convention was inherently linked to the inception of UNHCR. The Convention itself was the product of intense preparation, and although it was formally adopted at an ad hoc conference convened in July 1951, this adoption was the outcome of a long maturation process that had started well before the first ad hoc committee on the drafting of the Convention. The Convention was a document that reflected the preoccupations of the time, as will be discussed in Section 2.1. Section 2.2. examines the characteristics of the refugee definition, and how this definition relates to prior and alternative definitions. Finally, Section 2.3. attempts to show how the Convention is able to provide protection to environmental displaces, or not, as the case may be.

2.1. The Cornerstone of the International Refugee Regime

The negotiations over the drafting of the Convention were conducted alongside negotiations over the creation of UNHCR: the goal of the Convention was not only to formalise a refugee definition, but also to define the precise rights of refugees and the obligations of states towards them.

Although the Convention was negotiated by only twenty-six parties— or perhaps because of this fact – fierce debates erupted, between advocates and opponents of a broad definition of refugees, and concerning the scope of the Convention. Great Britain, for example, argued that the Convention should apply to all refugees, without distinction of country of origin, whether they were already asylum-seeker or might become so in the future. On the other hand, France and the United States contended that states needed to know in advance how many refugees they could expect if they were to sign the Convention: they felt that states could not commit to future flows of refugees, whose numbers and location were unknown (Weis 1995). Eventually, a limited interpretation of the Convention prevailed, which would serve primarily for the protection of a known quantity of European refugees. In order to be eligible for refugee status, people had to have been displaced by an event occurring before the 1st January 1951. Furthermore, states could choose to restrict asylum to those coming from European countries.

The Convention established a series of rights for refugees, including the rights to employment and education, to access national courts, and other economic, civil, and social rights, although though many observers noted that such rights were seldom implemented in cases of emergencies (Durieux and McAdam 2004). The most important right, however, was the right not to be repatriated to a country where the refugee would face persecution: the right of ‘non-refoulement’. The right of non-refoulement is now widely seen as the paramount of international refugee protection, as it is a principle that has become customary law and thus can impose itself on countries that are not parties to the Convention (Goodwin-Gill 1996: 30; Lauterpacht and Bethlehem 2003).

The purview of the 1951 Convention was limited in both time and space: to refugees displaced before 1951 and originating from Europe. The 1967 Additional Protocol to the Convention lifted these limitations, and made the refugee definition universal. Since then, the Convention has never been altered, and is one of the most widely ratified international agreements to date¹⁰³, with 147 signatories¹⁰⁴. Over time, the Convention has acquired the status of a human rights treaty (McAdam 2006), and some of its core principles, including that of finding asylum from persecution, are to be found in the Universal Declaration of Human Rights.

¹⁰³ Along with the UN Framework Convention on Climate Change and the Kyoto Protocol.

¹⁰⁴ Most of the countries that did not ratify the Convention are located in Asia – for example, India, Bangladesh, Pakistan, Saudi Arabia and Indonesia, amongst others – with the exception of Libya, in Africa.

Studies and initiatives on environmental migration, however, have repeatedly called for a modification of the 1951 Convention, or an additional protocol, in order to grant appropriate protection to people displaced by environmental changes. These calls have come from a wide range of sources: scholars, NGOs, but also policy-makers. While it is impossible to draw up a comprehensive list of these initiatives, it is possible to classify them into two categories:

- Those who argue that environmental degradation is a form of political persecution, and that environmental displaces therefore have a legitimate right to claim refugee status (Conisbee and Simms 2003);
- Those who contend that the refugee definition no longer matches the realities of forced migration, and must be revised in order to incorporate environmental displacees (Cooper 1997; Chemillier-Gendreau 2006).

These interventions have not been well received by scholars working on refugee rights, in the main members of the alarmist coalition. Most were afraid that these calls were an excuse to limit governmental responsibility for forced displacement (Kibreab 1997, 1994), or that they would result in a watering down of the protection mechanisms in place for current refugees. Castles expressed these fears in direct fashion:

It therefore seems appropriate to call for a much wider international protection regime that would embrace all these groups and – why not? – so-called environmental refugees as well. The reality is that there is no consensus for extending the refugee regime. Most receiving states want to restrict it further rather than improve it. (...) Any changes in the Refugee Convention in the current climate are likely to be for the worse. That is why a notion like ‘environmental refugees’ is not only misleading, but possibly harmful. It can be used by those who want to restrict asylum opportunities for refugees to support claims that those who arrive on our shores are not genuine victims of persecution, but are in fact fleeing environmental degradation and impoverishment. If people making refugee claims are not real refugees in the sense of the 1951 Convention then the case for exclusion is strengthened. (2002: 10)

I argue that such fears stem not only from the current anti-immigration climate denounced by Castles, but also from the status of the Refugee Convention as a human rights treaty.

Although a great number of initiatives have called for an extension of the refugee regime, any change to the Convention would be perceived as an attempt to alter or diminish human rights. Even those scholars from the alarmist coalition who have called for a better protection of environmental displaces in international law share these fears and concerns, and have recommended that the Geneva Convention not be modified, aware that the current refugee regime could be reduced rather than extended (Piguet 2008; Biermann and Boas 2007).

Some initiatives went a step further and called officially for recognition of 'environmental refugees' within the Geneva Convention. In recent years the Belgian Parliament has been the most active of all legislative bodies on this issue. In 2006, the Senate passed a resolution urging the Belgian government to work towards better protection of 'environmental refugees' in the Geneva Convention (Mahoux 2006). This is, to date, the most advanced official position on the matter taken by any state. During the ensuing parliamentary debate, some Senators opposed the resolution on the basis that it did not sufficiently address the root causes of the problem, but none mentioned the technical and political difficulties of revising the Geneva Convention.

Two other resolutions are currently pending in the Belgian House of Representatives on the issue: one recommends the drafting of an additional Protocol to the Geneva Convention, which would give legal status to 'environmental refugees' (Cornil et al. 2008); the other, although pursuing the same objective, does not call explicitly for a revision of the Geneva Convention (Boulet et al. 2008). A report under preparation in the Council of Europe follows the same line, and declares a 'pressing need for an elaboration of a specific framework for the recognition and protection of environmentally induced migrants, either in a separate Convention or as parts of intergovernmental environmental treaties, or as both, yet disassociating environmental migration from the 1951 Geneva Refugee Convention' (Acketoft 2008).

Thus different approaches exist, and not all initiatives calling for the international recognition of 'environmental refugees' of necessity call for a revision of the Geneva Convention. Although the number of such initiatives is on the rise at the legislative level, their number remains too limited to draw conclusions and patterns of to the different approaches to the Convention.

2.2. *The Refugee Definition*

The refugee definition of the Geneva Convention builds upon a series of previous definitions, provided by different international agreements. Prior to the twentieth century, there was no perceived need for a definition of refugee: ideally, those leaving their country were ‘welcomed with open arms by European monarchs or municipalities’ (Marrus 1985: 7), and considered as an addition to the development of the sovereign state.

2.2.1. *Previous Attempts to Define Refugees*

The need for definition arose only after the adoption of restrictive immigration policies by Western states in the early twentieth century. The beginning of the century was marked by massive refugee flows stemming from the Russian Revolution or the Armenian Genocide, and restrictive immigration policies were difficult to implement in the face of large humanitarian crises. Hence refugee law developed as a compromise between the need to provide protection to persecuted people and restrictive immigration policies; it constituted ‘a humanitarian exception to the protectionist norm, in that immigration screening was dispensed with for large groups of unprotected migrants’ (Hathaway 1991: 2).

The initial definitions of refugee were collective, and followed a case-by-case basis: states recognised some groups of people as in need of international protection, and refugees were simply defined as the members of the group. The refugee definition was relativist, and applied only to certain identified groups. Refugees were protected by virtue of their membership to this group; members of other groups that were not entitled to international protection might be in a similar situation but did not qualify as refugees. In the first phase, until 1935 and the rise of National Socialism in Germany, the only groups that qualified as refugees were those that had lost the protection of their state. Their refugee status was primarily aimed at correcting an anomaly of international law, and providing them with legal documentation and national protection. A second phase occurred after the Nazi party acceded to power in

Germany, when refugee status was granted to those fleeing the country not because they had lost the protection of their state, but because they needed refuge.

The most fundamental shift occurred with the 1938 Convention, which rejected the collective approach in favour of an individualistic approach to refugees. A refugee was no longer defined by his/her belonging to a group, but rather by his/her individual characteristics. The procedure of determining refugee status was considerably affected by this shift, since the right to asylum now rested on the applicant's personal characteristics, and was judged on a case-by-case basis: this individual approach to refugee status has predominated ever since. It is because of this individual approach that some observers maintain that normative frameworks of refugee law, and international law in general, are unfit to address the issue of environmental displacees (Cournil and Mazzega 2006; Zetter 2008). Accordingly, they propose that a legal status for environmental displacees should be based on a collective rather than individual approach (Cournil and Mazzega 2007; Magniny 1999).

2.2.2. *In the Geneva Convention*

The Geneva Convention defines a refugee as any person who has been recognised a refugee under previous arrangements, or any person who,

As a result of events occurring before 1 January 1951¹⁰⁵ and owing to 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 or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it (United Nations 1951: art. A(2)).

¹⁰⁵ The definition has a limited time frame: Article B(1) stipulates that 'for the purposes of this Convention, the words "events occurring before 1 January 1951" in article 1, section A, shall be understood to mean either (a) "events occurring in Europe before 1 January 1951"; or (b) "events occurring in Europe or elsewhere before 1 January 1951", and each Contracting State shall make a declaration at the time of signature, ratification or accession, specifying which of these meanings it applies for the purpose of its obligations under this Convention'.

Hathaway has observed that the definition is notable for two main characteristics: its strategic conceptualisation and its European focus (1991: 6). When agreeing on a definition, representatives of Western governments insisted that the term ‘refugee’ have a highly political connotation, in order to highlight the plight of peoples fleeing persecution from communism, and those whose flight was motivated by pro-Western political beliefs. Representatives of Soviet countries, on the contrary, were eager to downplay the importance of such motives for migration. Hathaway writes: ‘As anxious as the Soviets had been to exclude political émigrés from the scope of the Convention for fear of exposing their weak flank, so the more numerous and more powerful Western states were preoccupied to maximise the international visibility of that migration’ (1991: 7).

Such preoccupations are evident upon examination of the *travaux préparatoires* of the Convention. In a preparatory meeting for the Convention, the Soviet representative expressed the Soviets’ position on the refugee definition:

*The U.S.S.R. delegation considers that persons who collaborated in any way with the enemies of the democratic countries should not be regarded as refugees or enjoy the protection of the United Nations. It considers it essential to exclude from the category of persons who receive United Nations assistance not only those who, during the war, fought actively on the side of the enemy against the people and government of their country, but all those other traitors who are refusing to return home to serve their country together with their fellow citizens.*¹⁰⁶

On the contrary, Western countries, led by France and the United States, were keen to restrict the refugee definition to political motives:

If [...] it was considered that a single text should cover both refugees from Western Europe seeking asylum beyond the ‘Iron Curtain’ and refugees from the latter countries seeking asylum in Western Europe, he wondered what the moral implications of such a text would be. The problem of refugees could not be considered in the abstract, but, on the contrary, must be considered in the light of historical facts. In laying down the definition of the term ‘refugee’, account had hitherto always been taken of the fact that refugees principally involved had always been from a certain part of the world; thus, such a

¹⁰⁶ Statement from Mr Soldatov, representative of the U.S.S.R., at a preparatory meeting held on 14 December 1950. Quoted in (Weis 1995: 25) and (Hathaway 1991: 7).

definition was based on historical fact. Any attempt to impart a universal character to the text would be tantamount to making it an 'Open Sesame'.¹⁰⁷

Western nations were the more powerful block, and were able to impose their conception of refugeeism: only people persecuted for their political or civil status would be entitled to international protection. As a result, no Soviet nation, apart from Yugoslavia, ratified the Convention. Hence the definition was not grounded in humanitarian motives, but in political strategising aimed at stigmatising Soviet ideology in the early days of the Cold War. The refugee definition of the Geneva Convention is thus a direct by-product of the Cold War, rather than a genuine attempt to guarantee international protection to those who could no longer count on the protection of their country. The scope of the definition was deliberately limited for political reasons, as the abovementioned statement from the French representative attests: 'The problem of refugees could not be considered in the abstract'.

It seems therefore entirely logical that environmental stressors were not included as potential push factors entitling displacees to a refugee status: 'The refugee definition was carefully phrased to include only persons who have been disfranchised by their state on the basis of race, religion, nationality, membership of a particular social group, or political opinion, matters in regard to which East bloc practice has historically been problematic' (Hathaway 1991: 8). Other possible causes were also excluded, so that the definition could be used by the Soviets to their advantage. Hathaway continues:

Unlike the victims of civil and political oppression, however, persons denied even such basic rights as food, health care or education are excluded from the international refugee regime (unless that deprivation stems from civil or political status). By mandating protection for those whose (Western inspired) civil and political rights are jeopardized, without at the same time protecting persons whose (socialist inspired) socio-economic rights are at risk, the Convention adopted an incomplete and politically partisan human rights rationale.

Furthermore, the Convention was heavily focused on the issue of European refugees. European states complained that they had already shouldered most of the burden for post-war refugees, and so they were eager to see other nations share some parts of this burden. A clear

¹⁰⁷ Statement of Mr Rochefort, representative of France, to United Nations Conference of Plenipotentiaries on the Status of Refugees and Stateless Persons, Geneva, 16 July 1951. UN Doc. A/CONF.2/SR.22

objective of the Convention was to contribute to the resettlement of refugees beyond Europe (Grahl-Madsen 1966; Gallagher 1989): in order to encourage refugees to seek asylum beyond Europe's borders it was necessary to extend the asylum conditions that refugees enjoyed in Europe to outside Europe. In sum, the Convention was nothing more than a burden-sharing agreement: its scope was limited to European refugees who had been displaced before 1951¹⁰⁸, with to the goal of redistributing them to a wider array of countries. Despite repeated pleas and vocal complaints from representatives of developing nations, who argued that the large bulks of refugees were located in the South, and not only in Europe, their demands were ignored and the Convention kept a Euro-centric perspective (Weis 1995).

There was, however, another reason for the limited scope of the Convention. Following the termination of the International Refugee Organisation (IRO), states agreed that a new refugee agency was needed, and UNHCR was created. However, there were strong disagreements between states over the mandate of the agency. The United States, in particular, was very keen to limit its role and authority, and decreed that the newly created agency should possess limited, specific functions of international legal protection, have no operational role, and be only a temporary agency. Operations run by the IRO had been very costly, and Washington was unwilling to commit unknown quantities of funding to future, unpredictable flows of refugee. Instead, the United States preferred to direct funding to the reconstruction of Europe via the Marshall Plan, or to its own refugee agencies, which included the Intergovernmental Committee for European Migration, later known as the International Organisation for Migration (IOM). As will be described in the next section, the UNHCR was therefore established as a small agency, whose scope, role and autonomy were very limited. The Refugee Convention was intended to serve as the framework for UNHCR action, and reflected these organisational limitations in its refugee definition. In a nutshell, the United States imposed their vision of a modest organisation, which would only provide protection to limited and carefully identified refugees.

As demonstrated above, the original refugee definition was the product of three different components:

- Historical, as a way to resolve a specific situation, without any universal claim;

¹⁰⁸ States had the possibility of extending the protection to refugees originating from other parts of the world, but only on voluntary basis.

- Ideological, as a by-product of the nascent Cold War, rather than a by-product of humanitarian considerations;
- Organisational, as the framework of an agency with a deliberately limited mandate.

The 1967 Additional Protocol lifted the formal geographic and time restrictions of the Convention, but left the refugee definition unaltered. Although it has been argued that the Additional Protocol transformed the Convention from a Euro-centric document into a truly universal agreement (Orchard 2008), the unchanged refugee definition kept the focus of the Convention narrowed to a limited European scope, and refugees whose flight was not motivated by political or civil persecutions remained outside the protection mechanisms guaranteed by the Convention.

The narrow definition of refugee continued to exclude the majority of ‘refugees’, who originated from developing countries. Many commentators observed the absence of equal treatment:

(...) Most Third World refugees remain de facto excluded, as their flight is more often prompted by natural disaster, war, or broadly based political and economic turmoil than by “persecution”, at least as that term is understood in the Western context. (Hathaway 1991: 10)

The Convention and Protocol (...) designate as refugees only those who have fled from persecution and exclude fugitives from natural disasters and from civil and international war. Such (...) definition may well be appropriate for the purpose of determining whether an individual should receive an international travel document and should be eligible for the diplomatic protection (...); however, it appears inappropriate for the purpose of determining whether an applicant qualifies for admission to a country of asylum and to freedom from ‘refoulement’. The compassionate claim of a fugitive from persecution may, after all, be no greater than that of a person displaced by an earthquake or a civil war. (Plender 1977: 54)

Overall, I argue that the refugee definition provided in the Geneva Convention was a social category derived from a political construct: it resulted from the willingness of Western nations to stigmatise the Soviet regime, from the desire of Europe to share the burden of its refugee problem with other states, and the reluctance of the United States to provide funding to

address large and unpredictable flows of refugees. This set of political factors explains why environmental motives do not appear in the definition:

- Most of those fleeing natural disasters or environmental changes, along with those fleeing poverty, originate from developing countries, and therefore were of little concern to the drafters of the Convention;
- Their numbers were unknown and unpredictable, and thus had the potential to represent a considerable burden;
- Finally, environmental concerns were not yet on the political agenda, and therefore could not be part of a political strategy.

It is remarkable that such a historically contingent and politically biased convention is still, more than 50 years after its inception, the apogee of refugee protection¹⁰⁹ (McAdam 2006), the ‘wall behind which refugees can shelter’, as a special issue of UNHCR’s *Refugee* magazine proclaims, edited to mark the 50th anniversary of the Convention¹¹⁰. The strict limits of the Convention, however, have been stretched considerably over the last decades. This is primarily thanks to the actions of UNHCR, whose role will be described in the next section, but also to evolving interpretations of the Convention and alternative refugee definitions, which shall now be discussed.

2.2.3. *Alternate Definitions*

In addition to the definition provided by the Geneva Convention, two regional conventions, in Africa and Latin America, provided alternate definitions, which sought to extend the scope of the Geneva Convention: the 1969 Convention of the Organisation of African Unity (OAU), and the 1984 Cartagena Declaration on Refugees.

¹⁰⁹ A striking parallel can be drawn with the UN Security Council, whose composition is also a by-product of a similar historical context and political strategies. The reform of the Council, however, is currently under discussion on the official international agenda, unlike a reform of the refugee regime.

¹¹⁰ Issue 123, July 2001.

These regional conventions originated in the dissatisfaction of developing countries with the international refugee regime, which was perceived as overly Euro-centric. The Geneva Convention was perceived to be disconnected from the realities of forced migration in the South, and it was thought that regional instruments would more adequately address regional refugee issues. The Organisation for African Unity even sought to establish its own regional refugee organisation, and the UNHCR worked closely with OAU to convince the African Organisation of their capacity to provide regional refugee assistance (Orchard 2008: 303).

Overall, these instruments took a more pragmatic approach to refugee issues that reflected more accurately the actual causes of flight in developing countries, and recognised that it was usually difficult for refugees fleeing en masse to provide actual evidence of individual persecution (Arboleda 1991; Mubiala 2001). Above all, their main achievement was to significantly expand the definition of refugee in a more inclusive way.

In addition to the 1951 Refugee Convention definition, the 1969 OAU Convention defined a refugee as

Every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality (Organisation of the African Unity 1969).

The definition primarily relates to situations of mass violence, which triggered important refugee flows in Africa throughout the 1960s. However, the descriptor ‘events seriously disturbing public order’ could certainly encompass natural disasters, and African countries have consistently interpreted the definition in an expansive way, and seldom reject refugees at the border. Furthermore, the OAU Convention also considered the security implications of refugee flows, and focused on solutions to refugee situations, such as the promotion of voluntary repatriation and burden-sharing. Although the OAU definition is more expansive definition, it has greater temporal limits than the Geneva Convention: Gallagher notes that the Convention reflects African states’ assumption that refugee problems were temporary and that most of the refugees would voluntarily repatriate when independence was secured by newly-formed governments’ (Gallagher 1989: 584).

The Cartagena Declaration, adopted in 1984, proposed a similar expansion of the refugee definition:

(...) The definition or concept of a refugee to be recommended for use in the region is one which, in addition to containing the elements of the 1951 Convention and the 1967 Protocol, includes among refugees persons who have fled their country because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violation of human rights or other circumstances which have seriously disturbed public order ("Cartagena Declaration on Refugees" 1984).

Unlike the OAU Convention, however, this document was not adopted by a regional organisation, but rather by an ad hoc group of experts and representatives from Central American governments who participated in a conference in Colombia. Although the Declaration is not binding, it has evolved to the status of a principle of customary law in the region, and the expanded definition has been recommended for application in situations of mass influx (Goodwin-Gill 1996: 21).

Both conventions have made significant progress towards a more inclusive, less Euro-centric definition of the refugee. Their alternative definitions were paralleled in the evolving matched the evolution of the role of UNHCR, as will be demonstrated in the next section, as well as the more inclusive interpretations of the definition in the context of the development of human rights law (Carlier 2001).

Finally, it should be noted that there are currently two distinct refugee definitions in force: a wider definition, grounded in sociology, refers to someone who is forced to flee against his/her will; a stricter definition is grounded in law and refers directly to the Geneva Convention (Suhrke 1994: 488). I have carefully avoided imprecise use of the term 'environmental refugee' in this work, in order to avoid creating confusion, but it should be noted that the term has a distinct sociological meaning¹¹¹, which holds evidentiary value and should not be unthinkingly discarded. This semantic question relates to the epistemology of environmental migration, a topic that is beyond the purview of this paper.

¹¹¹ It should be noted that this meaning can be contested by the people themselves, as it will be shown in the case study about Katrina (Chapter 6).

2.3. *Environmental Migration and the Geneva Convention*

It is commonly assumed that environmental displacees are not covered by the Geneva Convention, since they do not meet the criteria set out in its refugee definition: they may not cross an international boundary, and are not directly ‘persecuted’, and their persecution is not a consequence of their race, religion, political opinion, nationality, or belonging to a specific group. As summarised by Castles,

The term ‘refugee’ has a precise meaning in international law. A refugee is defined by the 1951 UN Convention relating to the Status of Refugees as a person outside his or her country of nationality who is unable to return because of a ‘well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion’. Clearly, someone who flees due to environmental problems does not fall under this definition. Nobody gets asylum just because of environmental degradation. (2002: 8)

However, the situation is not this simple, and I would concur with Burson that ‘caution needs to be exercised before rigid and immutable distinctions are drawn between environmentally displaced persons and those to whom the Convention’s protection regime can extend’ (2008: 8). Although the Geneva Convention may not be able to provide protection to all those displaced by environmental changes, there are some instances in which it can be helpful in addressing their plight.

First, the connections between environmental change and security have long been the subject of consideration, and climate change has renewed interest in the nexus between the two (German Advisory Council on Global Change (WBGU) 2008; Barnett 2001b). Some authors, usually referred collectively as the ‘Toronto Group’, have argued that environmental disruptions are major triggers for conflicts, and that a positive and important linkage exists between environmental degradation, conflict and migration (Homer-Dixon 1991, 1994; Diamond 2005). Diamond, for example, claims that the Rwandan Genocide was a primarily a by-product of environmental scarcity more than of ethnic hatred (2005: 311-329), and similar claims have been made regarding the Darfur conflict. Other authors have taken a more cautious approach, and contended that environmental change does not lead automatically to

conflict but can be an aggravating factor (Gleditsch 1998; Ronnfelt 1997). In cases when a conflict originates in environmental disruption, or in a dispute over the use of natural resources, the people displaced by the conflict would generally be entitled to protection under the Geneva Convention. A more extreme but clear-cut case concerns the use of the environment as a tool of warfare during conflicts. Historical examples include defoliation with Agent Orange during the Vietnam war, or the destruction of the Iraqi Arab marshlands during the First Gulf War (Chemillier-Gendreau and Gendreau 2006). Displacements induced by such cases also fall within the scope of the Geneva Convention.

A second possible use of the Convention concerns peoples affected by environmental change as a result of their belonging to a specific group. The academic literature on the Geneva Convention refugee definition usually considers that the fourth criterion – ‘membership to a particular social group’ – contains a safety net designed to encompass new forms of persecution, such as persecution against homosexuals, for example (Goodwin-Gill 2006; Carlier 2001). Studies on environmental racism have shown that people belonging to minority groups are more likely to be exposed to environmental hazards or to live in a degraded environment (Boer et al. 1997). Roma, for example, often settle on lands at risk of flooding because these are the only areas where municipalities will allow them to stay. Should they be displaced by floods, as happens regularly in Eastern Europe, they can legitimately claim to have been persecuted because of their belonging to a specific group, and a number of Roma have been granted temporary protection in Belgium on this basis¹¹². Another case of environmental racism involving displacement might include discriminatory relief assistance in the case of a natural disaster, or discriminatory disaster prevention: the cases of Katrina and the recent Cyclone Nargis in Burma serve to illustrate this possibility.

Finally, a growing trend in the literature suggests that a progressive interpretation of the Geneva Convention might consider all situations in which states fail to provide protection to their citizens as persecution (Carlier 2001). Instances where a state fails to provide adequate protection – such as food supply or shelters in cases of natural disasters or other environmental changes – might qualify as cases of protection failure by the state, hence of persecution. Hathaway notes that ‘persecution’ can encompass both the privation of civil and political rights, and also the denial of social and economic rights, such as the right to food or

¹¹² Interview with a protection officer of the Commissariat Général aux Réfugiés et aux Apatrides (CGRA). Further details are given in Section 3 of this chapter.

decent housing (1991: 103). Burson (2008) provides a series of cases showing that the interpretation of failure of protection by administrative courts has been rather broad, and could include cases of deprivation from relief assistance.

These three types of situation represent cases in which the Geneva Convention could provide some protection to people displaced by environmental disruption. Hence the common claim that ‘the Geneva Convention does not apply to *environmental refugees*’ is overly simplistic, although it is incapable of providing protection to all environmental displacees. Between alarmists who push for revision of the Geneva Convention and sceptics who refuse the idea of any change to it, there might be a third way that allow for a broader interpretation of the Convention. The needs of environmental displacees, however, are far from being limited to legal protection, and the role of UNHCR in providing assistance and relief to people affected by natural disasters has expanded considerably over time, as will now be discussed.

3. The Evolving Role of UNHCR

‘No international organisation has had such an unpromising beginning as UNHCR’ (2008: 17), claim Loescher et al.. The refugee agency was initially conceived as an organisation of limited scope and three-year mandate, reflecting the strategic interests of Western nations, and their unwillingness, the United States in particular, to commit large amounts of funding, and significant obligations and responsibilities. As a result, during the Office’s three-year trial period it had very limited funding, no operational role, and almost no autonomy from the UN General Assembly. Over time, however, UNHCR was able to expand its role significantly – and thus refugee protection – both regarding its operational activities and the categories of people that were of its concern. The following section describes the initial mandate of UNHCR, and how this mandate has been stretched over time – now to its limit, some argue. A second section examines the involvement of the agency in situations of natural disasters, and asks whether environmental displacees should be considered ‘people of concern’ – to use the agency’s terminology – or not.

3.1. *A Stretched Mandate*

The initial mandate of UNHCR was very limited, and set out only two principal tasks for the newly-created organisation: ‘Providing international protection, under the auspices of the United Nations, to refugees who fall within the scope of the present Statute and of seeking permanent solutions for the problem of refugees’ (United Nations General Assembly 1950: art. 1). Its work was to be entirely apolitical, and carried out under the authority of the UN General Assembly. The High Commissioner would be appointed for a term of three years only, and the agency’s budget would be voted by the UN General Assembly¹¹³ with no possibility of external sources of funding without the latter’s approval.

More importantly, perhaps, the initial mandate did not include two functions that would soon become central to the Office’s activities (Morris 2008):

- The provision of material assistance to refugees. In its initial stage, the UNHCR’s role was limited to legal protection, and it did not have operational capacity. Furthermore, could not raise funds for special operations.
- The protection of internally-displaced people (IDPs). The statute defined the refugees in the same terms as the Geneva Convention, on the basis of individual persecution, with the same temporal and spatial limitations. The agency was therefore unable to provide refugee status to ‘internal refugees’, or to grant refugee status to large groups of ‘*prima facie* refugees’. Furthermore, its mandate was limited to those who had been displaced by events that occurred prior to 1951, and so it could not engage in future emergency operations.

In a nutshell, ‘the United States and its allies sustained their desire to create an international refugee agency that would neither pose a threat to their national sovereignty nor impose new financial obligations on them’ (Loescher et al. 2008: 14).

¹¹³ As a result of the arrangement, the Organisation was completely dependent upon its donor states, and continues to be so today.

Refugee flows, however, changed considerably throughout the second half of the twentieth century, and the leadership of the agency soon came to the conclusion that there was an evident mismatch between its tasks as set out in the original statute and the realities of forced migration worldwide (Adelman 2001). From then on, numerous attempts to enlarge its mandate would signpost the evolution of UNHCR. Article 9 of the UNHCR mandate states indeed that ‘the High Commissioner shall engage in such additional activities, including repatriation and resettlement, as the General Assembly may determine, within the limits of the resources placed at his disposal’ – this article was invoked consistently throughout UNHCR’s existence.

The purpose here is not to provide a comprehensive historical account of UNHCR’s activities and evolution – others have done so far better than I could have (Loescher 2003; Loescher et al. 2008; Steiner et al. 2003; Holborn 1975). However, three important evolutions need to be highlighted with regard to the protection of environmental displacees: UNHCR’s greater involvement in developing countries, its increasing operational role, and its efforts to protect IDPs.

3.1.1. UNHCR’s Presence in Developing Countries

In the 1950s, the beginnings of the process of decolonisation were accompanied by large flows of refugees. Refugee situations in the South differed considerably from refugee situations in Europe, and created possibly embarrassing situations, since refugees were often fleeing territories that were administered by core donor states of the Office. Furthermore, these refugees usually arrived in large groups and required emergency assistance. At that time, the overwhelming majority of the world’s refugees originated from and stayed in the Third World: Western nations had therefore a pragmatic interest in extending UNHCR’s mandate to encompass these refugees, and this interest culminated in the adoption of the 1967 Additional Protocol to the Convention, which lifted the mandate’s temporal and geographic limits (Loescher 1994: 362). As refugee problems accumulated, states increasingly turned to UNHCR to solve them, a task which often included the provision of material assistance. During the 1960s and 1970s, UNHCR’s role was thus considerably expanded, and its moral authority increased alongside its autonomy from donor governments. By the close of the 1970s, UNHCR had been transformed from a small agency concerned with legal protection to a global refugee organisation. Thanks to a series of pragmatic extensions of UNHCR’s

mandate and pragmatic regional conventions, *de facto* refugees could be treated collectively, without having to make individual decisions about their eligibility.

3.1.2. *An Increasing Operational Role*

Nineteen fifty two, the year following UNHCR's inception, saw the organisation seeking to provide material assistance to refugees, and the beginning of its fundraising activities. The commission first directly involved itself with the integration of refugees into Western countries, and then took a prominent role in responding to the refugee crisis in West Berlin in 1953. This operation raised its international profile, and brought it legitimacy to seek external funding and provide material assistance (Loescher et al. 2008: 20-21). As refugee crises in the South were booming, this shift towards a more operational role took a decisive turn under the leadership of High Commissioner Felix Schnyder, who emphasised assistance to refugees in developing countries and downplayed the importance of legal protection. This shift resulted in tensions within the organisation's staff, tensions that persist, to a certain extent, until today. This shift was nonetheless confirmed and reinforced by High Commissioner Jean-Pierre Hocké, who was convinced that the Office was too 'protection-oriented', an approach he found ineffective in alleviating the plight of African refugees (Morris 2008; Cuny 1981). Hocké therefore sought to address the root causes of refugee movements and to promote repatriation as the only viable solution to protracted refugee situations (Hocké 1989).

The provision of material assistance to refugees has now become a core part of UNHCR's activities, but tensions between its operational role and the protection role persist. As the principle of asylum faces significant threats from Western governments' restrictive migration policies, and as refugees, asylum-seekers and irregular migrants are increasingly regarded as part of a unitary and unwanted phenomenon, many scholars are now calling for the UNHCR to re-assume a stronger protection role (Suhrke and Newland 2001; Crisp 2008).

3.1.3. *The Protection of IDPs*

In the early 1990s, there was a widespread concern over the plight of people in refugee-like situations who had not crossed the borders of their country, also called internally-displaced

people (IDPs). Unlike refugees, IDPs are not entitled to international protection, and are placed under the responsibility of their (often failing) state, because of the principle of sovereignty (Beyani 1994).

Empirical evidence shows that the majority of people displaced for environmental reasons tend to stay within their country (EACH-FOR 2008). The assistance provided by UNHCR to IDPs is therefore of direct relevance for the plight of environmental displacees. There has been considerable debate over the role of UNHCR in providing assistance and protection to IDPs, and the conditions under which this role should be undertaken. Loescher *et al.* note that ‘from an initially very *ad hoc* and selective role, IDP protection has become an increasingly central and systematic part of UNHCR’s work’ (2008: 106). The agency stepped in a number of IDP situations in the 1970s, mostly on the grounds of humanitarian and/or operational reasons.

A turning point came in 1991 under the leadership of High Commissioner Sadako Ogata, who perceived IDPs as the new protection challenge for UNHCR (Ogata 1994). During the first Gulf War, she engaged UNHCR as the lead agency to provide protection to the Kurds displaced within Iraq. Following this operation, the agency sought to clarify a number of criteria that could justify such interventions. These criteria included a specific request for involvement by the UN Secretary General, the consent of the host state, the guarantee of access and security, and finally a clear relationship to UNHCR’s mandate (Loescher *et al.* 2008: 107).

After the adoption of the Guiding Principles on Internal Displacement, the first normative framework to address the issue¹¹⁴, IDPs were enshrined in the framework of humanitarian response, and became the joint responsibilities of all agencies coordinated by the UN Emergency Relief Coordinator. The involvement of UNHCR in IDP protection continued within this framework, but was hindered by a lack of coordination with other agencies, inconsistencies and ambiguities. In order to resolve these problems, the collaborative approach was replaced by a clustered approach in which, for the first time, the UNHCR was given an official mandate to assist and protect IDPs.

¹¹⁴ See Section 2 for a discussion of these principles as a normative framework.

The protection of IDPs might appear a logical continuation of the work of UNHCR. Its involvement in this field, however, takes place amid an ongoing debate over the role of UNHCR at a time when asylum is under threat, and against a landscape of forced migration in rapid evolution. While the number of refugees has undergone a slow decline in the last decade, the number of IDPs has boomed, and is now circa 25 million, more than twice the total number of refugees. In 2004, UNHCR assisted 5.6 million IDPs, roughly half the number of assisted refugees (Office of the United Nations High Commissioner for Refugees 2006: 17). The newly-appointed High Commissioner, Antonio Guterres, has signified that he wishes to see UNHCR evolve towards a protection organisation, which would encompass both refugees and IDPs. This orientation has been supported by a number of observers (Cohen 2006), but also raises some questions:

- Firstly, there is a risk that funding for refugees will diminish as a result of UNHCR's expanded mandate. If more people are to be assisted with the same budget, the amount of aid available for each person will necessarily be lower. Antonio Guterres has repeatedly emphasised that the budgetary lines for the IDPs must be separate from the budgetary lines devoted to refugees, which should be left unaltered. Although such a distinction is certainly possible on an accounting level, there is no guarantee that it will necessarily be the case on the field or in the wallets of donor governments.
- Secondly, some scholars have highlighted that the protection of IDPs is a slippery political slope, and that the UNHCR risks being used to justify more restrictive policies regarding asylum (Goodwin-Gill 2000). States are increasingly eager to use internal displacement as a way to avoid their obligation to provide asylum, and it is feared that extension of the mandate would undermine refugee protection.

3.2. Environmental Displacees as 'People of Concern'

In 1993, UNHCR's activity report acknowledged that environmental factors were a major root cause of displacement, which could be linked to security issues. I quote the following extract at length in order to illuminate the agency's perspective on this issue in the early 1990s:

Millions of people have been forced to leave their homes because the land on which they live has become uninhabitable or is no longer able to support them. In some cases the cause is a natural disaster; in others, the catastrophe is caused by humans. The disruption to the habitat may be sudden, as at Chernobyl or Mount Pinatubo, or as gradual as the spread of a desert or the retreat of a forest.

The terminology for describing environmentally induced migration is controversial. For many observers, "migration" does not convey the fact that the people affected are forcibly uprooted. To call them refugees seems to convey more accurately that they left their homes involuntarily, for reasons not of their own making. Accurate use of the term "refugee", however, implies a need for international protection. For most people whose usual places of residence have become uninhabitable, the first recourse remains their own governments and societies. People displaced by environmental degradation or natural disaster undoubtedly need assistance. They do not necessarily require the kind of international protection implied in the word "refugee".

There are, nevertheless, clear links between environmental degradation and refugee flows. The deterioration of the natural resource base, coupled with demographic pressure and chronic poverty, can lead to or exacerbate political, ethnic, social and economic tensions which in turn result in conflicts that force people to flee. Africa, for example, accounts for 10 per cent of the world's population and hosts over 29 per cent of its refugees. It is no coincidence that those parts of the continent that are most affected by soil erosion, drought and other environmental problems are also the main theatres of armed conflicts, recurrent famine and consequent refugee movements. [...]

Long-term strategies of prevention should address environmental damage as a potential contributor to refugee flows. There is no comfort in the fact that today only a minority of environmentally displaced people need international protection. The international community has every interest in responding to the need to preserve and rehabilitate the environment before degradation leads to violence and persecution – and a mass of displaced people who easily meet the conventional definition of refugees. (Ogata 1993)

In the latest edition of the report, issued in 2006, environmental changes were again labelled as a root cause of displacement, but the focus had shifted to natural disasters: people uprooted by slow-onset environmental changes were no longer mentioned. Furthermore, the report

assumed that all disaster-displacement would be internal, and could thus be addressed within the framework of the Guiding Principles on Internal Displacement:

In many ecological and economic crises, mobility and migration represent crucial survival strategies. It can therefore be very difficult to distinguish between forced disaster-induced displacement and mobility linked to people's coping mechanisms. (...) But all those displaced by disasters have specific needs, including access to assistance, protection from violence, and the restoration of their livelihoods. The UN's Guiding Principles on Internal Displacement suggest that those uprooted by natural or man-made disasters are entitled to protection and assistance. (Office of the United Nations High Commissioner for Refugees 2006: 28).

Despite this acknowledgement of entitlement, the agency has consistently rejected the notion of 'environmental refugees', and 'opposes any extension of the 1951 UN Refugee Convention to include people who have been displaced for reasons unrelated to persecution and armed conflict' (Crisp 2008: 6), a position similar to the views of scholars from the sceptical coalition.

This conceptual reluctance has long been matched with realities on the ground: until the 2004 tsunami, UNHCR's involvement with natural disasters had been very limited to exceptional cases. It mostly consisted in contributions of money and relief items, as well as in assistance to governments lacking the capacities to respond to disasters. UNHCR gave multiple reasons for this limited involvement. Apart from the limitations of its mandate and financial resources, four other reasons were put forward, in a rare presentation given by a UNHCR representative on the topic (Gorlick 2007):

- Lack of support from donor governments, whose concern was to limit their obligations towards refugees, asylum-seekers and migrants from developing countries;
- The fact that this role had already been undertaken by other organisations, including the Red Cross, IOM or OCHA;
- Scepticism related to the concept of environmental migration, in particular with regard to the lack of precise data, and the belief that UNHCR involvement in natural disasters would affect conventional refugees;

- Internal concerns within UNHCR over the possibility of refugees losing their specific rights of protection and governments blurring their responsibilities towards their citizens.

Insights from UNHCR staffers reveal that these internal debates were key to the organisation's reluctance to address natural disasters, and that the arguments used were close to those of the debates over the involvement with IDPs. In particular, some staffers argued that assistance to people displaced by disasters would dilute the protection afforded refugees, and that the nature of the protection required was fundamentally different, since refugees were unable to find domestic protection, which was not the case with environmental displacees. Others, in contrast, argued that environmental displacees were in need of protection, and that it was part of UNHCR's duty to ensure such protection.

McNamara, who conducted thorough interviews with UNHCR officials about this issue, remarks that 'normative discourse on environmental refugees within UNHCR is based around them being constructed as displaced people that are not real refugees' (2007: 19). All UNHCR officials whom she interviewed stated that environmental displacees were not of concern to UNHCR, since they were not part of their mandate. Historical evidence shows that this is feeble and facile excuse, since the UNHCR mandate has been extended continually in the past to deal with new categories of displacees, and to provide new forms of assistance and protection. McNamara rightly observes that their not being part of UNHCR mandate is a social construct, a by-product of the agency discourse.

Things, however, are evolving quickly. The large-scale operations conducted in the aftermath of the Asian tsunami, the Kashmir earthquake and the cyclone Nargis¹¹⁵, demonstrated that UNHCR had capacity to respond to natural disasters, and were in line with Antonio Guterres' new doctrine of UNHCR as a protection agency. These operations represented yet another important expansion of the organisation's mandate. For now, they remain ad hoc operations, similar to those conducted to provide assistance to IDPs in the 1970s.

However, some signs indicate that these *ad hoc* operations might soon be institutionalised in a normative framework: the agency is currently preparing a position statement on

¹¹⁵ For a discussion of these operations, please refer to the previous chapter.

environmental migration, which is due to be presented at the UN conference on climate change in Poznań in December 2008. A dedicated team has been formed within UNHCR to draft a comprehensive statement on the issue, which includes treatment of people displaced by slow-onset environmental changes, as well as by natural disasters. At the time of writing, the content of the statement was not known.

Although there are legitimate reasons for UNHCR to take up a wider role with regard to environmental migration, such a role would raise questions about the very nature of the organisation. Among all the UN agencies, UNHCR is clearly the best equipped to assist the growing numbers of environmental displacees, and this expanded role would also ensure its continuing relevance to donor governments, against a backdrop of declining refugee numbers. But the institutionalisation of a wider protection role would also dramatically transform the nature of the organisation into a protection agency. This seems to be the objective pursued by current High Commissioner Guterres, but such a transformation would certainly affect the protection of current refugees. Loescher *et al.* note that UNHCR's original mandate remains unmet, as attested by the growing number of protracted refugee situations, and that an expanded protection role would impact on its ability to fulfil its core refugee protection role. They conclude that the 'dilemma about the Office's future protection role places UNHCR at a crossroads': 'whether it chooses to be the UN's refugee agency or the UN's protection agency will have a profound effect on its future work, and its ability to meet the needs of refugees' (2008: 120). The authors also hint that they favour the first option, in common with a large number of migration scholars (Barutciski 2002). Scholars from the alarmist coalition, on the other hand, have repeatedly called upon UNHCR to take a wider role in the protection of environmental displacees.

Conclusion

Refugee law, which revolves around the Geneva Convention, deliberately dismisses factors other than persecution when defining who may qualify as a refugee. A core function of Convention is to define a refugee, and yet it does so in a performative way: refugees are those who fit the criteria of the Convention; migrants in refugee-like situations that do not fit these criteria cannot be labelled refugees. However, the study of the preparatory works of the Convention reveals how the refugee definition was based on political motives, and not on

scientific grounds. Furthermore, the work of UNHCR depends, to a great extent, upon the range of this definition. This certainly sheds some light on the conceptualisation of refugee as a political construct, and can illuminate debates on the conceptualisation of environmental migration or 'environmental refugees'

With regard to protection, international refugee law can do very little for those uprooted by environmental changes, except in specific cases such as environmental racism, or when the state is unable to master the situation. On the operational level, the UNHCR seems to be evolving towards a global protection agency, and could therefore take a bigger role in dealing with environmental displacement. This would be, however, a further stretch of its mandate, and the organisation seems unwilling to take this step at the moment.

Overall, unlike the areas of natural disasters and global warming, the international refugee regime remains dominated by the sceptical coalition, which can explain why the regime has not been significantly modified since the 1960s. In particular, a common feature of the different evolutions is their reactive character: the regime tried to adapt to some new realities of forced migration, but did never try to anticipate these new realities. This is a major difference between this policy area and the areas considered before, which take a much more pro-active and prospective approach – I argue that the domination of another policy coalition in these fields is no stranger to this fact.

Chapter 8

Asylum and Mobility

“I can’t stand people calling me a refugee. I am an American, and I love America.”

Clara Rita, displaced by hurricane Katrina.

Introduction

In the mid-1980s, the number of refugees rose considerably, with large numbers of refugees attempting to find asylum in Europe. This rise was countered with increasingly restrictive asylum policies in Western countries (Marfleet 2006: 12), in contexts where asylum policies were perceived and used as a tool of migration control, rather than as an obligation of states towards refugees (Wihtol de Wenden 1995). The period also coincided with the implementation, mostly in Europe and the United States, of special forms of protection to deal with displaced people who were considered to fall outside the scope of the Geneva Convention, but were *de facto* refugees, being in a refugee-like situation.

Given the limitations of international refugee law in providing protection to environmental displacees, the following chapter attempts to examine other types of relevant protection. A first section examines how environmentally-motivated migrants are addressed by European asylum and immigration policies. Section 2 examines mechanisms of subsidiary protection implemented in Europe and in the United States, and a third and final section addresses the mechanisms of protection offered to internal displacees.

1. European Asylum and Immigration Policies

From the mid-1990s onwards, European countries have been faced with a mass influx of asylum-seekers. In order to respond to the perceived 'refugee crisis', a common policy response was initiated in 1999. This common response has been implemented through a cooperation programme in the field of asylum and immigration, which aims to create a common asylum system by 2010.

1.1. Towards a European Asylum System

Despite pre-existing agreements on the Schengen regime and the Dublin Convention, the European asylum system was really initiated in 1999, when the Amsterdam Treaty communitarised the asylum and immigration policy, which used to be reserved to member-states (Lavenex 2001). The Tampere Summit, held the same year, launched a cooperation programme in the field: in subsequent years, the European Refugee Fund was created (2000), the Directive on Temporary Protection – described in Section 2 – was adopted (2001), and Eurodac, a database for asylum-seekers' fingerprints, was implemented (2003).

The common European asylum system rests upon a set of directives establishing minimum criteria for eligibility for refugee status, as well as minimum standards for the treatment of asylum claims throughout the European Union.

The objectives of the cooperation programme were reiterated at the Hague summit in 2004, with the goal of implementing a common asylum system by 2010. The common system would consist of a common procedure and status, partnerships with sending countries, common rules regarding visa issuing, as well as an ambitious programme for the control of external borders (Frontex) (Lavenex 2001; Hatton 2004; Thielemann 2006b). The programme represents a major policy change in a field that used to be the reserve of member-states, but has been met with harsh criticism by many scholars and NGOs. The common asylum system, they claimed, departs from European ideals and is nothing less than a way to externalise asylum and use it as a tool for migration control (Boswell 2000).

In recent years, the European asylum system has been reinforced with a couple of new agreements. The Dublin II Convention, adopted in 2003, aims to replace the Dublin Convention and clarify which country is responsible for dealing with a particular asylum application. The goal of the Convention is to organise the application of the Geneva Convention within the European Union (and Switzerland), and reduce the number of multiple asylum applications lodged in different countries. Hence it can be seen as the embryo of a common European asylum system.

More recently, the European Pact on Immigration and Asylum was adopted during the French Presidency of the European Union (second half of 2008). The goal of the Pact is to delineate a common strategy for immigration in Europe, revolving around five key policy objectives:

- the organisation of legal immigration based on the needs, priorities and capacities of each state;
- the fight against illegal migration;
- the strengthening of external border controls;
- a common asylum policy;
- and partnerships with origin countries.

Though the pact is presented as the projection of a balanced view on immigration, it seeks primarily to attract high-skilled migrants in Europe, while combating illegal immigration at the same time. In this regard, it is a manifestation of the concept of 'chosen immigration' put forward by the French Presidency. Despite its ambition to uphold a holistic view of immigration, however, the Pact remains mute on the topic of environmental migration, as well as on internal migration as a whole.

1.2. An Exception: Swedish Asylum Policy

Before concluding this section, a few words need to be said about Sweden, as it is currently the only country to guarantee asylum to people displaced by environmental disasters. In this regard, Sweden constitutes an interesting exception, dissonant with European asylum policies,

as it modified its asylum regime in a way that has often been recommended by lawyers working on environmental migration. It seemed therefore interesting to devote a section to this exception, in order to decipher the reasons for this policy change.

The Amendments to the Aliens Act introduced in 1997 considerably expanded the definition of people who could be granted asylum in Sweden. In addition to refugees defined as such by the Geneva Convention, three additional categories of people were also entitled to asylum in Sweden by the amendments. These are people who:

- *Have a well-founded fear of being sentenced to death or corporal punishment or of being subject to torture or other inhuman or degrading treatment or punishment,*
 - *Due to an external or internal armed conflict need protection or on account of an environmental disaster are unable to return to their country of origin, or*
 - *Because of his/ her sex or sexual preference have a well-founded fear of persecution.*
- ("Aliens Act with amendments" 1997)

The second category is of course of particular interest for this study: the concept of 'environmental disaster' is not further defined, and this broad category could encompass all types of environmental disruptions, either brutal or slow-onset. This amendment to the Aliens Act made Sweden the first country to provide asylum to environmental displacees in an institutionalised fashion. Contrary to a common assumption, the expansion of asylum did not lead to a sharp rise in asylum claims, whose fluctuations remain, for the most part, dependant upon other factors such as international crises or governmental decisions regarding certain nationalities (Abiri 2000).

These changes were introduced against a backdrop of restrictions to asylum in Europe, but were in line with the holistic approach promoted by the Swedish government since the early 1990s. The decision followed another decision to grant permanent residence to a group of 40,000 Bosnian refugees, a move perceived as particularly bold at a time when temporary protection was on everyone's lips (Appelqvist 2000). Both decisions were part of a consensual, holistic migration policy, encompassing both refugees and immigrants, as well as return and voluntary repatriation.

2. Mechanisms of Complementary protection

In the midst of the asylum crisis of the late 1980s, as the concept of complex displacement was dominating the asylum agenda, states sought ways to provide international protection to people falling beyond the scope of the Geneva Convention. Large numbers of people whose circumstances did not match the refugee definition, had been forcibly displaced from their homes because of torture, exploitation, generalised violence, and natural disasters. These people were often in a refugee-like situation, but were not entitled to the same benefits as refugees, though they were obviously in need of special protection (McAdam 2007: 20). Although complementary protection has never been legally defined, it stems from the principle of *non-refoulement* contained in the Convention, which has become a customary principle of international law (Goodwin-Gill 1996). This principle is important, because it severely hinders environmental displacees from benefiting from complementary protection: they can only be accepted in a country if they cannot be returned to their origin country without putting their life at risk. Furthermore, complementary protection is far from being a universal right: until now, only a minority of states have developed complementary protection mechanisms, all subject to national legislation. The extent of such mechanisms is dependent upon a range of different factors: the interpretation by the state of the 1951 Geneva Convention, an appreciation of the protection needs, moral and practical considerations, as well as practical reasons (Mandal 2005). Despite some overlap, two broad categories of complementary protection can be distinguished in the doctrine: temporary protection, and subsidiary protection or humanitarian status¹¹⁶.

2.1. *Temporary Protection*

Temporary protection gained considerable currency in the 1990s, following a successful airlifting of Kosovar *de facto* refugees to divers countries willing to grant them temporary protection, until voluntary repatriation was possible. The operation raised numerous questions about the implications of such burden-sharing agreements, but temporary

¹¹⁶ Doctrine has almost exclusively focused on the implementation of complementary protection in Europe and in the United States, where legislation (Directives and Immigration Act respectively) has been passed in order to institutionalise practices of complementary protection. These practices exist in other parts of the world as well, but are conducted on an *ad hoc* basis, without a normative framework.

protection was then widely perceived as a useful tool to help states deal with mass influxes of *de facto* refugees (Barutciski and Suhrke 2001). Temporary protection poses a series of other questions, which are aptly summarised by Fitzpatrick:

For refugee advocates, temporary protection expands the protection of forced migrants who cannot satisfy the criteria under the 1951 Convention and it promises group-based protection when the determination of an individual's status proves impossible. At the same time, refugee rights organisations fear that informal and discretionary temporary protection may dislodge refugee protection from the realm of enforceable human rights. For refugee agencies such as the United Nations High Commissioner for Refugees, temporary protection serves as a short-term strategy to secure the immediate physical safety of refugees and a way station to more durable protection. But where temporary protection is offered as a diluted substitute protection for Convention refugees, it represents a threat to the 1951 refugee regime. (2000: 280)

The United States was the first country to institutionalise temporary protection, through the Immigration Act of 1990. The law states that temporary protection status can be granted to nationals of a country where

- 1) *There is an ongoing armed conflict, and requiring return would pose a serious threat to personal safety;*
- 2) *There has been an earthquake, flood, drought, epidemic, or other environmental disaster resulting in a substantial, but temporary, disruption of living conditions; the foreign State is unable temporarily, to handle adequately the return of its nationals; and the foreign State officially has requested temporary protection for its nationals in the United States; or*
- 3) *There exist extraordinary and temporary conditions that prevent nationals from returning in safety, unless the Attorney General finds that permitting the aliens to remain temporarily is contrary to the national interest. (United States Congress 1990)*

The temporary protection status has been used on a couple of occasions in the aftermath of natural disasters. In August 1997, the island of Montserrat, in the Caribbean, was affected by a volcanic eruption, and 300 of its inhabitants were granted temporary protection status between 1997 and 1999 (Martin et al. 1998). After hurricane Mitch devastated entire regions of Central America in 1998, the Clinton Administration granted temporary protection status to about 150,000 Hondurans and Nicaraguans.

The European Union also issued a directive on temporary protection in 2001. The directive was primarily aimed at providing ‘immediate and temporary protection’ to people who fled their country *en masse*, in particular because of ‘armed conflict or endemic violence’ or ‘systematic or generalised violations of their human rights’ (European Council 2001). Although the directive is primarily targeted at situations of mass violence and human rights violations, environmental displacees may qualify for temporary protection without having to demonstrate that environmental disruption jeopardised their human rights. However, the directive has not been used for environmental cases so far.

Although temporary protection might appear an adequate solution in situations of natural disasters, it only provides – at the risk of being tautological – only temporary solutions. Protection expires after three years in Europe, eighteen months in the United States. In addition, those benefiting from the status enjoy more limited rights than conventional refugees¹¹⁷. Furthermore, in the case of the United States, the person already needs to be in the country on the date of designation in order to be able to benefit from the status. Hence the status is in no way aimed at facilitating the admission to the United States of people trying to escape an environmental disaster, but rather at providing some form of protection to those already in the country (Lopez 2007: 401).

More importantly, one should not forget that temporary protection schemes are only available in an institutionalised format in a very limited set of countries, and do not represent in any way the premises of a universal protection for people displaced by disasters.

2.2. *Subsidiary Protection and Humanitarian Status*

At the peak of the asylum crisis of the late 1980s, *de facto* refugees were the largest group of asylum-seekers in Europe (Cels 1990). Persons in this group were usually granted protection on the basis of humanitarian status, which protected them against *refoulement* and provided them with minimal material assistance. However, the level of protection varied considerably according to countries and situations.

¹¹⁷ In particular regarding the right to work, or political rights.

The Qualification directive of the European Union, issued in 2004 (European Council 2004), represents the first international attempt to harmonise these schemes of subsidiary protection and to guarantee minimal standards (McAdam 2007; Gil-Bazo 2006). According to the directive, a person eligible for subsidiary protection is someone who ‘does not qualify as a refugee but in respect of whom substantial grounds have been shown for believing that the person concerned, if returned to his or her country of origin, [...] would face a real risk of suffering serious harm’. At first glance, this definition might seem to constitute a basis for the protection of environmental displacees. An examination of what constitutes ‘serious harm’, however, reveals that the serious harm consists only of the most basic violations of human rights, such as death penalty or torture: environmental threats are not considered to be ‘serious harm’, thus excluding environmental displacees from subsidiary protection. McAdam notes that concerns related to environmental causes of migration were raised during discussions on the elaboration of the directive, but were dropped in a favour of a basic harmonisation, drawing on the ‘best’ elements of each member state’s system of protection¹¹⁸ (2007: 464). The issue was thus deliberately disregarded.

Overall, complementary protection does not offer adequate protection to environmental displacees. Not only can the system apply only in a very limited number of cases, upon strict conditions, but it also creates a differentiation of rights and status between conventional refugees and beneficiaries of these protection schemes, a differentiation that is not justified by their respective needs (McAdam 2006; Wihtol de Wenden 1995, 2002).

3. Internally-Displaced People

Empirical evidence demonstrates that most migration movements linked to environmental stressors – whether forced or voluntary – are internal displacements (EACH-FOR 2008). The Operational Guidelines of the Inter-Agency Standing Committee recommend that people

¹¹⁸ It is interesting to note that the Swedish provision of asylum for people displaced by environmental disasters was not considered among the ‘best’ European protection systems.

displaced by natural disasters be treated according to the Guiding Principles on Internal Displacement (Inter-Agency Standing Committee 2006), which are currently the only international normative framework addressing the plight of people displaced within their own country. So, is the problem finally solved with regards to internal environmental migration?

Concerns for IDPs began in the early 1990s, when the United Nations first came to deal with the issue. International concerns grew with the nomination of Mr Francis Deng as Representative of the UN Secretary General on Internally Displaced People, and culminated with the adoption of the Guiding Principles on Internal Displacement by the UN General Assembly in 1998. IDPs worldwide represent roughly 25 million people today. The overwhelming majority of them are located in developing countries, and particularly in Sudan, Colombia, the Democratic Republic of Congo, and Somalia¹¹⁹.

The present section aims to examine how policies of internal displacement impact upon the situations of environmentally-displaced people. Section 3.1 deals with the definitional issue of IDPs, and how environmentally-displaced people can be conceptualised as IDPs. The relevance of the Guiding Principles for the protection and management of environmental migration is then examined in Section 3.2.

3.1. Environmental Displacees as IDPs

Internally-displaced people were first defined negatively: they were people who had fled their homes, but did not qualify as refugees (Phuong 2004: 2). The conceptualisation of IDPs is indeed deeply linked to the refugee problem, and takes place in the context of containment efforts by receiving states aiming to restrict asylum and keep displaced people within the borders of their country (Dubernet 2001). However, problems of internal displacement also need to be conceptualised separately from refugee problems, since they raise issues of their own, most importantly the question of humanitarian intervention and protection in sovereign states.

Phuong, in one of the few monographs devoted entirely to the topic, contends that IDPs and refugees share two fundamental characteristics (2004: 37):

¹¹⁹ Data are extracted from reports of the Internal Displacement Monitoring Centre, available at <http://www.internal-displacement.org>

- The element of forced displacement,
- The breach of the bond with the state, even though IDPs remain within the responsibility perimeters of their state, which still has the duty to protect them.

Some authors, such as Lee (1996), have contended that refugees and IDPs are basically the same thing; he argued that border-crossing element was not an element inherent to refugeehood, and should therefore be removed from the refugee definition so that both types of displacees could be addressed by the same frameworks and agencies. Although it might be argued that the border-crossing element makes no real difference – or, to borrow an expression from Richard Holbrooke (2000), a ‘borderline difference’ – when it comes to the refugee experience, the nature of the protection required by refugees and IDPs is fundamentally different in nature. While refugee protection is a surrogate of their state protection, the prime responsibility for IDP protection remains within the realm of the sovereign state.

In the early 1990s, the international community perceived the need to define IDPs in order to provide them with adequate assistance. UNHCR favoured an approach whereby IDPs would be defined as people who would have been refugees had they left their country. The definition that was finally adopted in 1998 departed from this approach and chose to focus on the causes of displacement, with a view to the prevention of forced displacement. Phuong notes that this focus on the causes permitted a discussion of some root causes of displacement which had not been considered with regard to refugee movements, such as natural disasters or development projects, despite the reluctance of some authors to consider people displaced by disasters as IDPs (2004: 30). Such views insisted on the role of coercion as the fundamental characteristic of forced displacement, and coercion was narrowly interpreted as requiring action by the government against its citizens. Roberta Cohen, who was personally involved into the drafting of the definition, explains the choice to include people displaced by disasters:

Not all humanitarian or human rights groups wanted to include persons in the definition who were uprooted by natural or human-made disasters – that is floods, droughts, nuclear power accidents. They argued that the definition should focus only on persons who would be refugees if they crossed a border. But the overriding opinion was that persons uprooted by natural and human-made disasters, or by development projects, are also displaced and in need of attention; moreover, such persons can be

neglected or discriminated against by their governments on political or ethnic grounds or have their human rights violated in other ways. (2003: 5)

The definition that was finally adopted in 1998 characterised IDPs as

Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border. (United Nations Commission on Human Rights 1998)

The definition includes people displaced by natural disasters, but not those uprooted by slow-onset environmental changes. Some impacts of climate change, such as sea-level rise, are likely to bring huge challenges to this definition. Walter Kälin, UN General Secretary Representative for Internally Displaced People, recently identified three types of slow-onset environmental changes brought upon by global warming which have the potential to trigger internal displacements (Kälin 2008):

- Governments will need to identify areas at high risk from environmental change and displace – perhaps by force – people from these zones;
- Environmental degradation and slow-onset disasters, for which ‘we need criteria to better determine where to draw the line between voluntary movement and forced displacement’; and finally
- The case of “sinking” small island states, which currently lie in legal limbo.

These three areas not only have the potential to induce forced migration, but also to call into question the root causes for displacement addressed by the definition.

3.2. The Guiding Principles on Internal Displacement

By the mid-1990s, the numbers of IDPs worldwide had surged, and it was widely acknowledged that there were significant legal protection gaps with regard to internal displacement. Not only were IDPs a humanitarian problem, but they were also a threat to security and stability. Humanitarian organisations were also increasingly able to reach these populations, and expose their plight to the world.

In 1994, UN Secretary General Boutros Boutros-Ghali appointed Dr Francis Deng, a law professor and Sudanese national, as his representative for internally displaced people. The Commission on Human Rights invited him to conduct a comprehensive analysis of the legal instruments that could be used to address internal displacement, a review that would later serve as a first step towards the elaboration of guiding principles on internal displacement.

Not all stakeholders, however, favoured the development of a new legal instrument (Phuong 2004: 52). Three options were discussed; current debates between alarmists and sceptics on the best way to address environmental migration are very reminiscent of the debates that took place concerning these three options. Some stakeholders, lead by the International Red Cross Committee, opposed the development of any new legal instrument, fearing that a tailored normative framework would weaken and dilute existing mechanisms of protection, which simply needed to be better implemented. A second position, which was eventually favoured, recommended the adoption of an instrument of soft law, which seemed the most realistic option, given the political context. Finally, a maximalist and comprehensive approach was also proposed, in which refugees and IDPs would be subsumed into a single instrument addressing forced migration as a whole (Petrasek 1995).

The Guiding Principles on Internal Displacement were officially adopted by the United Nations General Assembly in 1998, and consist in thirty recommendations upholding the human rights of IDPs (United Nations Commission on Human Rights 1998). The principles address different aspects of internal displacement: protection from displacement, protection during displacement, and humanitarian assistance, as well as return, resettlement and reintegration. The document is exclusively concerned with human rights, and only marginally

addresses aspects related to migration management or financial compensation for the displacement.

The Guiding Principles are a document of soft law, which states are free to apply or disregard. Roberta Cohen, who assisted Francis Deng during the preparation of the document, asserts that there were three reasons why it was chosen not to confer binding force on the document: lack of political will, time constraints, and overlap with other pieces of law (Cohen 2003). Internal displacement was – and continues to be – a sensitive topic, and there was no political support for a legally binding document such as a treaty. Furthermore, the negotiation and ratification of a treaty would have taken years, whereas there was an urgent need for assistance and protection. Finally, most of the existing law was already available, but scattered. The Guiding Principles sought to gather these pieces of law into a single, compact document, and restate law as appropriate, rather than developing new norms.

Despite being a document of soft law, the Guiding Principles have been widely used by UN agencies, governments, NGOs and other groups. In some cases, provisions of national laws have been based on the principles, as have many been many programmes on internal displacement. As the guidelines gained currency, they attained higher levels of moral authority, making it harder for governments to ignore them.

There are several reasons why the Guiding Principles were received so positively by the international community. The first probably lies in the way Francis Deng proceeded in creating the guidelines. As noted by Kälin (2001), the document does not constitute typical soft law, since it was not negotiated by governments, but written by a group of independent experts informed by a wide range of stakeholders. This inclusive process, which was chosen directly by Francis Deng, ensured that the creation and application of norms were closely related to each other. Furthermore, the Guiding Principles did not seek to create new law, but rather to codify and gather existing norms from different branches of the law. Hence the document was firmly grounded in laws that had already been agreed upon by states, making its acceptance as a normative framework much easier.

Overall, thanks to the original approach that was taken in their elaboration, the Guiding Principles have become a strong and accepted standard of international law, despite not

having been negotiated directly by governments. In many regards, the non-binding character of the document has been instrumental in sealing this achievement.

4. Empirical illustrations

Migration patterns in New Orleans and Tuvalu were widely dissimilar, hence the migration and asylum policies that have addressed these migrations are also widely different. Whereas the Tuvaluan government is actively promoting an emigration policy, return migration is a priority for the authorities of New Orleans. In both cases, policy-makers share a concern for the scattering of their population, due to relocation and resettlement.

4.1. *Migration Policies in Tuvalu*

The alarmist view of Tuvalu's situation would consider that climate change is currently a major migration driver, whereas a sceptical perspective would argue that migration remains primarily driven by economic factors. How do these perspectives translate into policy responses? What are the strategies developed by the Tuvaluan government and its neighbours, and how do these choices affect the conceptualisation of migration from Tuvalu to New Zealand?

4.1.1. *Tuvaluan Policies*

The Tuvaluan government is actively promoting an emigration policy with a triple objective:

1. Alleviate the pressure from overpopulation in Funafuti

Internal migration is not managed by the government, and the development of Funafuti has resulted in considerable overpopulation, leading to pressures on the environment and on resources. Lately, the government has undertaken large investments in the development of the outer islands, in the hope that migration flows to Funafuti will slow down. At the same time, emigration is perceived as a possible adaptation strategy to alleviate the demographic burden.

2. Increase remittances

Remittances represent about 7 per cent of Tuvalu's GDP, and 9 per cent of average household income (Tuvalu Government 2006). The largest bulk of remittances used to come from phosphate miners in Nauru and international seamen, but the closure of the mines has almost halved this source of income. Labour migration is seen as a way of bringing additional resources to the country through remittances.

3. Respond to the fears of the population regarding the threat of climate change

Finally, it appears that concerns for climate change are also part of the reason why emigration is encouraged by the government. The opening of new migration routes is perceived to be a responsibility of the government, and a measure of disaster prevention.

We want to give people a choice: some of them want to go, others don't want, that's up to them. But they need to have the choice, for now they don't have nay choice really. It is our responsibility to do something in case the worst happen. We don't want to get trapped, we need to have a plan.

(Kelesoma Saloa)

Thus the emigration policy favoured by the Tuvaluan government is deeply associated with the decline in migration opportunities. Although problems of overpopulation and climate change are independent from the decline of migration possibilities, it is unlikely that the government would have sought new migration agreements had previous migration routes stayed open. At the same time, while pursuing a proactive emigration policy, the government is also concerned that the island might empty itself too quickly, and thus compromise its ability to develop. In many ways, Tuvalu was part of a migration system (Bedford 1992) that has disintegrated, which Tuvalu is now eager to rebuild. The next section will provide an overview of the evolution of the different components of this system.

4.1.2. *New Zealander Policies*

Migration to New Zealand is currently possible through two migration schemes: the first, often confused with and misnamed as an environmental migration agreement, is the Pacific Access Category, a scheme that allows an annual quota of 650 citizens from Fiji, Tuvalu, Kiribati and Tonga to settle in New Zealand. Under this scheme, Tuvalu has an annual quota of 75 migrants, which was not reached in either 2005 nor 2006¹²⁰. Immigrants are required to meet very stringent conditions before they can move to New Zealand, which include having a good command of English, a job offer in New Zealand, and undergoing a rigorous and costly medical check-up in Fiji. Once immigrants are settled in New Zealand, they can apply to bring other family members under the Family Sponsored Stream. The second agreement is more recent and was only implemented at the start of 2008. It consists of a seasonal migration scheme, that allows Tuvaluans (and other Pacific islanders) to come and work (typically in the agricultural sector) for six or nine months before workers are sent back home with their wages. It is too soon to say how Tuvaluans will take advantage of this programme.

I wanted to move to New Zealand in 1997 already, but my wife had to stay to look after her parents. It's not easy to get a job offer in New Zealand when you are in Tuvalu, so I had to travel there to apply for jobs. I got two job offers: one as a farmer, and one as a civil servant. I don't yet which one I will choose. I need to do a health check in Fiji first, because I cannot do it here in Tuvalu. It's very expensive, I don't have enough money for now. I'll go when I'll have enough money. (...) The Government could do more; for example they could arrange for health checks in Tuvalu.

(Utala Ktaloka)

New Zealand has no migration plans with Tuvalu other than these existing schemes. Although some Ministers and high-level officials have repeatedly claimed they would welcome Tuvaluans in New Zealand in case of a major disaster, no such plan exists.

Should the worst happen, I guess we'd send a boat to get them. It's clear that we won't let them down, but we don't plan any relocation scheme, we have migration agreements already that Tuvaluans can use if they want to. But Tuvalu not drowning yet, so I think it wouldn't be appropriate to have this kind of policy for now.

(Don Wil, NZ Aid)

¹²⁰ There were 16 successful applicants in 2005, and 22 in 2006 (source: Ministry of Foreign Affairs)

The situation is indeed difficult: on the one hand, neither the Tuvaluan nor the New Zealand governments are willing to consider a full evacuation process: there seems no reason to do so. On the other hand, the vulnerability of the island countries is such that any extreme weather event would result in massive casualties if a prior evacuation were not undertaken.

For now, the New Zealand government has chosen to be supportive of the Tuvaluan community in Auckland, and provides different subsidies for the organization of cultural events and bilingual schooling. It used to have a tolerance policy for overstayers who were later regularized through the Pacific Access Category scheme, but recent accounts indicate that some overstayers have recently been deported to Tuvalu.

4.1.3. Australian Policies

For years, Australia has refused to take any migrant from Tuvalu, and has even tried to set up a detention centre in Tuvalu as part of the ‘Pacific Solution’, by offering a lump sum payment of AUD \$10 million to Tuvalu. The offer was angrily turned down by the Tuvaluan government. In recent years however, two proposals were put forward that could radically change Australia’s policy on the topic:

The first was a proposed bill introduced by Senator Kerry Nettle on behalf of the Australian Green Party. The bill would have created a new visa class in Australia’s 1958 Migration Act to formally recognize and create mechanisms to deal with climate refugees. According to the proposed bill, a climate refugee visa would be created for ‘person(s) who (have) been displaced as a result of a climate change induced environmental disaster’, following an environmental disaster declaration to be made by the Minister. The declaration would take into account the geographical scope of the disaster, adaptation options and long-term sustainability, the capacity of the country to absorb displaced persons and international efforts to assist. The Minister could also put a limit on the number of climate change refugee visas. The bill was defeated in the Parliament; even if it had been passed, the bill contained no guarantee that Tuvaluans would have been able to qualify for this special visa status, since it contained some restrictive elements, such as a limit on the number of visas issued, and the reference to disasters rather than slow-onset processes, such as sea-level rise. The assistant to

Senator Kerry Nettle, who drafted the proposal, explained the rationale of the bill in the following terms:

The bill wasn't tailored especially for Tuvalu, but Tuvalu could benefit from it, of course. The idea was to try and do something to assist Pacific countries, which are completely ignored by the government. (...) There was also the idea that we should assume the responsibility for the impacts of climate change, since Pacific countries practically don't emit greenhouse gas emissions, whereas we haven't signed the Kyoto Protocol.

(Max Philips)

Internal relocation is hardly possible in the case of small islands, and many observers have identified this as an important protection gap. The proposed bill, however, would have covered this protection only partially: it neither addressed slow-onset change, nor the important issue of statelessness.

The second initiative was a discussion paper issued by Australia's Labor Party before it came to power in late 2007, dramatically entitled 'Our Drowning Neighbours' (Sercombe and Albanese sd). The document calls for an international recognition of 'climate change refugees' and states that Australia should welcome some of them through a regional coalition:

On current projections, Tuvalu is likely to be the first country that is fully evacuated due to climate change, but ultimately Kiribati, the Marshall Islands and others may also have to confront this scenario. (...) Labor believes that Australia should, as part of an international coalition, do its fair share to accept climate change refugees as part of our humanitarian immigration program. Yet Australia needs to work with our Pacific neighbours to prepare for such contingencies now. Firstly, Australia should help to develop a coalition of Pacific Rim countries willing to accept climate change refugees. Secondly, Australia should be working at the UN to ensure appropriate recognition of climate change refugees in existing conventions, or through the establishment of a new convention on climate change refugees. (Sercombe and Albanese sd: 10)

Interestingly, the document directly addressed the situation of Tuvalu, and proposed a far-ranging mechanism of international recognition, whose impacts on Australia's immigration policy would have been uncertain. It also suggested that Australia should help with the training of Tuvaluans, in order that they be able to 'meet the skilled migration requirements in

a variety of countries, should some choose to emigrate prior to the full evacuation of Tuvalu' (Sercombe and Albanese sd: 9).

Both initiatives, however, were rather intended for domestic than for external use, and fall into the category of campaign documents. They were launched with a view to the November 2007 general election, since both the Green and the Labor parties were in opposition to the Conservative Government of John Howard. Both documents were primarily intended for the Australian public, and thus choose an alarmist approach in order to attract the maximum attention. There was never, however, any real intent to see these proposals implemented. The amendment to the Immigration Act was not concerted with other parties, and the Greens knew it would be defeated; as for the policy document of the Labor Party, it was forgotten as soon as the Labor Party acceded to power in November 2007. Once again, the conceptualisation of environmental migration was dependent upon external factors, rather than actual needs of concerned populations.

4.1.4. Interim Conclusion

Government policies have taken a dual approach, reflecting a two-level policy subsystem. On the international scene, the Tuvaluan government has successfully marketed its country as the first victim of climate change, and has called for international help. Its domestic policy regarding emigration, in contrast, is penetrated by a sceptical approach, and seems to be equally concerned with alleviating the overpopulation problem and increasing remittances as it is with environmental threats. Massive emigration flows could equally represent a threat for the country, and Barnett and Adger state that 'the result of lost confidence in atoll-futures may be the end of the habitability of the atolls' (2003: 330). The reverse is also true: the loss of confidence might well be the result of uncertainties regarding the future of the country. Many Tuvaluans who emigrated to New Zealand did so because of the uncertain future of Tuvalu, as a risk-reduction strategy for their families: to these people future, expected changes were more important to their decision than current environmental degradation. In this regard, future policies designed by the Tuvaluan government to address climate change and migration will prove crucial if these uncertainties, and thus the threat faced by the country, are to be reduced. Such uncertainties are reinforced by the competing approaches endorsed by the government at different levels of policy-making.

Furthermore, the constant characterization of Tuvaluans as potential environmental migrants, or ‘refugees’, can snare them in a relativist trap (Connell 2003: 103) and prevent them from developing adequate adaptation strategies. The categorization can also result in a loss of confidence and individual empowerment, and therefore, as in the case of Katrina, the process of categorization needs to be questioned here.

As for New Zealand and Australia, they seem to have adopted a ‘wait and see’ approach, based on the implementation of *ad hoc* policies. For now, both countries’ approach is dominated by a reactive perspective towards migration, and neither of has planned for any proactive migration policy. As expressed by one interviewee, this implies the risk that ‘one day, when the waves come, the help will come too late’.

4.2. Migration Policies in New Orleans

Days after the hurricane struck, the population of the Greater New Orleans area was scattered throughout the United States. This scattering took place through three different pathways:

- The personal choice of the evacuees: factors impacting upon their destination choice included friends and family network, travel distance, information available about the destination, previous evacuations, and the assistance available. Many evacuees also had multiple destinations.
- Evacuation carried out by the authorities: as mentioned earlier, most of these evacuees had no choice in their destination, which was selected by the authorities according to the accommodation capacities of different states and cities.
- A burden-sharing scheme that was hastily improvised, following Houston’s inability to take on more evacuees. One week after the hurricane, on 4 September, Texas Governor Rick Perry announced that Houston was not able to provide shelter and food to the half million evacuees who had relocated to the city. Perry therefore ordered the airlifting of some evacuees to other states willing to take them, including

West Virginia, Utah, Oklahoma, Michigan, Iowa, New York and Pennsylvania¹²¹. The request for such a burden-sharing scheme was improvised, and reflected the numerous difficulties that states and cities encountered upon dealing with a massive influx of evacuees.

One year after the disaster, as shown by the following map, the city's population was still scattered across the country, since many had chosen not to return to New Orleans.

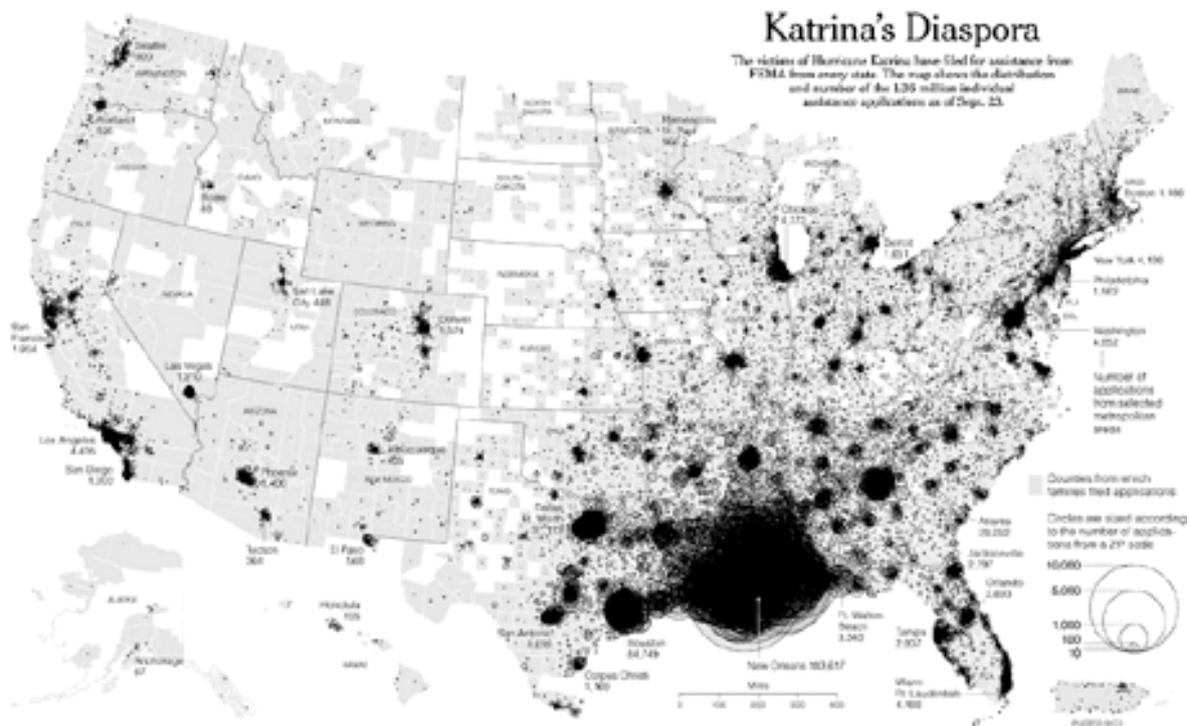


Fig. 9 – Katrina's Diaspora (source: New York Times)

Almost all displacements linked to the hurricane happened within the United States, with a few exceptions of international migration, such as the Tulane Professor who took up a professorship in Great Britain, convinced that Tulane University would never completely recover from the disaster. The striking feature of this displacement is its timeframe, which qualifies it more as a migration than a displacement. One year and a half after the disaster, only half of New Orleans population had returned to the city: 37 per cent lived in Louisiana, 34 per cent lived in Texas, 9 per cent lived in Georgia, and 20 per cent lived in another state.

¹²¹ New Mexico and Arizona also agreed to take up to 6,000 and 2,500 evacuees respectively.

Among these, only 11 per cent planned to eventually return to New Orleans, while 52 per cent stated they were certain to never return.

A widespread concern in New Orleans was thus the loss of the city's distinctive culture, which explains the use of the word 'diaspora' to emphasize the relationship that existed between those who returned home and those who did not, either because they were unwilling to do so or did not have the resources. A particular concern for the inhabitants was the loss of restaurant chefs and musicians, since the most salient elements of New Orleans culture are its cuisine and music. Several associations or committees were set up with the purpose of assisting the musical community, notably providing them with new instruments, since most of them had lost their instruments in the storm. Musicians probably benefited from more assistance than any other group of the population, fuelling concerns of discrimination when specific housing units were built for their sole use in a village purpose-built by Habitat for Humanity NGO, called 'The Musicians' Village'. The loss of large parts of their student body also had some catastrophic consequences for some universities (Ladd et al. 2006).

4.1.1. Problems Associated with Relocation

Although Texas and Houston were at first well organized in welcoming evacuees from the hurricane, they lacked the capacities to deal with 500,000 additional residents in the long term. I will focus specifically on Houston in this part, but the situation in other major cities was not significantly different. Overall, the major problems experienced by all evacuees were the loss of their 'sense of place', and their impression of being in an unknown environment. Even though Louisiana and Texas are neighbouring states, their cultures and attitudes are considerably different. The three most common problems encountered by the evacuees are detailed below:

4.1.1.1. Housing

Evacuees from New Orleans were initially sheltered into Reliant Park, which was considered a temporary spot that could handle evacuees for up to ninety days (Brinkley 2006: 440). On September 2, Texas Governor Rick Perry announced an emergency plan to allow for some of

the evacuees to be moved to Dallas and San Antonio. Four days later, he called on other states willing to accommodate evacuees: Arkansas and Oklahoma ended taking the majority (Nigg et al. 2006: 117). As mentioned above, this burden-sharing was improvised, and evacuees were not consulted. Nigg, Barnshaw and Torres stressed that

Katrina pointed out the need not only to prepare an area for a disaster impact but to prepare a region to accommodate the mass, albeit temporary, migration of homeless evacuees. Evacuees quickly taxed the resources of their homestates, then adjacent states into the region. Some preplanning for “receptor states” to take in evacuees would lessen the confusion and uncertainty about financial consequences of large-scale disasters for non impacted states. The development of policies similar to mutual aid agreements might facilitate this process. (2006: 126).

Many residents were eventually housed in trailers, gathered in what were called ‘trailer parks’. These trailer parks were guarded camps, usually located in the suburbs of urban areas, that could sometimes accommodate up to 2,000 residents; this was the case for one interview site, the park of Renaissance Village located north of Baton Rouge in Baxter. The parks were initially conceived as temporary housing, but most of turned out to be a more permanent habitat. Almost all interviewees within the Renaissance Village trailer park did not know when or if they would be able to return home, and considered Renaissance Village as the start of a new life.

4.1.1.2. Jobs

Finding jobs for the evacuees was nothing short of a logistical nightmare. Many respondents indicated they had suffered from discrimination when interviewing for a position. Overall, employers were not keen on hiring evacuees, since they were convinced that they were either trouble-makers, or planning to move back to New Orleans. A short film ‘Be a Houstonian’, was even broadcast by Houston’s Chamber of Commerce, in order to help evacuees pass recruitment tests. Advice in the video included the suggestion to change mobile phone number, so that the number would have the same dialling code as phones in Houston. For similar reasons, it was also suggested that evacuees change car license plate, and take professional interviews in a less casual attitude. Job fairs were also organized by many municipal councils to help evacuees start a new life.

Conclusion

In the updated edition of her migration atlas, Wihtol de Wenden uses Katrina and Tuvalu as 'emblematic examples' of flows of 'environmental refugees' (2009: 70). A similar choice was made in this thesis, as these two cases seem to exemplify and represent different aspects of the same phenomenon. However, this thesis retains the awareness both cases of environmental migration are social constructs, shaped by media discourses and a 'canary-in-the-coalmine' mindset. The goal of the fieldwork in each locale was to identify the patterns of this social construction in both cases, and how they came to be reflected in the policies designed to address the phenomenon.

Although the examples of Katrina and Tuvalu are generally described as two manifestations of the same phenomenon, the two cases are very different in scale and in nature. Katrina displaced more than a million people in a few days; only a few dozens of people leave Tuvalu each year. Hence the policies and arrangements to care for the displaced have little in common, but represent different aspects of the policy responses outlined above. Beyond the scale of the displacement however, the major difference between the two cases lies in the nature of the displacement. Most of those displaced by Katrina returned home – though a significant part, mostly from New Orleans, did not – while the overwhelming majority of those who left Tuvalu did so with no intention of return. Katrina's migration was brutal and hastily prepared, whereas Tuvaluans departing for New Zealand have typically thought about and prepared their migration over a couple of years. Furthermore, the former migration patterns were purely internal, whereas the latter has a strong international component.

It is therefore only logical that the legal frameworks and policies that apply to each case differ substantially. Normative frameworks in Louisiana derived from the Guiding Principles on Internal Displacement and a set of federal recommendations and guidelines in case of natural disasters; Tuvalu's migration to New Zealand is regulated by two labour migration schemes, the Pacific Access Category and a seasonal labour arrangement.

Some striking similarities, however, can also be found, in particular with regard to the uncertainty surrounding the migration and the representation of the victims. In both cases, a lack of long-term planning regarding the future of the 'homeland' has been a key factor driving the migration of the inhabitants. In New Orleans, uncertainties about reconstruction

plans, public assistance and the ability of the levees to resist a future hurricane, as well as on overall pessimistic state of mind about future prospects for the city, have all played a major role in keeping thousands of people away from a city they once called home. In Tuvalu, the lack of a long-term adaptation or relocation plan, as well as of precise knowledge about the impacts of climate change, has prompted many to move to New Zealand as a risk-reduction strategy for their families. In both cases, the general feeling of uncertainty was, to a large extent, the direct result of the lack of appropriate and long-term policies. These policies – or lack thereof – were not only related to the status, protection and assistance of the migrants, but also to adaptation and reconstruction. Such uncertainties mirror the confusion that surrounds the concept of environmental migration: just as the concept is still fuzzy and controversial, so are the policies and normative frameworks that address actual migration flows.

It is difficult to say whether, and in what ways, the poor conceptualisation of environmental migration impacts upon the adequacy of policies that deal with it, but both reflect each other: neither of the migration flows studied has been acknowledged by policy-makers to be ‘environmental migration’, despite this the case with the media, NGOs, and a large number of academics.

There is another point that Tuvalu and Katrina have in common: the dominant discourse concerning both cases depicts environmental migrants as powerless victims, and both migration flows are portrayed exclusively through the prism of environmental migration. This portrayal of the migrants, however, does not always match their motivations and aspirations, nor does it account for the complexity of their migration. Thus labelling both cases as ‘environmental migration’, though it stresses the importance of environmental factors to the migrants’ decisions, also carries at least two drawbacks:

- Firstly, it implies that the migrants are powerless victims of environmental changes, thus affecting the kind of protection and assistance required by the migrants, and undermining their capacity to cope;
- Secondly, it can imply that the same normative frameworks and policy responses are needed in both cases, neglecting the differences stressed above.

The simple fact that two migration flows so different from each other have been categorised under the same label evinces that environmental migration is socially constructed as any migration associated with environmental factors, whatever these factors may be and however different the associated migration can be. Each migration flow, however, was addressed in different ways by the relevant authorities, under different normative frameworks. Hence it seems doubtful that the proposed legislative and policy developments in the field will be adequate to deal with the different patterns of migration that the concept – however fuzzy it may be – currently covers. Treating environmental migration as a distinct category of migration might actually lead to the oblivion of existing normative frameworks – as was obviously the case with Katrina – or to the disempowerment of the migrants themselves.

Conclusion

“We are still confused, but at a much higher level.”

Lewis Carroll, Alice in Wonderland.

The research question at the centre of this work seeks to analyse normative frameworks and policy responses that address environmental migration, and to assess their influence on the conceptualisation of environmental migration and policy outcomes. Contrary to a commonly held belief, I have tried to show that normative frameworks relevant to environmental migration in the fields of asylum and migration, climate change or natural disasters are not a blank page. Refugee law and asylum policies contain elements, both at the normative and operational levels, which can be useful when dealing with environmental migration. Likewise, the more recent development of mechanisms of international governance to deal with natural disasters and climate change also provides some policy responses to environmental migration. In most cases, however, the response is provided on an ad hoc basis: no lead agency has a real mandate to care for environmental displacees, and legal protection can only be provided in specific, determined cases. Refugee law, which revolves around the Geneva Convention, deliberately dismissed, for political reasons, factors other than persecution when defining who could qualify as a refugee. As for normative frameworks in the environmental policy area, most of them have no binding value, though they also seek to protect the rights of those displaced.

Although some norms and policies do exist, important protection gaps remain, especially with regard to displacements induced by slow-onset environmental changes. These gaps and challenges will be exacerbated by climate change, and have been summarised by Walter Kälin (2008) as follows:

While existing human rights norms and the Guiding Principles on Internal Displacement provide sufficient protection for those forcibly displaced by sudden-onset disasters or because their place of origin has become inhabitable or been declared too dangerous for human habitation, there is a need to clarify or even develop the normative framework applicable to other situations. (a) In the context of slow-onset disasters, criteria are needed to distinguish between those who voluntarily leave their communities because of the effects of climate change and those who are forced to leave their homes and therefore qualify as internally displaced persons. (...) (b) People displaced across international borders fall into a normative gap. Here, it is necessary to determine under what circumstances such persons can be regarded as being in need of international protection. (...). (c) The status of people displaced from small islands states sinking due to rising sea levels, needs clarification, even if their number is likely to be small.

Another significant policy gap which is often unmentioned relates to migration management. It is increasingly recognised that voluntary migration can be an adaptation strategy to climate change, and that forced displacement can be avoided, yet no consistent international framework exists for a global, proactive governance of migration. Forced migration is only one dimension of environmental migration, one that can often (but not always) be avoided through voluntary migration. A significant policy gap lies, therefore, in the absence of mechanisms aimed at facilitating migration: at a time when the line between forced and voluntary migration is increasingly blurred, the development of such mechanisms of governance with regard to environmental migration can only be achieved through the bridging of environmental and migration policies on a global level.

These gaps also reveal how environmental and migration policies have evolved along different lines, at different speeds, over the last decades. Both sets of policies aspire to develop mechanisms of global governance within their respective fields, but the desire of states to maintain sovereign control over these policy areas has impeded the development of comprehensive policies. Environmental migration, lying at the crossroads at these policy areas, has thus been addressed in a fragmented fashion by different levels of governance.

I explain this fragmented approach by the lack of connections between environmental and migration policies and the dominance of different coalitions in these policy areas. In this work,

I have tried to show the divergent ways in which environmental displaces have been addressed by different policy areas. Displacements as a result of environmental disruption have been a matter of increasing concern in the field of disaster reduction and adaptation to climate change, whereas asylum and migration policies have remained timid in addressing the issue, despite creating some subsidiary mechanisms of protection.

This leads to the question, is this discrepancy the result of more developed mechanisms of international cooperation in the field of environment as compared with the field of migration? My research suggests that this is not the case. Disaster management, to a large extent, remains the responsibility of individual states. No international binding agreement exists to organise cooperation between states after natural disasters. With respect to climate change, although the Kyoto Protocol imposes greenhouse gases emissions reductions on industrialised countries, aspects of the agreement that touch upon adaptation remain embryonic. On the contrary, an international refugee regime has been established from the 1930s onwards, and the Geneva Convention was drafted as early as 1951. Other forms of complementary international protection have also been developed, either at the regional level (subsidiary and temporary protections) or as soft law (Guiding Principles on Internal Displacement). International governance of voluntary migration, however, has only recently begun, and still needs to develop policy instruments. For now, environmental migration has yet to be addressed by the debates on the governance of migration.

Hence one cannot claim that mechanisms of international governance are more advanced with regard to environmental matters than migration and asylum issues, at least for the fields considered here. Yet environmental migration is addressed more by environmental policies than migration policies. I argue that a key reason for this difference is that each field is dominated by a different coalition: while the sceptical coalition maintains a strong influence over migration policies, the alarmist coalition weighs heavily on environmental policy-making. I will now try to describe how these coalitions are formed, and how they interact with each other.

How are coalitions formed?

I have considered scientific information is an essential part of the policy process, and the core policy beliefs of the coalitions revolve around academic debates in the field. These core policy beliefs are very resistant to change, and are the key determinants of the belonging to a

coalition. Sceptics contend that environmental factors are one among many migration drivers, and that isolating environmental migration as a specific type of migration is pointless and potentially harmful. In sharp contrast, alarmists claim that increasing numbers of people are displaced by environmental disruptions, and that environmental changes constitute a major and distinct driver of migration. Building upon these core beliefs, members of the coalitions will propose and develop instruments and mechanisms to pursue the realisation of the core policy belief. At this stage, they might disagree between them, but remain bound together by their core policy beliefs. Hence it appears that the representations of environmental migration are the foundations of both the sceptical and alarmist coalitions. These representations are themselves social constructs embedded in a value system, shaped by different traditions and environments.

What do the coalitions consist of?

Researchers play a prominent role in the coalitions, but these also include journalists, NGOs, international agencies and parliamentarians.

Members of the sceptical coalition are primarily drawn from refugee lawyers and migration scholars. Geographers, in particular, are among those who attach great importance to the multi-causality of migration. Membership of coalition also extends to international agencies and organisations in charge of migration: UNHCR has insisted that its involvement in natural disasters must remain exceptional, whereas the European Commission Directorate General for Justice, Liberty and Security has contended that environmental migration is not relevant to European migration policies. Hence we find in the alarmist coalition a group of people that are often used to working with each other, even though they might disagree on many aspects of migration policies. There are no journalists nor policy entrepreneurs in the coalition, but rather a majority of migration scholars, refugee lawyers, national and regional immigration agencies, as well as UNHCR, even though its position is slowly shifting. Overall, the sceptical coalition is quite small, but remains influent through the presence of prominent scholars and official agencies and departments.

Members of the alarmist coalition, on the other hand, are more numerous, diverse, and powerful. The coalition was initially led by environmentalists such as Lester Brown and Norman Myers, who were soon followed by environmental scholars, elements of the media and NGOs, and also private businesses such as Munich Re. The coalition also included

numerous international organisations, such as UNEP, the Red Cross or IOM. Some parliamentarians, mostly from opposition parties, also joined the coalition and proposed some protection schemes for environmental displaces. Over the years, the coalition grew rapidly, to the point that it now dominates the policy subsystem of environmental migration. The dominance of the alarmist coalition is the result of different factors:

- first, the increased attention given to climate change and environmental issues created a favourable context for the rise of the coalition;
- the presence of most media in the coalition made the coalition's discourse available to a larger audience;
- finally, its members are far more numerous than in the sceptical coalition, and have a greater influence on traditional policy-makers.

How do coalitions work?

In some cases, coalitions are organised in associations, lobby groups, etc. This is not the case here, and the coalitions are not formally organised. Their members meet at conferences, workshops and professional forums, but they do so for other reasons than their belonging to a coalition. The reason for this is simple: these coalitions are abstract concepts, a methodological framework for the analysis of the policy process.

It is important to note that the coalitions are not sociologically homogenous, and members of a single coalition on one issue can be members of opposing coalitions on a different issue. The motivations of individual members can also be different: as explained earlier in my work, different research agendas and objectives drive migration and environmental scholars. As for the position taken by international organisations, this is not contingent on their policy field (for example, IOM is a member of the alarmist coalition), but rather on their willingness to extend their mandate. IOM, UNEP or the IASC are all seeking to play a greater role in their respective fields.

A central idea of the thesis is that ideas and representations matter in the policy process. Both coalitions were initially formed around conflicting arguments in the academic literature, and researchers involved in these academic debates became unwitting policy entrepreneurs who crafted the coalitions. As academic debates were parlayed into the policy level, the coalitions expanded.

It is useful to note, however, can professional forums – conferences and workshops in our case – can help the process of learning across coalitions, and thus bring coalitions closer. Given the dominance of the alarmist coalition, policy debates on environmental migration are currently concentrated in the area of environmental policy-making, more precisely in the area of climate policy-making. As a result of the different professional forums that revolve around climate change, as well as the open forum of climate negotiations¹²², the two coalitions have been able to come closer and adopt some common positions. The latest manifestation of such a common position was the recent submission to UNFCCC of a position paper by IOM, UNHCR, United Nations University, the Norwegian Refugee Council and the Representative of the Secretary-General on the Human Rights of Internally Displaced Persons. The paper stressed the need to address environmental migration in upcoming climate change negotiations. Although the entities signatory to this position paper traditionally formed part of opposing coalitions, they were brought together in the professional forum constituted by climate negotiations.

This apparent reconciliation, which is a recent development, obscures the dominant position held by the alarmist coalition. Climate negotiations have now become the central focal point of the policy subsystem of environmental migration, and it is expected that normative frameworks to deal with the phenomenon of environmental migration will develop primarily in international climate policies.

The assimilating of environmental migration to climate negotiations shapes the current conceptualisation of environmental migration in different ways:

- Firstly, it denies the role played by migration policies in determining the size and patterns of migration flows, by implying that flows are primarily dependent on the extent of climate change impacts and the adaptation strategies that will be implemented to mitigate these impacts. Thus the embedding of policy debates within the sphere of climate change reflects a deterministic perspective that assumes that environmental displacements depend primarily on the impacts of climate change, when in fact these impacts can be mitigated by adaptation policies.

¹²² Core climate negotiations are held annually at the Conference of the Parties to the UNFCCC (or COP). The COP hosts the negotiation process regarding the implementation of the UNFCCC, but is also an open forum attended by thousands of NGOs, lobbies, companies, international organisations, scholars and journalists.

- Secondly, it narrows cases of environmental migration to those displacements induced by climate change, and thus excludes displacements associated with other environmental disruptions. Furthermore, it has a strong bias towards future displacements and considers environmental migration to be a new issue, despite the existence of past and current migrations associated with environmental disruptions, including the effects of climate change.
- Thirdly, environmental migration is considered as a forced movement, and the voluntary dimension of some migration flows is not addressed. Therefore, policy proposals are geared towards protection and compensation, rather than governance of migration.
- Finally, and most importantly, it tends to conceptualise environmental migration as a specific type of migration that must be addressed by environmental policies rather than by migration policies. Undoubtedly, this is the clearest sign of the dominance of the alarmist coalition in the policy subsystem.

These findings verify my initial research hypotheses, with some reservations. Both the cases of Katrina and Tuvalu indicate that states continue to play a central role in shaping migration movements, in contrast to the prevailing essentialist understanding of environmental migration as a phenomenon shaped primarily by environmental changes and the policies designed to address these changes, rather than by policies that address the movements themselves. The existence of two competing coalitions can serve as an explanation for the distinct development of environmental and migration policies with regard to environmental migration, although the subsystem as a whole is heavily dominated by the alarmist coalition.

This thesis has sought to make an original contribution in bringing a constructivist perspective to academic debates that were most often rooted in a deterministic perspective. In conducting the analysis, the Advocacy Coalition Framework was used as a methodological tool, allowing me to highlight the existence of advocacy coalitions in the policy debates. The choices I made, however, also meant that I had to leave some fields unexplored. Furthermore, my research has also allowed to identify some new research questions, which I hope to investigate in the years to come. These unexplored fields and new questions can be presented in three different areas:

- First, the choice of the ACF as a model of the policy process revealed certain insights, but implied the exclusion of alternative models that might have yielded other, additional insights. The conceptualisation of environmental migration is rapidly evolving, and so are new policy proposals to address it. Therefore, I hope to be able to study these new developments over the next few years, with the help of other theoretical models that will allow me to combine different representations of the policy process.

- Furthermore, the thesis sought to combine an analysis of both environmental and migration policy areas. Though I hope that this combined analysis is an original feature of the thesis, it also meant that I needed to refrain myself from exploring other policy areas, such as human rights policies or development policies. These policy areas were deliberately omitted, but a more comprehensive analysis would need to include them.

- Finally, I have shown how policy debates have cemented a concept of environmental migration as a forced migration caused primarily by the impacts of climate change, and have tried to identify the shortcomings of this conceptualisation. Given that policy debates currently revolve around adaptation to climate change, it would be of future interest to trace how migration will be addressed in debates on adaptation, and how migration strategies on the ground can be used as a way of coping with the impacts of climate change. Although migration is often characterised as a consequence of the failure of adaptation strategies, some empirical studies have shown that it can also be, of itself, an adaptation strategy (Van Der Geest 2008). I hope to be able to contribute that the development and furthering of such empirical studies. In the continuation of the thesis, a promising direction of future research might be to look at the way in which migration is envisioned within climate negotiations over adaptation. Migration remains generally considered to be a failure of adaptation, and not (yet?) as an adaptation strategy. My hypothesis would be that the concept of migration as a coping strategy will gain currency in policy debates on adaptation. Once again, the linkages between research and policy seem of crucial importance in this regard. But only future research will tell.

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1. General overview of Tuvalu

Historical outlook

The history of Tuvalu remains difficult to write, and large parts of it are still unknown. McDonald rightly notes that the writing of such histories was 'largely the preserve of non indigenous historians' and that most were 'Western historians writing about "the other" ' (1996: 37). This might partly explain why little is known about the pre-colonisation era. The most reliable source on Tuvalu's history is the work of Barrie McDonald, an Australian scholar, and his book contains only one chapter on Tuvalu's pre-European history (McDonald 1982) – as the author says himself, one chapter to 'encapsulate at least two, and perhaps three thousand years of distinctive history' (1996: 40).

There's no agreement as to the date, or even the period, when Tuvalu was first settled. Howe (2003) suggests that the islands were settled around 1,000 BC by Polynesians from Samoa and Tonga, except for the atoll of Nui that was predominantly settled by I-Kiribatis, and this claim is also supported by McDonald (1996: 40). An history of Tuvalu commissioned by the Government also recalls legends of the settlements of Funafuti, the main atoll, dating back to about 3,000 years ago (Faaniu 1983). Other scholars, however, suggest that Tuvalu's settlement 'may not have been long before Europeans reached the central Pacific; there are even suggestions that colonization, originating in Vaitupu, may have been as recent as the Sixteenth Century' (Munro and Bedford 1980: 2). Munro further asserts that most islands were settled between the Fourteenth and Eighteenth Centuries, with Nukulaelae being the latest atoll to be settled (1982: 7).

Though some islands of Tuvalu were first spotted by Spanish explorer Alvaro de Mendana y Neyra in 1568 and again in 1595¹²³, it is only in 1819 that Captain Arent de Peyster's ship landed in Funafuti, making first contact with Tuvaluans (Connell 1983). The ship was owned by Edward Ellice, a London merchant and financier, who gave his name to the newly (re)discovered atolls.

¹²³ The island of Nui in 1568, and Niulakita in 1595.

Christianity was introduced in 1860s by missionaries from the Cook Islands and Samoa. At the same time, Tuvalu sparked interest from 'blackbirders', ships that were sailing the South Pacific in search for slaves to work in the sugar cane plantations of Queensland or the guano mines of Peru (Maude 1981). The exact number of kidnapped people is unknown, but blackbirders devastated the atolls of Nukulaelae and Funafuti, and none of the slaves ever returned to Tuvalu.

Tuvalu, then known as Ellice Islands, was proclaimed a British protectorate in 1892, in order to protect the population from the hostile raids of blackbirders. The prime interest of the British authorities lied in the phosphate mines of Kiribati, but it was proposed to include Tuvalu in the protectorate, an offer that was eventually accepted. Following this incorporation, trade increased dramatically in Tuvalu, and many Tuvaluans left to work in Kiribati's phosphate mines.

In 1915, the islands were incorporated with the Gilbert Islands (now Kiribati) in order to form the British colony of the Gilbert and Ellice Islands, and most of the population had been converted to Christianity by then. There were major differences between the two groups of islands however: while Tuvaluans were Polynesians, I-Kiribati were Micronesians. These ethnic differences were further reinforced by linguistic and cultural differences, but the islands were aggregated for the convenience of the colonial administration.

Funafuti was later transformed into an American airbase during World War II: large holes – the 'borrow pits' – were dug at the two ends of the island, an airstrip was built with the soil that had been dug up, and the island was used between 1942 and 1944 as a military base to bomb Japanese positions in Kiribati, Nauru and the Marshall Islands. At the peak of the war, more than 6,000 soldiers occupied the island, while most of Funafuti's population was temporarily displaced on an outer islet (McQuarrie 1994). Remains of this period can still be seen today, in particular wrecked tanks abandoned in the lagoon and the 'borrow pits', now used as waste dumps, that have never been filled up by the American military, despite repeated pleas from Tuvalu government.

Shortly after the war, two other significant population movements occurred: the first one from the atoll of Vaitupu, and the second one from Niutao.. In 1951, elders from Vaitupu,

under the impulsion of Donald Kennedy, an Australian expatriate who was also the headmaster of the boarding school, decided to purchase the island of Kioa, an outlier to Fiji. The main reason underlying the purchase was the fear that resources on the island would be too scarce to sustain demographic growth. A few dozens of families relocated to Kioa until 1983, and were eventually granted Fijian citizenship in 2005, even though the island still enjoys some autonomy and has its own administrative body. British colonial authorities had similar thoughts about Niutao, then Tuvalu's most-populated atoll, and decided to ship some Niutao islanders to the uninhabited Niulakita atoll¹²⁴ in 1949. From then on, Tuvalu, which means 'cluster of eight', would count nine populated atolls. Niulakita remains the least populated atoll, with only about 40 inhabitants.

These two displacements reveal that the idea of permanent resettlement was considered by some well before the threats of climate change were known. Most media reports tend to portray Tuvalu's current possible relocation as unprecedented – these examples show that the very idea of relocation is far from being unprecedented, even if these resettlements were of a much smaller scale. Even before these resettlements occurred, the idea was considered in the 1890s in response to what was perceived as an overpopulation problem (Connell 1983). Munro and Bedford note that this idea was born out of a Malthusian perspective: people feared that they would not have enough food unless the population was kept under strict control (1980: 3). As early as in the 1860s, tight population controls included forced abortions and infanticides, and a policy of a maximum of two children per family was implemented throughout Vaitupu. These techniques of population controls, though counterbalanced by adoption, were abolished by the missionaries, and population grew rapidly from then on. Interestingly, as I will show later in this chapter, this Malthusian perspective is still part of the rationale of the current governmental policy to encourage and facilitate emigration.

Tuvalu suffered important damages, as well as a heavy toll on human lives, after hurricane Bebe, which hit Funafuti in 1972 (Falani s.d.). A few years later, as Kiribati was seeking to gain independence, Tuvaluans were concerned that their identity could be overshadowed by I-Kiribatis, who outnumbered them by seven to one (Connell 1983). Thus they opted for secession, and 92 % of the population voted in favour of it in a referendum held in August

¹²⁴ It is interesting to note here that the atoll of Niulakita was not entirely uninhabited, and that some families from Vaitupu had already settled the atoll. This group was promptly shipped back to Vaitupu. The anecdote is narrated in Bennetts and Wheeler photographic essay on Tuvalu (2001), and was orally confirmed to me during my stay.

1974. The amiable separation became effective on October 1st, 1975, and Tuvalu gained full independence three years later on October 1st, 1978. Tuvalu rapidly established itself as a parliamentary democracy, and has been served by twelve different prime ministers between 1978 and 2008.

A turning point in Tuvalu's history was the sale of the internet domain '.tv' in 1999. This domain, which had been attributed by the International Standardisation Organisation (ISO), was sold to internet company VeriSign for US\$ 50 million in royalties over a twelve-year period, thus representing a significant part of Tuvalu's annual budget. This unexpected influx of money allowed for a number of development projects, including the asphaltting of the islands' roads. But the money was also used to send a permanent representative to the United Nations in New York. Tuvalu became a member of the United Nations on September 5th, 2000¹²⁵. Enele Sopoaga was appointed ambassador to the United Nations, and quickly became one of the most vocal advocates of Tuvalu. Sopoaga quickly took up the vice-presidency of the Alliance Of Small Island States (AOSIS), a role that would give him a prominent role in the negotiations related to climate change.

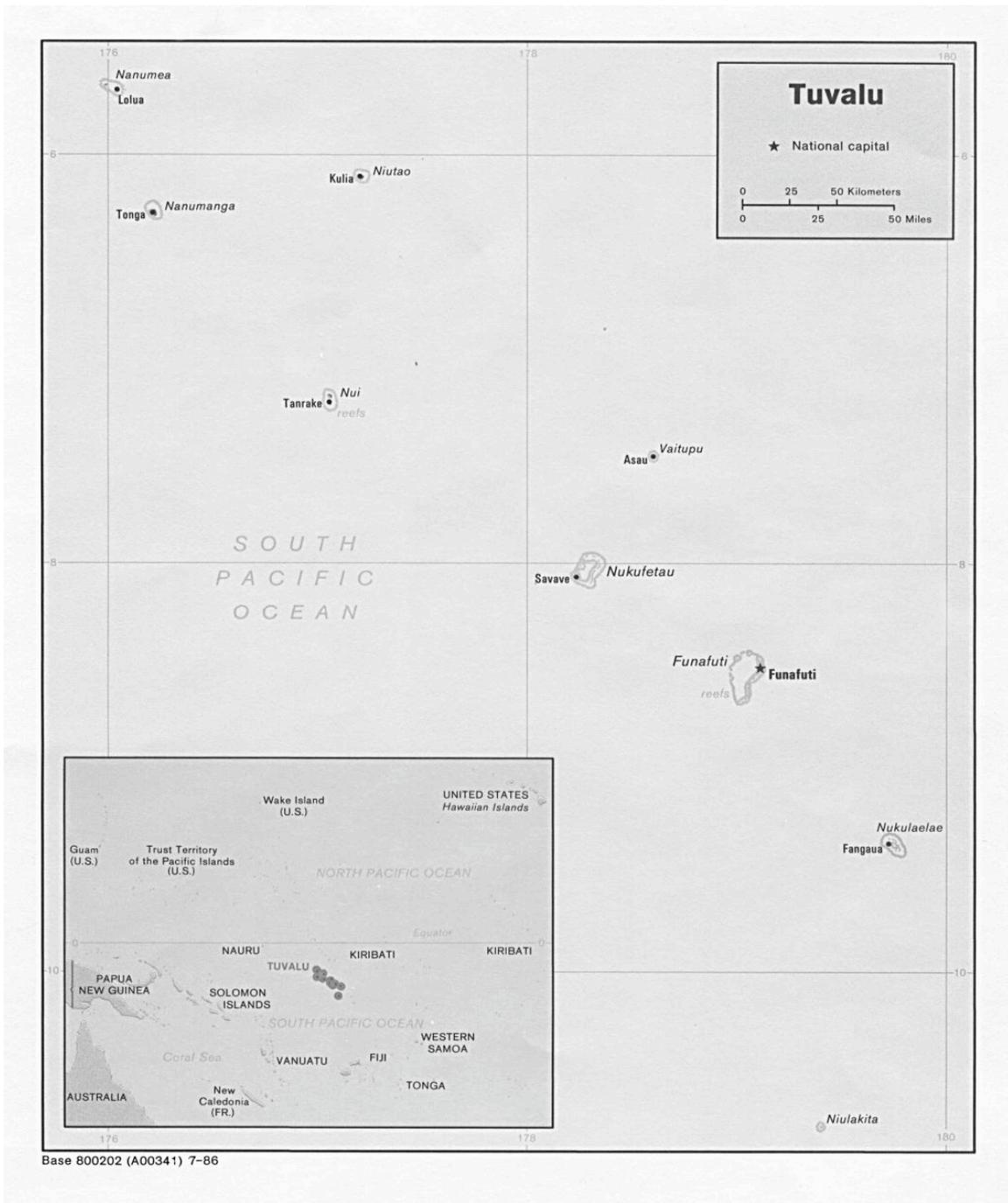
The government has since consistently used international forums to attract the world's attention to the specific vulnerabilities of small island states and the threats of climate change, and Tuvaluan leaders have been particularly successful in voicing their concerns about climate change to the rest of the world and the international media alike.

Geography

Tuvalu is one of the only five countries comprised entirely of low-lying islands and atolls, which are 'rings of coral reefs that enclose a lagoon' (Barnett and Adger 2003: 322). Despite a territory spreading over 750,000 square kilometres in the South Pacific Ocean, its land area is only of 26 square kilometres, making it the fourth smallest country worldwide, after Vatican City, Monaco and Nauru. Located half way between Hawaii and Australia, the archipelago is made up of six coral atolls and three reef islands. Funafuti, Nanumea, Nui, Vaitupu,

¹²⁵ Tuvalu also became a full member of the Commonwealth at the same occasion. The Queen of England remains the official head of state, even though republican movements gained some strength under the leadership of the late Prime Minister Ionatana Ionatana. On April 30th, 2008, a referendum on Tuvalu's transformation into a republic was defeated by a two to one majority.

Nukufetau and Nukulaelae are all coral atolls, with a lagoon open to the ocean; Nanumanga and Niutao are reef islands, but have a landlocked lagoon, while Niulakita, the smallest entity, doesn't have a lagoon. In addition, Tuvalu also comprises about 120 islets. None of these entities are separated by a distance less than 60 kilometres, and there are 350 nautical miles between the most northern atoll, Nanumea, and the most southern island, Niulakita (Barton 1977).



Map of Tuvalu¹²⁶

¹²⁶ Source: Intute, University of Manchester

The main characteristics of Tuvalu's geography, and the one that drew most of the attention, is its very low elevation: its highest peak¹²⁷ is at a striking 5 metres above sea-level. This low elevation makes Tuvalu extremely vulnerable to sea-level rise and other climate events (Barnett and Adger 2003; Mimura et al. 2007b; Lal et al. 2002).

Another factor that makes Tuvalu particularly vulnerable to sea-level rise is the geology of its atolls, whose morphology was not developed until the post-mid Holocene period (about 4000 B.C.). The atoll reefs are 'perched atop carbonate platforms which cap buried volcanic edifices', and 'underlain by 8–28 m of Holocene limestone disconformably overlying a substratum of last-interglacial or older limestone' (Dickinson 2004: 251). The landmass of current Tuvalu atolls is formed of unconsolidated limestone sediments, which are less than 85 metres in depth. Some islands and islets tend to be more stable than others, which are formed with migratory sand cays with unstable shoreline. Geophysical research shows that any sea-level rise above 75 centimetres might trigger wave erosion of stable islets, by overtopping their stable reef platform. Hence there exists a threshold in sea-level rise, above which the effects of wave erosion would start disaggregating the atoll. The research concludes that 'the risk of future inundation of island nations cannot be evaluated solely in terms of expected sea-level rise with respect to gross islet elevations', but needs to take into account their geological morphology, and the existence of this threshold in sea-level rise, estimated at 0.75 metres (Dickinson 1999: 124).

Furthermore, in the absence of any lake or river, resources of potable water depend exclusively on the rain water that is collected in tanks and reservoirs. Natural resources are extremely scarce, and most of the consumed food is now imported. The salinity of soils makes it almost impossible to grow any crops, apart from a vegetable garden run under the supervision of the Taiwanese embassy.

¹²⁷ Ironically, this point is known as Mount Howard, in reference to former Australian Prime Minister John Howard, who famously refused to ratify the Kyoto Protocol.

Population

The population of Tuvalu, and of Funafuti in particular, has undergone considerable changes over the recent years. Tuvalu's population slowly rose from the end of 19th century until the middle of the 20th century (from 2,497 inhabitants in 1876 to 3,994 in 1931), then expanded considerably during the second half of the 20th century, as shown in the table below:

Island	Area ¹²⁸	1947	1963	1968	1973	1979	1991	2002	Distribution ¹²⁹	Density ¹³⁰
Funafuti	2.79	528	687	826	871	2,120	3,839	4,492	47.0	1,610
Nanumea	3.87	746	1,051	1,076	977	844	824	664	6.9	172
Nanumanga	2.78	524	544	585	587	605	644	589	6.2	212
Niutao	2.53	644	797	796	907	866	749	663	6.9	262
Nui	2.83	490	528	569	569	603	606	548	5.7	194
Vaitupu	5.60	728	823	876	948	1,273	1,202	1,591	16.6	284
Nukufetau	2.99	524	655	646	620	626	751	586	6.1	196
Nukulaelae	1.82	282	317	354	343	347	353	393	4.1	216
Niulakita	0.42	21	42	54	65	65	75	35	0.4	83
Total	25.6	4,487	5,444	5,782	5,887	7,349	9,043	9,561	100.0	373

Tuvalu's population, 1947-2002. Sources: Connell 1983, Secretariat of the Pacific Community 2005, own calculations

Apart from the steep population increase, the most important feature of the demographic evolution of Tuvalu is most likely the internal migration from the outer islands to the main atoll, Funafuti. The first comprehensive review of internal migration was conducted in 1963, when the census asked respondents to provide data about their island of birth. Apart from Vaitupu and Funafuti, all other islands have had positive out-migration rates since then. The in-migration flows to Vaitupu and Funafuti have a straightforward explanation: Vaitupu is home to the country's only boarding school, while Funafuti, as the country's capital, underwent rapid economic development. The island has been home to new shops and services, including a hospital, which attracted many migrants, and it clearly appears that the accelerating pace of internal migration is associated with the economic development of Funafuti.

¹²⁸ Noted in square kilometres

¹²⁹ Noted in %

¹³⁰ Noted in persons per square kilometre

The total population of Funafuti was only of 871 inhabitants in 1973 (Bailey 1975), with a population density of 313 inhabitants per square kilometre; Funafuti's population, 25 years later, is currently about 4,500, with an extremely high population density of 1,610 inhabitants per square kilometre. Overpopulation has thus become a major concern for the government, and one of the reasons why emigration is encouraged. The whole population is Polynesian, with a small Micronesian minority (mostly from Kiribati), and only a few immigrants (mostly international volunteers).

Economy

As most atoll countries, Tuvalu is particularly vulnerable to global economic change, due to low levels of income, low infrastructure and high level of dependency upon foreign aid. Besides fish, Tuvalu has very few natural resources. Its economy relies heavily on foreign aid, notably through a Trust Fund established in 1987 by the UK, Australia and New Zealand. This Trust Fund represents roughly 25 % of the GDP, while an additional 20 % is provided by remittances, mostly from sailors working at sea. Economic activity is overwhelmingly dominated by the public sector: two-thirds of all waged employment is concentrated in the public sector, one of the highest rates in the world (Connell 2003: 93). Only one third of the total workforce is formally employed, even though the statistics are somewhat misleading, domestic duties being not considered as unemployment (Tuvalu Government 2006).

Tuvalu's GDP per capita is about US\$ 1,600. Most people make a living through exploitation of the sea and reefs, or thanks to remittances sent by members of their family abroad. Agriculture is extremely limited, mostly due to the salinity of the soils. Copra exports have stopped in the 1990s, due to low market rates, and culture of taro remains difficult. Fishing industry is not important, but Tuvalu benefits from licensing fees sold to distant nations. Manufacturing is almost non-existent, tourism is extremely limited and Tuvalu does not export any goods, apart from collectible stamps.

Foreign aid remains the principal source of income for Tuvalu, and has sometimes led to poorly sustainable development projects which impacted upon the islands natural adaptation capacity. In the 1990s though, Tuvalu experienced some economic growth, mostly thanks to

some ‘unusual development strategies’, which included capital investment in the United States, the production of collectible postage stamps, and the renting of its telephone country code – 688 – to phone sex companies¹³¹. A major shift in Tuvalu’s economy occurred with the sale of the internet domain “.tv”, as mentioned earlier, which allowed for the development of the infrastructure in Funafuti, as well as for the membership in the United Nations and a continuous presence in New York.

¹³¹ This latest venture, however, was quickly abandoned after moral concerns were raised. The venture capital investment in the United States has also come to an end.

2. General overview of New Orleans

This section attempts to provide a short, general overview of the situation of New Orleans before Katrina hit. Katrina has often been portrayed as an ‘unnatural disaster’, which was more than just the consequence of an environmental hazard (Hartman and Squires 2006; Dyson 2006). Two aspects proved indeed particularly crucial with regard to the disaster, and shall be developed here: the ‘unnatural’ character of the city, and the social vulnerabilities of its inhabitants.

*An unnatural metropolis*¹³²

Many observers had warned already about the natural vulnerability of Katrina, and had stressed the risk of a major hurricane washing the city away (van Heerden and Bryan 2006; Brinkley 2006). I shall not go into details of these natural vulnerabilities here, as they were well known and others have described them better than I could possibly do (Colten 2004; McQuaid and Schleifstein 2006).

For now, let us simply mention that the natural vulnerability of New Orleans was not only due to its low elevation, below sea-level, but also to the chaotic alterations of its natural environment, which started at the beginning of the 19th century. The city had grown out of the historical French Quarter alongside the banks of Mississippi, in a disorganized and anarchic fashion: as the population expanded, levees were built and flood-prone neighbourhoods were developed (Colten 2004). Many experts had warned of the risks faced by the city in the case of a hurricane: they had pointed the geographical location of the city, under sea-level and nested between the Gulf of Mexico, the Lake Pontchartrain and the Mississippi River, but also the degradation of the wetlands, the fragile and poorly maintained levees, or the alarming state of the pumps. They were not heard, and sometimes not even listened to (van Heerden and Bryan 2006).

¹³² The expression is borrowed from Colten (2004).

Early modifications of the natural environment were imposed by the economic development of the city. They included the creation of new neighbourhoods, the draining of marshlands, as well as the implementations of measures of flood controls. Colten (2004) shows that these significant modifications transformed New Orleans in an antithesis of nature, which was therefore particularly vulnerable to any natural hazards. Furthermore, these modifications had numerous adverse effects on minorities, who were compelled to live in the most vulnerable neighbourhoods, whereas the more affluent population could live in safer neighbourhoods such as the French Quarter or Garden City. Thus environmental policies deeply affected the social geography of the city, and were marked by environmental racism, even though the term did not yet exist when these policies were designed.

A city marked by social vulnerabilities

Abundant literature on disasters has shown that a natural hazard does not always result in a disaster, but only when the hazard hits in a context of social vulnerability (Oliver-Smith and Hoffman 2002). The case of Katrina provides an example particularly telling of this interaction between natural hazards and social vulnerabilities. Before Katrina hit, the economic situation of New Orleans was dire already: the oil and gas industry had relocated to Texas, and economic opportunities, apart from tourism, were scarce. Louisiana was one of the poorest states in the United States, and 28% of New Orleans' population lived below the poverty line. Amongst those, 84% were African Americans. One quarter of the population did not own a car, and many had never left the city.

Overall, statistical surveys show that social vulnerabilities in New Orleans before Katrina were far higher than the American average (Fussell 2006; Laska and Morrow 2006):

Pre-Katrina, New Orleans ranked second amongst US cities on to the degree to which poor families were clustered in extremely poor neighbourhoods (Berube and Katz 2005). About 28% lived below the poverty line, compared to 13% on the national level, and 38% of children lived in poor families. A bit less than 10% of the population had no telephone service.

About 60% of the pre-Katrina population were black, a figure that has now fallen to 40%. As mentioned in the previous section, black people were living in more flood-prone areas as a result of the development of the city from the 1940s onwards. As low-lying areas were drained and developed, the white population settled on higher grounds, leaving the inner city mostly inhabited by African Americans.

About 17,000 elderly lived alone before Katrina. Though New Orleans' overall number of elderly people was only slightly above the national average, 50% of them reported disabilities, against 40% nationwide.

The rate of single-mother households among the total number of households was more than double the national average, at 56%. These households were also disproportionately poor: 41% of them were living in poverty. More than 24% of women above 65 were poor, compared to a 12% national average. Gender-related vulnerabilities were amongst the most under-reported vulnerabilities before the disaster and in its immediate aftermath.

Finally, the rate of tenants amongst the population was also far greater than the national average: 51% lived in rented property, against 31% on average.

Overall, a striking feature of pre-Katrina New Orleans was the superposition of natural and social vulnerabilities: the latter were largely induced by the former, and set the ground for the occurrence of a social disaster.

3. Questions for semi-open interviews during fieldwork

Tuvalu

1. What do you know about sea-level rise? Is it something you're afraid of?
2. How does sea-level rise impact on your everyday life?
3. Do you think you'll have to move eventually? Is it something you plan to do? Why (not)?
4. Have you been offered to move already, or encouraged to do so?
5. What should the government do?
6. Do you think other governments have to get involved and deal with the problem?
7. What do you think will happen?
8. Do you know people who have moved already? Where did they move? How do you feel about them?

Katrina

1. Are you now living in New Orleans? Where exactly? In what kind of housing?
2. Before Katrina, where were you living in New Orleans? In what kind of housing? For how long had you lived in New Orleans?
3. How did the evacuation take place? How long did you stay away (for returnees)?
4. Were you expecting to return to your home soon afterwards, or did you make provisions for a longer stay?
5. Where did you want to go? Were you able to go there? What made you choose your destination if you were able to do so? Where did you stay? Did you stay with friends/relatives, or on your own?
6. Did you move with friends, family, or on your own?
7. Have you established some networks at your destination? If yes, are they with other evacuees or with locals?
8. If you have returned to your home, why did you do so? / If you have resettled elsewhere, why did you do so?

9. Do you plan to leave/return to New Orleans in the near future, or not? Why? If New Orleans were definitely safe from floods, would you choose to live there? Why?
10. What protection and assistance was offered to you during the course of the evacuation and afterwards? Were you satisfied with the assistance provided?

4. People interviewed in Tuvalu, Fiji, Australia and New Zealand

Experts and officials

	Name	Place	Function
1	Susie Saitala Kofe	Funafuti	Chair, NGO Alofa Tuvalu
2	Nala Ielemia	Funafuti	Wife of the Prime Minister
3	Matia Toafa	Funafuti	Former Prime Minister
4	Tito Isala	Funafuti	Historian
5	Semese Alefaio	Funafuti	Tuvalu Association of NGOs
6	Saufatu Sopoaga	Funafuti	Former Prime Minister
7	Tataua Pese	Funafuti	Red Cross
8	Eseta Lauti	Funafuti	Red Cross (President of local branch)
9	Lalwa Silafaga	Funafuti	Radio journalist
10	Puafitu Faaalo	Funafuti	Professor
11	Enele Sopoaga	Funafuti	Former Ambassador at the UN
12	Panapasi Nelesone	Funafuti	Secretary to the Governor
13	Kelesoma Saloa	Funafuti	Secretary to the Prime Minister
14	Avafoa Silu	Funafuti	Secretary for Foreign Affairs
15	Enate Evi	Funafuti	Director of Environment Agency
16	Salanoa Tinilau	Funafuti	Reverend
17	Daniel Liao	Funafuti	Resident Ambassador of Taiwan
18	Pulafagu Toafa	Funafuti	Tuvalu National Council of Women
19	Pasemeta Sateko Talaapa	Funafuti	EU-NZAid In-Country Coordinator
20	Kirk Yates	Suva	NZ Aid
21	Ron Duncan	Suva	University of the South Pacific
22	Lynda Newland	Suva	University of the South Pacific
23	Jennifer Evans	Suva	University of the South Pacific
24	Tine Leuelu	Suva	Tuvalu High Commissioner
25	Pascal Dayez-Burgeon	Suva	French embassy
26	John Collins	Sydney	Technical University, Sydney

27	John Connell	Sydney	University of Sydney
28	James Prest	Canberra	Australian National University
29	Bruce Kent	Canberra	Australian National University
30	Rod Holesgrove	Canberra	Advisor to Bob Sercombe MP
31	Max Philips	Canberra	Advisor to Kerry Nettle MP
32	Michael Goldsmith	Hamilton	University of Waikato
33	John Campbell	Hamilton	University of Waikato
34	Don Will	Wellington	NZ Aid
35	Brett Davies	Wellington	Immigration New Zealand
36	Gareth Hughes	Wellington	Climate Coordinator, Green Party
37	Ruth Laugesen	Wellington	Journalist, Star Times
38	Shawn Shen	Auckland	University of Otago / Auckland
39	Kaipati Tekavei	Auckland	Pastor, Tuvaluan community
40	Paani Laupepa	Auckland	Former Tuvalu Interior Minister
41	Paul Spoonley	Auckland	Massey University
42	Jocelyn Carlin	Auckland	Journalist - Photographer

Residents

	Name	Place	Age	Occupation
1	Eti Eseta	Funafuti	50 <	Fisherman
2	Risasi Finikaso	Funafuti	30-50	Hotel manager
3	Penieli Metia	Funafuti	30-50	Shop owner
4	Utala Ktaloka	Funafuti	50 <	Engineer
5	Luisa Fakamua	Funafuti	18-30	Shop owner
6	Sakala Tekavatoetoe	Funafuti	18-30	Handcrafter
7	Suilia Toloa	Funafuti	30-50	Teacher
8	Kumitia Tekaa	Funafuti	18-30	Housewife
9	Lolani Ioapo	Funafuti	< 18	Student
10	Simoe Foilape	Funafuti	< 18	Student
11	Nofoalofa Petero	Funafuti	30-50	Unemployed
12	Oketopa Tinilau	Auckland	18-30	Civil servant

13	Tomalu Talu	Auckland	30-50	Unemployed
14	Ani Hemokoa	Auckland	30-50	Unemployed
15	Molu Tavita	Auckland	18-30	Student
16	Peo Tefono	Auckland	50 <	Retiree
17	Nouala Ofati	Auckland	18-30	Student
18	Laumua Taulialia	Auckland	30-50	Housewife
19	Selau Hofeni	Auckland	30-50	Civil servant

5. People interviewed in Louisiana and Texas

Experts and officials

	Name	Place	Function
1	John Kiefer	New Orleans	University of New Orleans
2	Shirley Laska	New Orleans	University of New Orleans
3	John Renne	New Orleans	University of New Orleans
4	Susan Howell	New Orleans	University of New Orleans
5	Robert Montjoy	New Orleans	University of New Orleans
6	Peter Yaukey	New Orleans	University of New Orleans
7	Clarice Kirkland	New Orleans	Mayor's Office
8	Mary LeBlanc	Baxter	Renaissance Village trailer park
9	Ezra Boyd	Baton Rouge	LSU Hurricane Center
10	Marc Levitan	Baton Rouge	LSU Hurricane Center
11	Ivor Van Heerden	Baton Rouge	LSU Hurricane Center
12	Frederick Weil	Baton Rouge	LSU
13	John Beggs	Baton Rouge	LSU
14	Michael Leitner	Baton Rouge	LSU
15	Nancy Maveety	New Orleans	Tulane University
16	Elizabeth Fussell	New Orleans	Tulane University
17	Lolis E. Elie	New Orleans	Journalist, Times-Picayune
18	Mark Schleifstein	New Orleans	Journalist, Times-Picayune
19	Tim Morris	New Orleans	Editor, Times-Picayune
20	Chris Sluaghter	New Orleans	Journalist, WWL-TV
21	Ed Blakely	New Orleans	Mayor's Recovery Office
22	Paula Devlin	New Orleans	Editor, Times-Picayune
23	Tara Young	Washington*	Journalist, The Washington Post
24	Siva Blake	New Orleans	The Historic New Orleans Collection
25	Jesse St Amant	New Orleans	Sherif, St Bernard parish

26	Dexter Accardo	New Orleans	Emergency manager, Plaquemines parish
27	John Wildgen	New Orleans	Emergency worker, New Orleans
28	Col. Jeffrey A. Bedey	New Orleans	US Army Corps of Engineer
29	Craig Mathews	Baton Rouge	Louisiana Recovery Authority

Residents

	Name	Place	Age	Occupation
1	Annie Vic	New Orleans	50 <	Tour guide
2	Marijke Albers	New Orleans	50 <	Retiree
3	Arcenia Crayton	Baxter	30-50	Unemployed
4	Mary LeBlanc	Baxter	30-50	Community organiser
5	Marie-Françoise Crouch	New Orleans	50 <	Retiree
6	Rob Speiser	Boston*	18-30	Student
7	Anthony Ishmael	New Orleans	18-30	Construction worker
8	Sarah Evans	New Orleans	18-30	Student
9	Johnson Caldwell	New Orleans*	< 18	Student
10	Mary Altazan	New Orleans	50 <	Housewife
11	Cornelia Whitlow	New Orleans	50 <	Retiree
12	Paul Areinecke	Charlotte, NC*	18-30	Employee
13	Fred Berner	Hammond	30-50	Contractor
14	Vahe Baladouny	Kenner	30-50	Employee
15	Ibrahim Peña	Houston, TX	18-30	Student
16	Jamie Whiteman	Houston, TX	30-50	Cook
17	Ted Bogan	Houston, TX	18-30	Hotel manager
18	Clare Cahalan	New Orleans	18-30	Part-time student
19	Clara Rita	Houston, TX	18-30	Barnmaid
20	Elise Ramsey	Houston, TX	30-50	Unemployed
21	Erika Wildgen	Houston, TX	18-30	Architect

* denotes an interview by phone.

6. IASC Operational Guidelines on Human Rights and Natural Disasters (extracts)

| 13

- I. Persons affected by natural disasters should enjoy the same rights and freedoms under human rights law as others in their country and not be discriminated against. Targeted measures to address assistance and protection needs of specific categories of affected populations do not constitute discrimination if, and to the extent that, they are based on differing needs.
- II. States have the primary duty and responsibility to provide assistance to persons affected by natural disasters and to protect their human rights.
- III. Organizations providing protection and assistance to persons affected by natural disasters accept that human rights underpin all humanitarian action. In situations of natural disaster they should therefore respect the human rights of persons affected by disasters at all times and advocate for their promotion and protection to the fullest extent. Humanitarian organizations shall not promote, actively participate in, or in any other manner contribute to, or endorse policies or activities, which do or can lead to human rights violations by States. They shall strive to enable the affected people to exercise their own rights.
- IV. Organizations providing protection and assistance in situations of natural disasters shall be guided by these Operational Guidelines in all of their activities, in particular when monitoring and assessing the situation and needs of affected persons, when programming and implementing their own activities as well as when entering into a dialogue with governmental authorities on the State's duties and responsibilities under international human rights and, where applicable, international humanitarian and refugee law. In doing so, they shall remain accountable to all of their relevant stakeholders, in particular to the persons affected by the natural disaster.
- V. All communities affected by the natural disaster should be entitled to easy accessible information concerning: (a) the nature and level of disaster they are facing; (b) the possible risk mitigation measures that can be taken; (c) early warning information; and (d) information on ongoing humanitarian assistance, recovery efforts and their respective entitlements. They should be meaningfully consulted and given the opportunity to take charge of their own affairs to the maximum extent possible and to participate in the planning and implementation of the various stages of the disaster response.
- VI. These Operational Guidelines seek to improve the practical implementation of international instruments protecting human rights. They shall not be interpreted as restricting, modifying or impairing the provisions of international human rights or, where applicable, international humanitarian and refugee law. They should be applied together with other relevant Codes of Conduct, Guidelines and Manuals.⁶
- VII. Organizations providing protection and assistance in situations of natural disasters shall endeavor to have adequate mechanisms established to ensure that the Operational Guidelines are applied and that the human rights of the affected are protected.

⁶ See the detailed references to codes of conduct, guidelines and manuals that are relevant in the context of natural disasters in the accompanying Manual.

A.1 Evacuations, relocations and other life-saving measures

- A.1.1** If an imminent natural disaster creates a serious risk for the life, physical integrity or health of affected individuals and communities, all appropriate measures necessary to protect those in danger, in particular vulnerable groups, should be taken to the maximum extent possible (e.g. emergency shelter arrangements).
- A.1.2** If such measures would be insufficient, endangered persons should be allowed, and assisted to leave the danger zone. To the extent that they cannot do so on their own endangered persons should be evacuated from the danger zone by using all available means.
- A.1.3** These evacuations should be carried out in a manner that fully respects the rights to life, dignity, liberty and security of those affected. Measures should be taken to safeguard homes and common assets left behind. Evacuated persons should be registered and their evacuation monitored.
- A.1.4** When the natural disaster has occurred, persons affected by it should be allowed to move to other parts of the country and to settle there. This right may not be subject to any restrictions except those which are provided by law, and are necessary to protect national security, the safety and security of affected populations, public order (*ordre public*), public health or the rights and freedoms of others.
- A.1.5** Persons—including evacuees—who have been ordered or forced to flee or to leave their homes or places of habitual residence as a result of a natural disaster or its effects, or have left in order to avoid them, and have not crossed an internationally recognized State border should be treated as belonging to the category of internally displaced persons covered by the 1998 Guiding Principles on Internal Displacement.
- A.1.6** After the emergency phase, persons displaced by the natural disaster should be granted the opportunity to choose freely whether they want to return to their homes and places of origin, to remain in the area to which they have been displaced, or to resettle in another part of the country. Their right of choice may not be subjected to any restrictions except those which are provided by law, and are necessary to protect national security, the safety and security of affected populations, public order (*ordre public*), safety, public health or morals or the rights and freedoms of others. In particular, the return of persons displaced by the disaster to their homes and places of origin should only be prohibited if these homes or places of origin are in zones where there are real dangers to the life or physical integrity and health of the affected persons. Restrictions should only last as long as such dangers exist and only be implemented if other, less intrusive, measures of protection are not available or possible.

A

A.1.7 Persons affected by the natural disaster should not, under any circumstances, be forced to return to or resettle in any place where their life, safety, liberty and/or health would be at further risk.

A.1.8 Unless it is necessary for the protection of affected persons against very serious and imminent threats to their lives, their physical integrity or health, evacuations against their will, or prohibitions against their return, should not be supported by organizations providing protection and assistance to persons affected by natural disasters, even if they have been ordered by the competent authorities. Such organizations should not become involved in involuntary evacuations in any manner.

A.2 Protection against the negative impacts of natural hazards

A.2.1 Persons affected by natural disasters, displaced or not, should be protected against the dangers of potential secondary hazards and other disaster risks.

A.3 Protection against violence, including gender-based violence

A.3.1 During and after the emergency phase, law enforcement personnel and local authorities should be encouraged to take effective measures to ensure the security of populations affected by the natural disaster.

A.3.2 Mechanisms which are appropriate to address instances of violence and other violations of human rights, as well as of relevant guarantees under international humanitarian law, should be established without delay. In particular, the deployment of law enforcement personnel to areas at risk of or with a break down of law and order—including sexual and gender-based violence, robberies, or looting—should be requested.

A.3.3 Appropriate measures should be taken as early and as quickly as possible to protect affected populations, in particular women and boy and girl children, against trafficking, forced labour and contemporary forms of slavery such as sale into marriage, forced prostitution, and sexual exploitation.

A.3.4 Should the natural disaster have occurred in a country with an armed conflict, appropriate measures should be taken as soon as possible to ensure that children affected by the natural disaster are protected against being recruited or associated with armed forces or groups.

A.4 Camp security

A.4.1 Persons displaced by the disaster should, to the maximum extent possible, be provided with the means to recover as quickly as possible and become self-sustainable (even in places of temporary displacement) or with fast rehabilitation assistance for return. Camps are a last resort and should only be estab-



lished where, and until, the possibility of self-sustainability or fast rehabilitation assistance do not exist.

A.4.2 The location and lay-out of camps and settlements for persons displaced by the disaster should be situated in areas with a low natural hazard risk. They should be designed so as to maximize the security and protection of displaced persons, including women and others whose physical security is most at risk (e.g. children, older persons, persons with disabilities, single-headed households and members of religious and ethnic minority groups or indigenous peoples).

A.4.3 Security should be provided in camps, in particular by monitoring, through law enforcement personnel and camp committees drawn from among the displaced communities. Appropriate mechanisms to address instances of violence and other violations of the human rights of camp residents should be established.

A

A.4.4 Persons affected by the disaster should be allowed to move freely in and out of camps. Such movement should not be restricted or prohibited unless it is necessary for the protection of the security or health of camp residents, or that of the population in the vicinity. If there are restrictions, they should not remain in force any longer than absolutely necessary.

A.4.5 In order to maintain the civilian character of camps at all times, appropriate measures should be taken to avoid the presence of uncontrolled armed elements in camps and settlements. Where such elements are present, they should be separated from the civilian population in the camp. The presence of armed State police or security forces should be limited to the extent strictly necessary to provide security.

A.4.6 Once the immediate emergency phase is over, camps set up by armed forces or groups should be managed by civilian authorities or organizations. The role of police and security forces should be limited to providing security.

A.5 Protection against anti-personnel landmines and other explosive devices

A.5.1 Access for specialized organizations should be facilitated as soon as possible, so that they can take appropriate measures—including information and awareness campaigns and fencing off and marking relevant areas—to protect persons affected by natural disasters, displaced or not, against the dangers of anti-personnel landmines and other explosive ordnance that may have been dislodged, concealed or obscured in the course of the natural disaster.

B.1 Access to goods and services, and humanitarian action

B.1.1 Measures should be taken to ensure that persons affected by natural disasters, in particular those displaced, have unimpeded and non-discriminatory access to goods and services necessary to address their basic needs.

B.1.2 Humanitarian action should be based on assessed need and provided to all persons affected by the natural disaster without adverse distinction of any kind other than that of differing needs.

B.1.3 Safe and non-discriminatory access to available humanitarian assistance should be secured for all persons in need. In particular, measures should be taken to grant priority access to such vulnerable groups as minorities, single-headed households, elderly, people with disabilities, and unaccompanied and separated children.

B

B.1.4 In particular, when the authorities concerned are unable or unwilling to provide the required humanitarian assistance, international humanitarian organizations and other appropriate actors should offer their services in support of persons affected by natural disasters and in need of humanitarian assistance.

B.1.5 Humanitarian action should be carried out in accordance with the principles of humanity, impartiality and, in countries with armed conflict, neutrality. Humanitarian assistance should not be diverted.

B.1.6 International organizations and agencies and other actors providing humanitarian assistance, should ensure coordination of their actions among themselves and with national and local authorities. The responsibilities for certain areas of activities assigned to specific agencies and organizations should be taken into account.

B.2 Provision of adequate food, water and sanitation, shelter, clothing and essential health services

B.2.1 During and after the emergency phase of the disaster, adequate food, water and sanitation, shelter, clothing, and essential health services should be provided to persons affected by natural disasters who are in need of these goods and services. Provision of goods and services should be without any discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, age, disability or other status. Adequacy of these goods and services means that they are (i) available, (ii) accessible, (iii) acceptable, and (iv) adaptable:

(i) Availability means that these goods and services are made available to the affected population in sufficient quantity and quality;

(ii) Accessibility requires that these goods and services (a) are granted without discrimination to all in need, (b) are within safe reach and can be physi-

cally accessed by everyone, including vulnerable and marginalized groups, and (c) are known to the beneficiaries;

(iii) Acceptability refers to the need to provide goods and services that are culturally appropriate and sensitive to gender and age;

(iv) Adaptability requires that these goods and services be provided in ways flexible enough to adapt to the change of needs in the different phases of emergency relief, reconstruction and, in the case of displaced persons, return. During the immediate emergency phase, food, water and sanitation, shelter, clothing, and health services are considered adequate if they ensure survival to all in need of them.

- B.2.2** If food, water and sanitation, shelter, clothing, and health services are not available in sufficient quantities, they should be provided first to those most in need. The definition of need should be based and assessed on non-discriminatory and objective criteria.
- B.2.3** If the host population, which has not been directly affected by the natural disaster, suffers from similar shortages of water and sanitation, shelter, clothing, and essential health services as those affected by the natural disaster, relief should also be provided to it on an equitable basis.
- B.2.4** The right to shelter should be understood as the right to live somewhere in security, peace and dignity. These criteria should be used as benchmarks in planning and implementing shelter programmes, taking into account the different circumstances during and after the emergency phase.
- B.2.5** Those affected by the natural disaster should be given access to psycho-social assistance and social services, when necessary. Special attention should be given to the health needs of women, including provision of appropriate clothing and hygienic supplies, access to female health care providers and such services as reproductive health care.
- B.2.6** Special attention should be given to the provision of psycho-social care for victims of sexual and other abuses.
- B.2.7** Special attention should be given to the prevention of contagious and infectious diseases, including HIV/AIDS, among the affected population, particularly among those displaced by the disaster.

C.1 Education

- C.1.1 The return of children, whether displaced or not, to schooling should be facilitated as early and as quickly as possible after the disaster. Education should respect their cultural identity, language and tradition.
- C.1.2 Education should be compulsory and free at the primary level. Measures should be taken to ensure that education is not disrupted at higher levels when students, as a consequence of the disaster, can no longer afford such education.
- C.1.3 Special efforts should be made to ensure the full and equal participation of women and girls, affected by the natural disaster, in educational programmes.

C**C.2 Property and possession**

- C.2.1 Competent authorities should be requested to protect, to the maximum extent possible, against looting, destruction, and arbitrary or illegal appropriation, occupation or use of property and possessions left behind by persons or communities displaced by the natural disaster.
- C.2.2 Unused private property and possessions may be temporarily, but no longer than absolutely necessary, allocated to those displaced by the natural disaster. Competent authorities should be requested to ensure that owners of affected property are adequately compensated for such use. Due process guarantees and access to fair and impartial legal procedures should be assured for all parties.
- C.2.3 The return of persons or communities displaced by the natural disaster to their property and possessions should be facilitated as soon as possible.
- C.2.4 Owners, whose land deeds or property documents have been lost or damaged during the natural disaster or whose land boundaries have been destroyed, should be provided with accessible procedures to re-claim ownership of their original land and property without undue delay.
- C.2.5 Legal procedures should be put in place to consider competing claims to land and property with due process guarantees and without delay. Access to an independent court or tribunal should be guaranteed if the decision is not accepted by both parties.
- C.2.6 Specific arrangements should be made to enable women, particularly widows, as well as orphaned children to (re-)claim housing, land or property and to acquire housing or land title deeds in their own name.
- C.2.7 Specific arrangements should be made to enable and facilitate recognition of claims to land title and ownership based on prolonged possession, in the absence of formal land titles, especially for indigenous peoples.

- C.2.8** Appropriate measures should be taken to protect persons or communities affected by natural disasters—in particular the poor, women, members of minority groups or indigenous peoples, or those displaced—against undue or illegal attempts by landlords, speculators, local authorities and other actors to deprive them of their property and possessions.
- C.2.9** Prohibitions on remaining in or returning to certain areas and/or rebuilding should not be supported unless they are based on law and, in the individual case, necessary for reasons of safety, health, disaster prevention, or the implementation of reconstruction and development schemes. In all cases of prohibitions on remaining, returning and rebuilding measures should be taken to provide owners with due process guarantees, including the right to be heard and the right of access to an independent court or tribunal, as well as just compensation.
- C.2.10** Should evictions become unavoidable in the course of measures mentioned above in **A.1.3** and **C.2.3**, the following guarantees should be put in place: (a) an opportunity for genuine consultation with those affected; (b) adequate and reasonable notice prior to the scheduled date of eviction; (c) the timely provision of information on the eviction and future use of the land; (d) the presence of government officials during an eviction; (e) the proper identification of all persons carrying out the eviction; (f) the prohibition of evictions during bad weather or at night; (g) provision of legal remedies; and (h) provision of legal aid, where needed, to seek redress from the courts.
- C.2.11** Evictions—in particular those ordered in the context of evacuations and of secondary occupants of property and possessions left behind by persons displaced by the natural disaster—should not render individuals homeless or vulnerable to the violation of other human rights. Appropriate measures should be taken to ensure that adequate alternative housing, resettlement and/or access to productive land is made available to those unable to provide for themselves.

C

C.3 Housing

- C.3.1** As soon as possible, appropriate measures should be taken, without discrimination of any kind, to allow for the speedy transition from temporary or intermediate shelter to temporary or permanent housing, fulfilling the requirements of adequacy in international human rights law.
- C.3.2** The criteria for adequacy are: accessibility, affordability, habitability, security of tenure, cultural adequacy, suitability of location, and access to essential services such as health and education (see **B.2.1**). Respect for safety standards aimed at reducing damage in cases of future disasters is also a criterion for adequacy.

C.3.3 To ensure sustainable long-term planning of resettlement and reconstruction in the aftermath of a natural disaster, all affected groups and persons, including women, indigenous peoples and persons with disabilities, should be consulted and participate in the planning and implementation of housing programmes. To the maximum extent possible, and provided that necessary safety standards are met, owners of destroyed houses should be allowed to decide on their own how to rebuild them.

C.4 Livelihood and work

C.4.1 Projects to restore economic activities, opportunities and livelihoods that are disrupted by the natural disaster should start as soon and as completely as possible. To the maximum extent possible, such measures should already be taken during the emergency phase.

C

C.4.2 Where individuals are unable to return to previous sources of livelihood due to the natural disaster, appropriate measures—including provision of re-training opportunities or micro-credits—should be taken. Opportunities created by such measures should be available without any discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, age, disability or other status.

C.4.3 Access to livelihoods and employment opportunities should be ensured when planning temporary camps and relocation sites, as well as permanent re-housing for individuals displaced by the natural disaster.

D.1 Documentation

D.1.1 Organizations providing humanitarian assistance to persons affected by natural disasters should grant access to life-saving goods and services even in the absence of relevant documents or should issue such documents without delay even during the emergency phase of the humanitarian action. Personal data collected, and records established in this context, shall be protected against misuse of any kind.

D.1.2 Appropriate measures should be taken as early as possible, including during the emergency phase, to restore personal documentation that has been lost or destroyed in a natural disaster, to persons affected by the natural disaster (e.g. birth, marriage and death certificates, insurance certificates, passports, personal identification and travel documents, education and health certificates).

D

D.1.3 Women and men should be treated equally when documents of any kind are issued. Women should be issued documentation in their own names.

D.1.4 Unaccompanied and orphaned children should be issued documentation in their own names.

D.1.5 Loss of personal documentation should not be used: (a) to justify the denial of essential food and relief services; (b) to prevent individuals from travelling to safe areas or from returning to their homes; or (c) to impede their access to employment opportunities.

D.1.6 Loss of documents proving land tenure and ownership should not be used to impede property rights (see **C.2**).

D.2 Freedom of movement and right to return

D.2.1 In accordance with their right to freedom of movement, persons displaced by natural disaster should be provided with the information necessary to exercise their right to decide freely where they want to live—whether they want to return to their homes, to integrate where they are staying during their displacement or to resettle in another part of the country.

D.2.2 Appropriate measures should be taken as soon as possible to establish conditions conducive to sustainable return in safety and dignity. Conditions are considered sustainable if:

(i) people feel safe and secure, free from harassment and intimidation, as well as from unmitigated risks of further calamitous effects produced by natural hazards;

(ii) people have been able to repossess their properties or homes, and these have been adequately reconstructed or rehabilitated;

(iii) people can return to their lives as normally as possible, with access to services, schools, livelihoods, employment, markets, etc. without discrimination.

- D.2.3** Appropriate measures should be taken to provide the means to enable persons displaced by the disaster to return to their homes or places of habitual residence, or to remain or to resettle voluntarily in another part of the country.

D.3 Family life and missing or dead relatives

- D.3.1** Members of displaced families who wish to remain together should be allowed and assisted to do so during the emergency phase and in the context of return or resettlement.
- D.3.2** Appropriate measures should be taken as early and as quickly as possible to re-establish contacts between members of families that have been separated in the course of the disaster, and to reunite them without delay, particularly when children are involved.
- D.3.3** Separated and unaccompanied children should be assisted in accordance with the best interests of the child. In particular, the placing of children in institutions should be avoided whenever possible.
- D.3.4** Appropriate measures should be taken to establish the fate and whereabouts of missing relatives and to inform the next of kin on the progress of the investigation and results obtained.
- D.3.5** Appropriate measures should be taken to collect and identify the mortal remains of those deceased, to prevent their despoliation or mutilation, and to facilitate the return of the remains to the next of kin. If remains cannot be returned—for example, when the next of kin cannot be identified or contacted—they must be disposed of respectfully and in a manner which will help their future recovery and identification.
- D.3.6** Cremation of unidentified bodies should be avoided. Instead, they should be stored or buried temporarily, pending future identification and return to families.
- D.3.7** All burials should be conducted in a manner that respects the dignity and privacy of the dead and of their living family members. Measures should allow for the possibility of recovery of the human remains for future identification and reburial if required. Local religious and cultural practices and beliefs should be taken into account.
- D.3.8** Measures should be taken to protect funerary sites and monuments from desecration or disturbance.
- D.3.9** Family members should be fully informed about the location of grave sites, and have full access to them. They should be given the opportunity to erect memorials and conduct religious ceremonies as needed.



D.3.10 Family members should have the opportunity to recover the remains of their dead for further forensic investigations and to dispose of them according to their own religious and cultural beliefs and practices.

D.4 Expression, assembly and association, and religion

D.4.1 Mechanisms should be established to enable communities to give feedback and raise complaints or grievances on the disaster relief, recovery and reconstruction response. Efforts should be made to ensure that women and persons with special needs—e.g. children, older persons, persons with disabilities, single-headed households, and members of religious and ethnic minority groups or indigenous peoples—are specially consulted and can participate in all aspects of the disaster response. Persons affected by the natural disaster should be protected against adverse reaction for exchanging information or expressing their opinions and concerns regarding the disaster relief, recovery and reconstruction efforts. Opportunity should be provided for affected persons to conduct peaceful assemblies or to form associations for this purpose.

D.4.2 Religious traditions should be respected, as appropriate, when planning and implementing humanitarian assistance, in particular in the context of food assistance, health care services, and living and sanitary arrangements.

D.4.3 Opportunity should be provided for the exercise of religious faith in a manner that respects the rights and beliefs of others and does not incite discrimination, hostility or violence.

D.5 Electoral rights

D.5.1 Measures should be taken to ensure that persons affected by the natural disaster can exercise their right to vote in elections and to be elected, in particular if they have been displaced. Such measures may include voter registration and arrangements for absentee voting.

D

7. Funding of the Global Facility for Disaster Reduction and Recovery

 		GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY(GFDRR)	
		Year 2007 - 2010	
DONOR	FLAG	PLEGGED IN US DOLLARS(\$)	CONTRIBUTED IN US DOLLARS(\$)
AUSTRALIA		5,081,000.00* <small>*This includes contribution for Myanmar cyclone & China earthquake</small>	5,081,000.00
CANADA		3,511,000.00	3,511,000.00
DENMARK		9,234,000.00* <small>*This includes contribution for Bangladesh cyclone</small>	9,234,000.00
European Commission		400,000.00	— —
ITALY		5,000,000.00	5,000,000.00
JAPAN		6,000,000.00	6,000,000.00
Luxembourg		2,936,000.00	2,936,000.00
Norway		6,337,000.00	6,337,000.00
SPAIN		6,000,000.00	6,000,000.00
SWEDEN		8,753,000.00* <small>*This includes contribution for Myanmar cyclone</small>	8,753,000.00
SWITZERLAND		1,024,000.00	1,024,000.00
UNITED KINGDOM		8,761,000.00	8,761,000.00
THE WORLD BANK		15,000,000.00	15,000,000.00
TOTAL		78,037,000.00	78,037,000.00

Note: The above amounts are based on exchange rate as of June 8, 2008 and may change from time to time due to fluctuations in exchange rate.

8. Submission by the IOM, UNHCR, UNU, NRC and the RSG on the HR of IDPs to the UNFCCC

**SUBMISSION by the
INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM), THE UNITED NATIONS
HIGH COMMISSIONER FOR REFUGEES (UNHCR), THE UNITED NATIONS
UNIVERSITY (UNU), THE NORWEGIAN REFUGEE COUNCIL (NRC) AND THE
REPRESENTATIVE OF THE SECRETARY-GENERAL ON THE HUMAN RIGHTS OF
INTERNALLY DISPLACED PERSONS (RSG ON THE HR OF IDPs)**

**Climate change, migration, and displacement:
impacts, vulnerability, and adaptation options**

6 February 2009

**5th session of the Ad Hoc Working Group on Long-Term Cooperative Action
under the Convention (AWG-LCA 5). Bonn, March 29 – April 8, 2009**

Introduction

The First Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) issued in 1990 noted that the greatest single impact of climate change might be on human migration and displacement. This claim was further substantiated by the findings of the IPCC Fourth Assessment Report (2007), which provided ample indications that climate change will raise the risk of humanitarian emergencies, as a result of, inter alia, increasing intensity of natural hazards. The International Organization for Migration (IOM), the UN High Commissioner for Refugees (UNHCR), the UN University (UNU) and the Norwegian Refugee Council (NRC) agencies directly concerned with migration and displacement issues are already facing the growing impact of climate change on human mobility.

While there are no scientifically verified estimates of climate change-related displacement or of overall population flows triggered by the effects of climate change, it is evident that gradual and sudden environmental changes are already resulting in substantial human migration and displacement. This trend is expected to continue, with anywhere between 50 and 200 million people moving as a result by the middle of the century, either within their countries or across borders, on a permanent or temporary basis. There is a possibility of even higher numbers if the IPCC's worst-case scenarios materialize. In some cases, in particular at early stages of environmental degradation and for those with the resources to move, migration may be an adaptation mechanism, allowing for example to diversify the sources of income. In other instances, in particular in cases of natural disasters and for those with fewer means to move, leaving their places of habitual residence may be an expression of failed adaptation and constitute a survival mechanism.

Ensuring that migration and displacement triggered by climate change are systematically considered and addressed by the international community is our shared responsibility. This cannot be achieved unless these consequences are duly acknowledged in the successor-agreement to the Kyoto Protocol¹.

¹ Climate-change related migration was highlighted in several statements at the fourteenth session of the Conference of the Parties (COP 14), including in the opening statement by the Minister of the Environment of Poland and President of COP 14 and in the statement delivered by the Ambassador of Algeria to the Republic of Poland on behalf of the African Group.

IOM, UNHCR, UNU and NRC therefore compiled this joint submission with the aim of bringing the migration and displacement implications of climate change to the attention of the UNFCCC and requesting that these implications are considered in the 15th Conference of Parties agreement. This submission is based on the assembly document text (FCCC/AWGLCA/2008/16/Rev.1) and contains concrete text proposals in order to indicate the gaps relating to migration and displacement in the previous draft and facilitate the inclusion of these issues in subsequent versions of the draft agreement. Climate-change related migration and displacement is a topic of relevance for Article 4, paragraph 1(e) and 1(f) of the Convention, the Bali Action Plan, and the Nairobi Work Programme.

This submission should be read in conjunction with the previous submissions also relating to the topic of climate change, migration and displacement:

- 1) Change, Migration and Displacement: Who will be affected? Working paper submitted by the informal group on Migration/Displacement and Climate Change of the IASC 31 October 2008 to the UNFCCC Secretariat.
- 2) Disaster Risk Reduction Strategies and Risk Management Practices: Critical Elements for Adaptation to Climate Change Submission to the UNFCCC Adhoc Working Group on Long Term Cooperative Action by The Informal Taskforce on climate change of the Inter-Agency Standing Committee and The International Strategy for Disaster Reduction 11 November 2008.

Ideas and Proposals on paragraph 1 of the Bali Action Plan²

Additional Text Proposals by
IOM, UNHCR, UNU, NRC and RSG on the HR of IDPs³

II. A shared vision for long-term cooperative action

14. On the scientific basis

More analytical inter-disciplinary work is required to improve the knowledge base and understanding of the scale, nature and patterns of climate change related population movements and impacts of such movement on the population distribution at the national, regional and global levels.

There is a need for better assessment of the humanitarian consequences of climate change, including in relation to climate related population movements. Such assessments should be gender sensitive with special attention given to the situation of indigenous peoples. The results of such assessments should feed into disaster risk reduction, risk planning and preparedness strategies and activities.

² FCCC/AWGLCA/2008/16/Rev1, 10 December 2008, the text below refers to the paragraph number and titles as given in this document.

³ These proposals build on the references to migration and displacement and related issues included by the Member States in paragraphs 177 (b) and 187 (g) of the assembly document FCCC/AWGLCA/2008/16/Rev1, 10 December 2008.

16. On the **scope of the shared vision**

Include the consideration of the impacts of climate change on population settlement and movements and the need to manage these impacts, including as part of the adaptation strategies and activities.

Include the recognition of humanitarian consequences of climate change, including migration, displacement and, in some instances, statelessness, and of the need to take action to minimize them, including through prevention of displacement, and to prepare for and address the unavoidable consequences.

17. On **principles for a shared vision**

Consider giving priority to the particular needs of the people most vulnerable to and most affected by climate change, including the displaced and those at risk of displacement.

19. On a shared vision for enhanced action on **adaptation**

Build coherence at national and international levels between mitigation and adaptation policies and other relevant policy domains, such as development, humanitarian action, migration and health.

Include migration, both internal and cross-border, as a possible adaptation strategy, especially at early stages of gradual environmental degradation.

IV. Enhanced action on adaptation

A. International cooperation to support urgent implementation of adaptation actions

99. On the **context of adaptation planning and implementation**

Adaptation strategies and action need to consider the human mobility, health and demographic implications of climate change as well as their economic and social consequences.

Adaptation strategies and action need to consider the humanitarian consequences of climate change, including migration, displacement and the need to prepare for and address them.

Consider giving priority to the particular needs of the people most vulnerable to and the people most affected by climate change, including the displaced and those at risk of displacement.

100. On the **nature of adaptation plans**

(a) A framework/structure for adaptation (AOSIS, MISC.2/Add.1 and MISC.2/Add.2; EC and its member States, MISC.5/Add.1 and MISC.5/Add.2; United States, MISC.5; EC and its member States, adaptation workshop) should be adopted, geared towards the evaluation and implementation of strategies and programme support (EC and its member States, MISC.2; United States, MISC.5) and structured

but flexible (AOSIS, MISC.5/Add.2). The formulation of such a framework/structure should take into account/focus on, inter alia:

Consideration of migration, both internal and cross-border, as a possible adaptation strategy, especially at the early stages of environmental degradation. This will require factoring migration considerations into national adaptation policies and vice versa.

(b) National adaptation plans should go beyond the current NAPAs, and should:

Incorporate other relevant policy considerations such as development, human mobility, disaster prevention and preparedness, avoidance of statelessness and health and be consistent with relevant national policies and strategies.

102. On vulnerability and adaptation assessments to support adaptation planning and Implementation

(a) Consideration of the following elements in order to ensure the effectiveness of the assessment process:

The need to collect better data on the nature and patterns of climate change related population movements and vulnerability mapping to more accurately locate areas experiencing or likely to experience an outward flow of people owing to the direct or indirect effects of climate change.
Vulnerability, risk and adaptation assessments to take account of the risk of displacement and statelessness as well as the particular protection needs of those already displaced.

103. On incentivizing adaptation, and creating enabling environments

(c) That governments should play leading roles in creating enabling environments for adaptation, including through identifying vulnerabilities to climate change; improving the environment for doing business; creating legal and regulatory conditions that facilitate adaptation; reducing perverse incentives that encourage maladaptation; enhancing the necessary information and knowledge base; and educating stakeholders (United States, MISC.5/Add.2);

That governments may consider facilitating the role of migration as an adaptation strategy by strengthening its development effects on areas of origin.

105. Parties proposed that **financial support** be directed at:

Disaster risk reduction, risk management and humanitarian response at all levels, whether local, national, or international.
Community stabilization and development projects aimed at increasing the resilience of vulnerable communities.
Protection and assistance in accordance with the 1998 Guiding Principles on Internal Displacement to persons internally displaced as a result of the effects of climate change. States significantly affected by displacement and migration as a result of climate change may also require support to meet their needs,

including to ensure adequate protection of and assistance to concerned populations.

108. On the ways to enhance knowledge sharing

Facilitate the sharing and dissemination of good practices based on countries experiences in addressing cross-border and internal environmental population movement, relocation and resettlement as well as return.

Support inter-disciplinary cooperation to improve the knowledge base and generate data on the scale, nature and patterns of climate change related population movements.

2. Input by observer organizations

115. On institutional arrangements

(a) Efforts by the United Nations system and other relevant organizations to coordinate action to support Parties in respect to climate change, and specifically to provide support for adaptation practices, should be continued (ISDR, MISC.6), and adaptation efforts should take advantage of the multistakeholder ISDR system and the multi-partner IASC system (IASC/ISDR, MISC.6/Add.1);

D. Economic diversification to build resilience

2. Input by observer organizations

123. Organizations proposed that economic diversification policies should be organized within sectors or by the promotion of new activities from other economic sectors, and that all stakeholders be consulted (ITUC); new activities in other economic sectors should be proposed for workers in sectors at risk, and social dialogue with all stakeholders at all levels needs to be undertaken in an institutionalized manner (ILO, MISC.5/Add.2).

Recognize and facilitate the role of migration, including climate change related migration, as an income diversification strategy at the household level; seek to strengthen the development effect of migrant remittances on areas of origin.

163. On guiding the disbursement of, and access to, financial resources for mitigation and adaptation and technology cooperation

Objective criteria, such as a small number of internationally recognized indicators representing economic status and vulnerability to climate impacts, including the likelihood of migration and displacement could be developed for determining who receives broader multilateral funding.

9. Bali Action Plan

Advance unedited version

Decision -/CP.13

Bali Action Plan

The Conference of the Parties,

Resolving to urgently enhance implementation of the Convention in order to achieve its ultimate objective in full accordance with its principles and commitments,

Reaffirming that economic and social development and poverty eradication are global priorities,

Responding to the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change that warming of the climate system is unequivocal, and that delay in reducing emissions significantly constrains opportunities to achieve lower stabilization levels and increases the risk of more severe climate change impacts,

Recognizing that deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasizing the urgency¹ to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,

1. *Decides* to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session, by addressing, inter alia:
 - (a) A shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention, in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, and taking into account social and economic conditions and other relevant factors;
 - (b) Enhanced national/international action on mitigation of climate change, including, inter alia, consideration of:
 - (i) Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties, while ensuring the comparability of efforts among them, taking into account differences in their national circumstances;
 - (ii) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner;
 - (iii) Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and

¹ Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Technical Summary, pages 39 and 90, and Chapter 13, page 776.

Advance unedited version

- the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;
- (iv) Cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention;
 - (v) Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries;
 - (vi) Economic and social consequences of response measures;
 - (vii) Ways to strengthen the catalytic role of the Convention in encouraging multilateral bodies, the public and private sectors and civil society, building on synergies among activities and processes, as a means to support mitigation in a coherent and integrated manner;
- (c) Enhanced action on adaptation, including, inter alia, consideration of:
- (i) International cooperation to support urgent implementation of adaptation actions, including through vulnerability assessments, prioritization of actions, financial needs assessments, capacity-building and response strategies, integration of adaptation actions into sectoral and national planning, specific projects and programmes, means to incentivize the implementation of adaptation actions, and other ways to enable climate-resilient development and reduce vulnerability of all Parties, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods;
 - (ii) Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance;
 - (iii) Disaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change;
 - (iv) Economic diversification to build resilience;
 - (v) Ways to strengthen the catalytic role of the Convention in encouraging multilateral bodies, the public and private sectors and civil society, building on synergies among activities and processes, as a means to support adaptation in a coherent and integrated manner;
- (d) Enhanced action on technology development and transfer to support action on mitigation and adaptation, including, inter alia, consideration of:
- (i) Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;
 - (ii) Ways to accelerate deployment, diffusion and transfer of affordable environmentally sound technologies;

Advance unedited version

- (iii) Cooperation on research and development of current, new and innovative technology, including win-win solutions;
- (iv) The effectiveness of mechanisms and tools for technology cooperation in specific sectors;
- (e) Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation, including, inter alia, consideration of:
 - (i) Improved access to adequate, predictable and sustainable financial resources and financial and technical support, and the provision of new and additional resources, including official and concessional funding for developing country Parties;
 - (ii) Positive incentives for developing country Parties for the enhanced implementation of national mitigation strategies and adaptation action;
 - (iii) Innovative means of funding to assist developing country Parties that are particularly vulnerable to the adverse impacts of climate change in meeting the cost of adaptation;
 - (iv) Means to incentivize the implementation of adaptation actions on the basis of sustainable development policies;
 - (v) Mobilization of public- and private-sector funding and investment, including facilitation of carbon-friendly investment choices;
 - (vi) Financial and technical support for capacity-building in the assessment of the costs of adaptation in developing countries, in particular the most vulnerable ones, to aid in determining their financial needs;

2. *Decides* that the process shall be conducted under a subsidiary body under the Convention, hereby established and known as the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, that shall complete its work in 2009 and present the outcome of its work to the Conference of the Parties for adoption at its fifteenth session;

3. *Agrees* that the process shall begin without delay, that the sessions of the group will be scheduled as often as is feasible and necessary to complete the work of the group, where possible in conjunction with sessions of other bodies established under the Convention, and that its sessions may be complemented by workshops and other activities, as required;

4. *Decides* that the first session of the group shall be held as soon as is feasible and not later than April 2008;

5. *Decides* that the Chair and Vice-Chair of the group, with one being from a Party included in Annex I to the Convention (Annex I Party) and the other being from a Party not included in Annex I to the Convention (non-Annex I Party), shall alternate annually between an Annex I Party and a non-Annex I Party;

6. *Takes note* of the proposed schedule of meetings contained in the annex;

7. *Instructs* the group to develop its work programme at its first session in a coherent and integrated manner;

Advance unedited version

8. *Invites* Parties to submit to the secretariat, by 22 February 2008, their views regarding the work programme, taking into account the elements referred to in paragraph 1 above, to be compiled by the secretariat for consideration by the group at its first meeting;

9. *Requests* the group to report to the Conference of the Parties at its fourteenth session on progress made;

10. *Agrees* to take stock of the progress made, at its fourteenth session, on the basis of the report by the group;

11. *Agrees* that the process shall be informed by, inter alia, the best available scientific information, experience in implementation of the Convention and its Kyoto Protocol, and processes thereunder, outputs from other relevant intergovernmental processes and insights from the business and research communities and civil society;

12. *Notes* that the organization of work of the group will require a significant amount of additional resources to provide for the participation of delegates from Parties eligible to be funded and to provide conference services and substantive support;

13. *Strongly urges* Parties in a position to do so, in order to facilitate the work of the group, to provide contributions to the Trust Fund for Participation in the UNFCCC Process and the Trust Fund for Supplementary Activities for the purposes referred to in paragraph 12 above and to provide other forms of in kind support such as hosting a session of the group.

10. Resolution 1655 of the Council of Europe on environmental migration – 30 January 2009

Provisional edition

Environmentally induced migration and displacement: a 21st century challenge

Resolution 1655 (2009)¹

1. Migration – both internal and cross-border – is one of the oldest coping strategies for dealing with a degradation of environmental conditions. However, the increase in the magnitude and geographical scale of environmental change caused or exacerbated by both climate change and human activity have led many in the academic circles and in the international community to refer to environmentally induced migration as a new type of phenomenon, and a new challenge for the 21st century.
2. The Parliamentary Assembly recognises that natural disasters and environmental degradation will increasingly determine the nature of human mobility as well as its humanitarian and human security dimensions, which will need to be urgently assessed.
3. It notes with concern the drastic estimates predicting unmanageable environmental migration flows. Already today, over 30 million people worldwide are being displaced because of the increase in desertification, droughts, sea-level rise, industrial accidents, major infrastructure projects and extreme weather events, and this figure is rising sharply. Alarming, this figure already exceeds the number of those obliged to flee because of armed conflicts and persecution.
4. Most in danger are vulnerable groups in the least developed countries whose capacity to prevent, adapt to and reduce the effects of climate change is extremely poor, those residing in low-lying coastal areas and areas of considerable over-population. Europe is not immune to the consequences of climate change and environmentally induced migration either.
5. Environmentally induced migration is rarely mono-causal. The cause-consequence relations are increasingly complex and multi-factorial. A growing number of people flee because of multiple causes of discrimination and human rights abuses, environmental degradation, competition for scarce resources and economic hardship caused by dysfunctional states. Some leave voluntarily, some flee because there is no other choice; and some may make the decision to move before they have no other choice but to flee. The different degrees of force and the complex set of influencing factors blurs the

traditional concepts of migration and displacement, creating confusion among the academia and the international community about whether to talk about migration or displacement in the case of people fleeing disasters and environmental degradation.

6. The interaction between the environment and migration is a two-way process: besides sudden or slow on-set environmental disasters leading to both internal and cross-border movements of people, massive migration for environmental reasons may in turn affect environmental conditions both in areas of origin and destination and the transit routes in between, notably when large concentrations of people are forced to seek refuge in other ecologically fragile areas. The Assembly deems it an urgency to develop better understanding of the net impact of migration on the environment in areas of concern.

7. Migration can also be a positive and proactive diversification and development strategy that households, individuals and sometimes whole communities adopt to improve their lives and reduce risk and vulnerability. Mass migration can however have negative impacts, including escalating humanitarian crisis, rapid urbanisation, associated slum growth and stagnated development.

8. One of the most fundamental issues in climate change and environmentally induced migration is that it is a global process, not a local crisis. Hence it is the responsibility of the global community and not only that of local and national authorities to engage in proactive intervention. Adequate measures for prevention, adaptation and mitigation need to be taken by the global community in order for the "hotspot" countries to reduce their vulnerability to the impacts of environmental disasters and manage the evolution of environmental processes.

9. Mass population flows, caused by scarcity of resources coupled with state mismanagement and poor governance can lead to instability and provoke conflict situations. Such conflicts could result in increased refugee flows and internal population displacement and, more generally, could reduce global political stability and human security. The Assembly believes that, in order to avoid such negative scenarios, Europe should be at the forefront in addressing the growing and shared challenge of environmentally induced migration and displacement.

10. Vulnerable groups such as women, children, the elderly, persons with disabilities and indigenous peoples in the poorest countries are exposed to cumulative vulnerabilities and require special consideration. The elderly leave their home areas and have few possibilities of adapting. Children are cut off from their ethnic and cultural environments and, in many cases, from everyday communication in their mother tongues, which is an important factor in their upbringing and their understanding of the world. The Assembly particularly observes that, due to traditional female roles and activities in many societies, women are more vulnerable to the effects of climate change than men. It underlines the importance of recognising gender specific impacts of climate change from the outset of policy setting.

11. The majority of migratory movements prompted by climate change

and environmental degradation are expected to occur within countries, although increased cross-border movement of people will also occur. The Assembly maintains that all the affected persons, whether or not they leave their country, need to be properly protected as regards their human, social and economic rights. Furthermore, this protection should include reliance on effective support from the international community if national support is lacking or insufficient.

12. The Assembly is concerned about the lack of consensus within the international community as regards the applicable international legal terminology concerning human mobility associated with environmental disasters and degradation. The variety of terms interchangeably used today hinders the much-needed progress on the recognition and legal protection of environmental migrants and displaced persons.

13. The difficulty arises from different approaches to the concept of migration, which itself lacks a universal definition. The humanitarian organisations advocate the need to maintain a distinction between cross-border migration and internal displacement, voluntary and forced movements, in fear of undermining the existing categories they are mandated to protect. They argue that the definition of internally displaced persons as stipulated in the 1998 United Nations Guiding Principles on Internal Displacement already includes persons or groups who have been forced or obliged to flee or leave their homes or places of habitual residence as a result or in order to avoid natural or human-made disasters.

14. Various development agencies focusing on broader population and development issues, on the other hand, prefer to talk about environmental migration as an overarching concept, inclusive of all persons who have an environmental factor as the major driver for movement. They maintain that migration includes both international and internal, voluntary and forced categories of movement, and everything in between.

15. The Assembly welcomes the recent efforts undertaken by the informal United Nations Inter-Agency Standing Committee in aspiring to establish commonly accepted terminology and concepts. From its own perspective, it sees the need to cover the full range of human mobility caused by environmental factors implying any length of time and degree of possibility of return, while upholding the universally adopted protection standards prescribed in international law and normative frameworks.

16. The Assembly observes that whereas there exists a large body of well-established international, regional and national legal instruments, conventions and norms to protect the rights of people forcibly displaced by conflict and persecution, and to some extent by natural disasters or conflicts over resources, many gaps remain in the existing protection frameworks. Particularly for those considered to have moved due to gradual environmental degradation, there may be normative and operational protection gaps, internally and internationally. In addition, when it comes to the small island states that risk becoming submerged, there may be a serious gap in the existing international treaties on statelessness.

17. Whereas these gaps need to be more thoroughly researched, and

while emphasising the need to recognise existing protection instruments (for example, for environmentally displaced persons under the Guiding Principles), the Assembly observes that no legal framework or defined policy exists that would cover the full scope of environmentally induced migration in the widest sense of the term. It therefore calls upon international organisations active in this field to consider the elaboration of a specific framework for the recognition and protection of environmental migrants, either in a separate convention or as parts of multilateral environmental treaties, or as both.

18. Alternatively, the Assembly encourages the respective United Nations agencies to consider extending the Guiding Principles on Internal Displacement to include persons displaced by gradual environmental degradation, while in parallel creating a similar synthesis of existing international law on external displacement in the form of principles.

19. In this context, and in particular with reference to its [Recommendation 1631](#) (2003) on internal displacement in Europe, the Assembly expresses its continued support to the humanitarian action and normative frameworks developed over the last decade to protect the internally displaced persons through the Guiding Principles on Internal Displacement. Ten years after the adoption of this unique source of guidance for providing assistance and protection to people forced to move within the borders of their countries, it is time to question whether time has come to enhance its impact not only by ensuring that its principles are enshrined in national legislation but also through working it into a binding instrument, as is presently being done by the African Union.

20. The Assembly remains concerned by the fact that there is not a single international organisation today that explicitly focuses on the problems and protection of people moving or having to move their places of habitual residence mainly or exclusively for environmental reasons. It recognises the leading role that the United Nations agencies, particularly the United Nations High Commissioner for Refugees (for example in the humanitarian protection cluster), have to play in providing protection and humanitarian assistance to those fleeing environmental disasters.

21. In addition to humanitarian action, the Assembly encourages an effective co-ordination structure to be established that would pull the various international agencies and stakeholders together. To this end, it invites a co-ordinating commission for environmental migration to be created with a mission to co-ordinate the work of international organisations that focus on different aspects of the problem of environmentally induced migration, including through risk reduction, humanitarian response, adaptation and development.

22. The Assembly regrets that, when natural disasters occur, consequent environmental displacement and migration do not figure in disaster statistics. In the absence of an overarching organisation collecting or assembling statistics on non-conflict displacement, it urges the international humanitarian community and all countries falling victim of natural disasters to include - to the extent possible - the internally displaced and cross-border migrants in disaster statistics.

23. The adaptation policies aimed at the protection of health and livelihoods of developing countries' populations are essential in dealing with those impacts of climate change that became unavoidable. Such policies must be strengthened and supported through international development assistance.

24. In the light of the above, the Assembly calls upon its member states to:

- 24.1. support the adoption of a clearly defined and inclusive working definition that covers all forms of movement from voluntary to forced and includes the full range of human mobility caused by environmental factors to be applied by state institutions and humanitarian organisations involved in the assistance to and effective protection of those concerned; such definition should be consistent with international and regional standards and recognise the different protection needs and rights of those affected;
- 24.2. take adequate measures to reduce the vulnerability of developing countries to the impacts of environmental disasters and manage the evolution of environmental processes;
- 24.3. undertake a comprehensive study, including primary data collection, and develop policies assessing the complex interaction of environmental change, migration, displacement and conflict;
- 24.4. contribute, through active participation in the work of the international organisations dealing with this issue, to the investigation of existing gaps in law and protection mechanisms with a view to an eventual elaboration of a new international convention providing internationally assured protection to people displaced because of environmental degradation and natural and man-made disasters when return is impossible;
- 24.5. pre-empt the work at international level by elaborating national legislation that would recognise environmentally induced migrants and their protection needs not only through the principle of non-refoulement under Articles 2 and 3 of the European Convention of Human Rights but also through subsidiary protection, e.g. granting them a status of temporary humanitarian residence or a permanent status in case of impossibility of return;
- 24.6. promote multi-disciplinary research involving climate science, geography, migration, development and energy studies, disaster studies, environmental studies, social cohesion and health with a view to improved understanding and recognition of the links between the movement of people and environmental factors;
- 24.7. promote policy coherence at national and international levels among migration, development, and humanitarian policies and adaptation policies to climate change, including by supporting the inclusion of migration and displacement consequences of climate change in the UNFCCC' successor-agreement to the Kyoto Protocol;
- 24.8. take into account a gender perspective when elaborating national and international policies and protection frameworks on environmentally induced migration.

25. The Assembly further calls upon the European Union to take the above into consideration while elaborating their comprehensive immigration policy strategy. This strategy is needed at pan-European, regional, national and local levels. It should improve risk anticipation and management and disaster

response, offer adequate protection to the victims of climate and environmental disruptions and provide instruments for compensation and resettlement. It should also encourage awareness raising and sensitivity of the populations and authorities concerned.

26. In particular, the Assembly encourages the European Union to use the ongoing amendment process outlined in the Policy Plan on Asylum for better addressing the protection gap in cross-border environmental displacement. The Finnish and Swedish legislation and case-law should be more looked into to see whether it could serve as best-practice or even a model for a new subparagraph, thereby explicitly recognising cross-border environmentally displaced persons in Europe.

27. The Assembly further calls upon the European Union to create an appropriate system of funding, at European level, supporting prevention and adaptation strategies, development and migration management projects as well as improved humanitarian response.

28. The Assembly is convinced that the time to address the dangerous environmental degradation including climate change is now. Action for this must be co-ordinated and swift: policy makers, the scientific community, civil society and other actors - at both national and international levels - must seek common solutions for those people who are currently or who may be induced to migrate in order to seek safe and sustainable existences.

¹ *Assembly debate* on 30 January 2009 (9th Sitting) (see [Doc. 11785](#), report of the Committee on Migration, Refugees and Population, rapporteur: Mrs Acketoft, and [Doc. 11814](#), opinion of the Committee on the Environment, Agriculture and Local and Regional Affairs, rapporteur: Mr Ivanov). *Text adopted by the Assembly* on 30 January 2009 (9th Sitting).

See also [Recommendation 1862](#) (2009)

11. Recommendation 1862 of the Council of Europe on environmental migration – 30 January 2009

Provisional edition

Environmentally induced migration and displacement: a 21st century challenge

Recommendation 1862 (2009)¹

1. Referring to its [Resolution 1655](#) (2009) on “Environmentally induced migration and displacement: a 21st century challenge”, the Parliamentary Assembly draws attention to the numerous activities carried out by the Council of Europe in relation to the environment and migration.

2. It welcomes the work the Committee of Ministers has previously undertaken in elaborating the European Convention on the Legal Status of Migrant Workers (ETS No. 093) as well as in promoting the United Nations Guiding Principles on Internal Displacement, leading to the adoption of Committee of Ministers Rec(2006)6 on Internally Displaced Persons. These recommendations are in line with the 1998 United Nations Guiding Principles on Internal Displacement, which include also “*persons displaced from their homes or places of habitual residence due to natural or man-made disasters*”.

3. The Assembly recalls the Council of Europe's duty to promote the universal protection of human rights of all vulnerable groups and to improve, whenever necessary, the legislation to this end. It encourages member states to assume a pioneering role in standard setting in the field of protection of people compelled to leave their homes mainly or exclusively for environmental reasons.

4. The Assembly is concerned about the various gaps in international human rights and refugee law, which leaves various categories of people fleeing environmental disasters internally or by crossing international borders, including European borders, without adequate legal protection.

5. It is equally concerned that people in Europe have no specific legal remedy against human-induced environmental degradation and climate change that affects their health and safety.

6. Consequently, the Assembly invites the Committee of Ministers to:

- 6.1. launch a dialogue among its member states with a view to promoting understanding of the existence and scale of the problems related to environmentally induced migration and encouraging

concerted action. This action should aim at either improving the existing international protection framework or complementing the latter by elaboration of new binding instruments, and prioritise the challenges of prevention, adaptation and development as integral elements of the international response;

- 6.2. set up a working group, in co-operation with other European institutions, to carry out a comprehensive legal study on the gaps in existing international law and normative regulations with a view to an eventual elaboration of a European framework convention for the recognition of status of environmental migrants, should this be deemed necessary;
- 6.3. consider adding an additional protocol to the European Convention on Human Rights, concerning the right to a healthy and safe environment; such a protocol would introduce the precautionary principle in the Convention and would reflect the way the concept of "human rights" has evolved since the Convention was drafted;
- 6.4. continue to urge member states to incorporate the United Nations Guiding Principles on Internal Displacement and the thirteen principles elaborated in Recommendation Rec(2006)6 of the Committee of Ministers in their national legislation;
- 6.5. encourage its United Nations and other relevant partners to seek avenues for extending the Guiding Principles to include people displaced by gradual environmental degradation processes, and to consider developing similar Guiding Principles or Guidelines to cover the rights of those moving across international borders for compelling environmental reasons ("external displacement");
- 6.6. avail its expertise on legal, environment and migration issues to the United Nations Inter-Agency Standing Committee working group or any other international co-operation body set up for the purpose of setting standards for the protection of environmental migrants;
- 6.7. adopt a recommendation calling on member states to develop in their spatial planning policies a common European approach to preventing and managing extreme climate events as the main cause of environmental migration;
- 6.8. encourage dialogue between environmental, migration and demographic research centres in Council of Europe member states to widen and deepen the understanding of root causes of environmentally induced migration;
- 6.8. prioritise the actions of the Council of Europe Development Bank that contribute to protecting and improving the environment. Projects that provide appropriate responses to urgent needs and to sustainable prevention action of environmental deterioration in a long-term perspective should be particularly supported;
- 6.9. support, in co-operation with international and financial

institutions, the development of programmes for helping the public to adapt to the inevitable effects of climate change so as to reduce migration flows resulting from environmental factors.

1 *Assembly debate* on 30 January 2009 (9th Sitting) (see [Doc. 11785](#), report of the Committee on Migration, Refugees and Population, rapporteur: Mrs Acketoft, and [Doc. 11814](#), opinion of the Committee on the Environment, Agriculture and Local and Regional Affairs, rapporteur: Mr Ivanov). *Text adopted by the Assembly* on 30 January 2009 (9th Sitting).

12. Belgian Senate – Proposition of resolution aiming to promote the adoption of an environmental refugee status in international conventions (Doc. 3-1556/3, 21 March 2006)

3-1556/3

Sénat de Belgique

SESSION DE 2005-2006

21 MARS 2006

Proposition de résolution visant à la reconnaissance dans les conventions internationales du statut de réfugié environnemental

TEXTE ADOPTÉ PAR LA COMMISSION DES RELATIONS EXTÉRIEURES ET DE LA DÉFENSE

Proposition de résolution visant à promouvoir la reconnaissance dans les conventions internationales du statut de réfugié environnemental

(Nouvel intitulé)

LE SÉNAT,

A. Considérant que le Programme Environnemental des Nations unies (PNUE) définit les réfugiés environnementaux comme des personnes forcées de quitter leurs habitations traditionnelles d'une façon temporaire ou permanente, à cause d'une dégradation (naturelle ou humaine) nette de leur environnement qui bouleverse gravement leur cadre de vie et/ou qui déséquilibre sérieusement leur qualité de vie.

B. Considérant que chaque changement physique, chimique et/ou biologique dans l'écosystème qui le rend temporairement ou en permanence inapte pour une habitation humaine est considéré comme une dégradation de l'environnement (PNUE, 1985).

C. Considérant que, selon le constat établi par une étude de l'Institut pour la sécurité

environnementale et humaine (ISEH) de l'Université des Nations unies (UNU, Bonn) rendue publique le 11 octobre 2005, 50 millions de personnes pourraient devenir des « réfugiés environnementaux » au cours des prochaines années.

D. Considérant que la montée du niveau des mers, le phénomène de désertification, les canicules ou les inondations obligeront prochainement des populations entières à quitter leurs lieux de résidence pour aller s'établir dans des régions où le climat est plus accueillant.

E. Considérant qu'il y a des craintes bien fondées selon lesquelles les populations fuyant des conditions environnementales invivables pourraient croître de façon exponentielle au cours des prochaines années, alors que la planète subit des effets du changement climatique et d'autres phénomènes comme la désertification.

F. Considérant que la dégradation de l'environnement peut avoir des origines naturelles (tornades, cyclones, éruptions volcaniques, tremblements de terre, etc.) ou directement causées par des activités humaines (déforestation des forêts tropicales, construction de grands barrages, catastrophes nucléaires, pollution, etc.).

G. Considérant que la dégradation de l'environnement peut aussi être une association de causes humaines et naturelles (inondations, sécheresses provoquée par des changements climatiques).

H. Considérant que selon l'ONU, la communauté internationale devra donc faire face à des mouvements de population importants au cours des prochaines années et qu'il est nécessaire que cette nouvelle catégorie de réfugiés environnementaux puisse trouver une place dans le cadre d'accords internationaux existant.

I. Considérant qu'à l'heure actuelle, les réfugiés environnementaux ne sont pas encore reconnus dans les conventions internationales, comme c'est le cas pour les réfugiés politiques, et de ce fait ils n'ont donc pas accès aux mêmes ressources financières ou aux services de santé auxquels ont droit les réfugiés politiques.

J. Considérant que 20 millions de personnes ont déjà été déplacées à cause de problèmes liés à des formes diverses de dégradation de l'environnement, de l'érosion des terres arables à la pollution des nappes phréatiques, précisent les experts de l'ONU.

K. Considérant que le problème posé par les réfugiés environnementaux est lié à leur statut juridique car selon l'article 1^{er} de la Convention de Genève, un réfugié est une personne qui craint, avec raison, d'être persécutée du fait de sa race, de sa religion, de sa nationalité, de son appartenance à un certain groupe social ou de ses opinions politiques et qui ne peut ou ne veut pas retourner dans son pays en raison de cette crainte.

L. Considérant que l'avenir des réfugiés environnementaux passe donc par la reconnaissance juridique de leur existence pour permettre aux différentes organisations d'accomplir leur mission.

DEMANDE AU GOUVERNEMENT:

1. de promouvoir et de soutenir au sein des Nations unies la reconnaissance du statut de réfugié environnemental, afin qu'une solution juridique soit apportée au problème de ces réfugiés, et ce dans le cadre de la Convention de Genève sur les réfugiés;

2. de veiller à mettre cette question à l'ordre du jour d'un prochain Conseil des ministres de la Justice et des Affaires intérieures de l'Union européenne;

3. de saisir le Conseil du développement durable de la question.

**13. Australian Senate – Migration (Climate Refugees) Amendment Bill
2007**

2004-2005-2006-2007

The Parliament of the
Commonwealth of Australia

THE SENATE

Presented and read a first time

**Migration (Climate Refugees)
Amendment Bill 2007**

No. , 2007

(Senator Nettle)

**A Bill for an Act to recognise refugees of climate
change induced environmental disasters, and for
related purposes**

1 **A Bill for an Act to recognise refugees of climate**
2 **change induced environmental disasters, and for**
3 **related purposes**

4 The Parliament of Australia enacts:

5 **1 Short title**

6 This Act may be cited as the *Migration (Climate Refugees)*
7 *Amendment Act 2007*.

8 **2 Commencement**

9 This Act commences on the day after the day on which it receives
10 the Royal Assent.

11 **3 Schedule(s)**

12 Each Act that is specified in a Schedule to this Act is amended or
13 repealed as set out in the applicable items in the Schedule
14 concerned, and any other item in a Schedule to this Act has effect
15 according to its terms.

1
2 **Schedule 1—Amendment of the Migration Act**
3 **1958**

4 **1 Subsection 5(1) (after the definition of *character concern*)**

5 Insert:

6 *climate change induced environmental disaster* means a disaster
7 that results from both incremental and rapid ecological and
8 climatic change and disruption, that includes sea level rise, coastal
9 erosion, desertification, collapsing ecosystems, fresh water
10 contamination, more frequent occurrence of extreme weather
11 events such as cyclones, tornados, flooding and drought and that
12 means inhabitants are unable to lead safe or sustainable lives in
13 their immediate environment.

14 **2 After section 36**

15 Insert:

16 **36A Climate change refugee visas**

- 17 (1) There is a class of visas to be known as climate change refugee
18 visas.
- 19 (2) A criterion for a climate change refugee visa is that the applicant
20 for the visa is a person who has been displaced as a result of a
21 climate change induced environmental disaster.
- 22 (3) If a person makes an application for a climate change refugee visa,
23 the Minister must in accordance with subsection (4) make a climate
24 change induced environmental disaster declaration in relation to
25 the climate change circumstance which is the subject of the
26 person's visa application.
- 27 (4) A climate change induced environmental disaster declaration must
28 be made by the Minister before the expiration of three weeks from
29 the date of receipt of the visa application.
- 30 (5) In making the declaration, the Minister may give consideration to:
31 (a) the geographical scope of the disaster;
32 (b) adaptation options and long term sustainability;

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- 1 (c) the capability of the country and neighbouring countries to
2 absorb displaced persons;
3 (d) international efforts to assist.
- 4 (6) The power to make a declaration under subsection (3) must only be
5 exercised by the Minister personally.
- 6 (7) The Minister may set a limit on the number of climate change
7 refugee visas that will be issued pursuant to any such declaration.
- 8 (8) The Minister may make regulations setting out criteria by which a
9 displaced person within the area covered by the declaration may
10 apply to be accepted for a climate change refugee visa.

14. Registration form for the Pacific Access Category

Registration Form for Pacific Access Category



New Zealand
Immigration Service
Te Ratonga Manene

Information for Pacific Access Category applicants

What is the Pacific Access Category?

The Pacific Access Category (PAC) allows a set quota of:

- citizens of Kiribati; **and**
- citizens of Tuvalu; **and**
- citizens of Tonga; **and**
- citizens of Fiji

to be granted residence in New Zealand each year.

Who is eligible for residence under the PAC?

You will only qualify for residence if you, the principal applicant, meet the following criteria:

- you are a citizen of Kiribati, Tuvalu, Tonga, or Fiji; **and**
- you have registered for the PAC and your registration has been drawn from the ballot (see **How do I register for the PAC?** on the next page); **and**
- you are aged between 18 and 45 inclusive; **and**
- you have an acceptable offer of employment in New Zealand; **and**
- you lodge your application for residence under the PAC within 6 months of the NZIS writing to you saying that your registration has been drawn from the ballot; **and**
- you meet a minimum level of English language ability; **and**
- you meet the minimum income requirement, if you have dependent children; **and**
- you, your partner, and/or dependent children meet health and character requirements.

ALSO:

- Principal applicants who are citizens of **Tonga** must be either in Tonga or lawfully in New Zealand, at the time their application for residence under the PAC is made. You must also have been born in Tonga or born overseas to a Tongan citizen who was born in Tonga.
- Principal applicants who are citizens of **Kiribati** must be either in Kiribati or Fiji, or lawfully in New Zealand, at the time their application for residence under the PAC is made. You must also have been born in Kiribati or born overseas to a Kiribati citizen who was born in Kiribati.
- Principal applicants who are citizens of **Tuvalu** must be either in Tuvalu or Fiji, or lawfully in New Zealand, at the time their application for residence under the PAC is made. You must also have been born in Tuvalu or born overseas to a Tuvaluan citizen who was born in Tuvalu.
- Principal applicants who are citizens of **Fiji** must be either in Fiji, or lawfully in New Zealand, at the time their application for residence under the PAC is made. You must also have been born in Fiji or born overseas to a Fijian citizen who was born in Fiji.

Definitions

- The **principal applicant** is the person who fills in the "Principal Applicant's Details" section of this registration form and must meet the criteria set out above.
- **Dependent children** are those of your children who are totally or mostly reliant on you or your partner for financial support, whether or not they are living with you, and who are either:
 - single, aged 17-24, and with no children of their own; **or**
 - single, and aged 16 or younger.
- The **minimum English requirement** is that you can satisfy a visa or immigration officer that you can read English, understand and respond to questions in English, and hold a conversation about yourself, your family, or your background.
- Applicants have to meet the minimum income requirement in accordance with the Pacific Access Category Policy. Your closest NZIS branch can tell you the dollar amount of the **minimum income requirement**. If you and your partner both have an acceptable job offer, both of your wages or salaries can be taken into account when we check to see if you meet the minimum income requirement. Where you both have acceptable job offers, only one of the jobs has to be full-time (see below).
- Your **job offer** must be for work that is permanent, full-time, genuine, and paid by salary or wages. Your closest NZIS branch has more information about job offer criteria.
- You can include your **partner** in your registration, but for your partnership to be recognised you must:
 - be living together (and have been for a minimum of 12 months) in a genuine and stable relationship; **and**
 - both be aged 18 years or older (or have the consent of your parents or guardians if you are aged between 16 and 18); **and**
 - have met each other prior to your application being made; **and**
 - not be close relatives.

IMPORTANT NOTE:

You do not need to provide evidence of your job offer, your English language ability, or your health and character until you are invited to apply for residence. Should you be granted residence under the PAC, you are responsible for your own travel arrangements and all living costs in New Zealand.

How do I register for the PAC?

If you meet the criteria listed on the front of this form under **Who is eligible for residence under the PAC?**, fill in this form and send it, together **with the registration fee** and a **certified true copy of your birth certificate** to: NZIS, Pacific Access Category, PO Box 76835, Manukau City, Auckland, New Zealand, **or** bring it to the NZIS Manukau City Branch Office, Level 2, 20 Amersham Way, Cogita House, Manukau City.

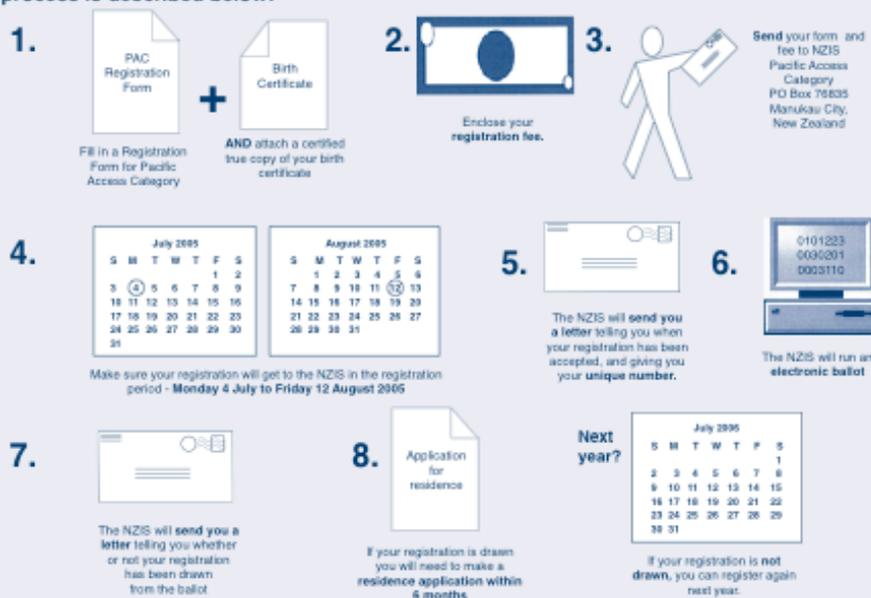
You need to make sure the form is **received** by the NZIS during the registration period. **The registration period for 2005 is from Monday 4 July 2005 to 3pm on Friday 12 August 2005. Forms received outside those dates will not be accepted.**

The NZIS will enter all the registrations from people who meet the PAC requirements into a ballot. There is one ballot for each of the four countries included in the PAC. The NZIS will run the ballot electronically at the end of the registration period. Registrations will be randomly drawn from the ballot until the number of places for each country has been met.

The NZIS will then send you a letter telling you whether or not your registration was drawn out of the ballot. If your registration is drawn from the ballot, you must lodge a residence application within 6 months from the date of the letter. Your residence application should be made to the following branches of the NZIS: **Suva** branch if you live in Fiji, Tuvalu or Kiribati; **Nuku'alofa** branch if you live in Tonga; **Manukau City** branch if you are in New Zealand.

If your registration is not drawn from the ballot, you can register again next year in a subsequent registration period at a reduced fee, as long as all the same people are included in your registration.

This process is described below:



Who can I include in my registration?

DO include your partner and/or dependent children (see **Definitions** on the front page) in your registration. If your registration is drawn from the ballot, only the people who were listed on the registration will be able to be included on your residence application. If you do not include your partner and/or dependent children on your registration, these people will not be able to apply for residence under the Partnership Policy or Dependent Child Policy of Family Category later.

DO NOT include your parents, grandparents, uncles, aunts, nieces, nephews, brothers, sisters, or cousins in your registration.

Please note

- Each principal applicant may only submit **one registration form** during the registration period.
- If you, or any of the people you have included in your registration, are included in another registration in the same registration period, the second registration will **not** be accepted.
- **It is important that you give us a contact address and telephone number so we can notify you if your registration number is drawn.**

Please tear off and keep these notes if you wish

Registration Form For Pacific Access Category



New Zealand
Immigration Service
Te Ratonga Manene

NZIS use only
Client number:
Registration
number:

A. Principal Applicant's Details

A1 Your name as shown in passport (or birth certificate if you don't have a passport)

Family Name: Given Names:

A2 Please provide all other names you are known by or have been known by.
(including the full name on your original birth certificate if different from the names stated in Question **A1**)

A3 Your sex? Male Female

A4 Your date of birth - Please attach a certified true copy of your birth certificate

<input type="text"/>	<input type="text"/>	<input type="text"/>
day	month	year

A5 Your country of birth?

A6 Your country (or countries) of citizenship?

A7 Your country of residence (what country do you normally live in)?

A8 Your partnership status (*Married, Partnered, Separated, Divorced, Widowed, Single*)?

A9 Your contact details if we need to contact you about this registration?

Address for correspondence:	Telephone (day):
<input type="text"/>	Telephone (night):
<input type="text"/>	Email (if any):
Home address (if different from above):	Fax (if any):
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

A10 Did an agent or other person help you to complete this form? Yes No
If Yes, please give their contact details below and ensure they sign the declaration on page 6. (If "No" go to Question **B1**).

Name & address for correspondence of person who assisted the applicant to complete this form:	Telephone (day):
<input type="text"/>	Telephone (night):
<input type="text"/>	Email (if any):
<input type="text"/>	Fax (if any):

A11 If you have given the name and address of an agent or representative in Question **A10** do you authorise that person to act on your behalf? Yes No

Please note: if you tick "Yes" for Question **A11** we will send all correspondence about your registration to the person named in Question **A10**.

Please staple
**photo of
Principal Applicant**
in this box.

The photo should
be no more than **3**
months old

B. Family Details

B1 Please list all immediate family (that is, partner, and any dependent children) who would be included in your application for residence if you are successful in the ballot. See **"Who can I include in my registration?"** on page 2.

Please list names as shown in passports (if they have one) or birth certificate (if they do not have a passport). Continue on a separate sheet of paper if necessary. (If no family members are included, please state "None" in **B2** and **B3**.)

Please note: You must list all of your immediate family members who would be included in your application for residence if you are successful in the ballot. Immediate family members who are not named in this registration form will not be able to be included in your application for residence under the Pacific Access Category. Any immediate family members not included in this registration form will **also** not be able to be approved for residence later under the Partnership Policy or Dependent Child Policy of the Family Category.

B2 Partner - Please attach a certified true copy of your partner's birth certificate

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

B3 Dependent Child 1

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

B4 Dependent Child 2

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

B5 Dependent Child 3

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

B6 Dependent Child 4

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

B7 Dependent Child 5

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

B8 Dependent Child 6

Family name:		Country of citizenship:	
Given names:		Country of residence:	
Date of birth:	Sex:	Relationship to you:	Partnership status:
day month year	M F		

C. Qualifications, Skills & Work Experience Details

Principal Applicant:

C1 Please list below any formal qualifications you have obtained

Type of qualification	Where obtained	When obtained

C2 Do you have a current driver's licence? Yes No

C3 Please list your work experience below. You should include both paid and unpaid work experience (for example volunteer work). *Continue on a separate sheet of paper with your name if not enough space below.*

Type of work experience	Name of employer or organisation you worked for	How long did you work for? (number of weeks, months or years)

Applicant's partner:

C4 Please list below any formal qualifications your partner has obtained

Type of qualification	Where obtained	When obtained

C5 Does your partner have a current driver's licence? Yes No

C6 Please list your partner's work experience below. You should include both paid and unpaid work experience (for example volunteer work). *Continue on a separate sheet of paper with your partner's name if not enough space below.*

Type of work experience	Name of employer or organisation you worked for	How long did you work for? (number of weeks, months or years)

D. Declaration

I understand the information and questions in this form and the information I have given is true and complete.

Signature of applicant

day month year

E. Declaration for Person Assisting the Applicant to Complete This Form

To be completed and signed by any person who has assisted the applicant to complete this form by explaining, translating or filling in the form for the applicant.

Full name of person assisting:

Address of person assisting:

I understand that after the applicant has signed this form it is an offence to alter or enter further information on it, alter any material attached to it, or attach any further material to it, unless the person making the alteration or addition states on the form what information or material has been altered or attached, why, and by whom. I understand that the maximum penalty for this offence is a fine of up to NZ\$100,000 and/or a term of imprisonment of up to 7 years.

I certify that I have assisted in the completion of this form and any additional sheets at the request of the applicant **and** that the applicant understood the content of the form(s) and agreed that the information provided is correct before signing the declaration. I have assisted the applicant as a:

lawyer agent, consultant or representative translator friend or family member other advisor

Please specify:

Signature of person assisting:

day month year

F. Fee Payment Details

I am paying (amount)

Preferred methods of payment

Bank Cheque/Bank Draft *EFTPOS Credit card

**Note the EFTPOS option is not available if lodging application by mail.*

Credit card (specify type) Mastercard Visa

Name of Cardholder

Card number

Expiry Date

Signature

day month year

The following methods of payment can be used but are not recommended for the noted reasons

Personal Cheque Your registration will be held for 10 working days to ensure the cheque has cleared before it will be processed

Cash **Cash should not be sent through the mail for security reasons**

Note: Please see our leaflet **New Zealand Immigration Guide to Fees** (NZIS 1028). All current fees and specific payment instructions for offshore branches can be found on the NZIS website at www.immigration.govt.nz

Privacy Act

The information about you and your family requested on this form is being collected so the New Zealand Immigration Service can determine whether you are eligible to register under the Pacific Access Category. The main recipient of this information is the New Zealand Immigration Service of the Department of Labour, but it may also be shared with other Government agencies which are entitled to this information under applicable legislation. The address of the New Zealand Immigration Service is PO Box 3705, Wellington, New Zealand. This is not where your registration should be sent. The collection of the information is authorised by the Immigration Act 1987 and the Immigration Regulations made under that Act. If you come to New Zealand you have the right to see information about you held by the New Zealand Immigration Service and to ask for any of it to be corrected.

CHECKLIST - PLEASE COMPLETE

Please ensure your Registration Form for Pacific Access Category includes all the following:

If you fail to meet any of the following requirements your registration form may be returned to you.

For speed of registration processing and document security, we recommend that you provide certified true copies instead of original documents.

Have You:

1. SIGNED the registration form?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
2. Included the CORRECT REGISTRATION FEE?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
3. Attached certified true copies of birth certificates for the principal applicant, and any partner included in this registration form?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
4. Included the DATE OF BIRTH of all people listed on this registration form?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
5. Enclosed a PRE-PAID, SELF-ADDRESSED ENVELOPE for the secure return of your documents? We will return any original documents by ordinary mail unless you supply a pre-paid, self-addressed courier envelope.	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

**15. Belgian House of Representatives – Proposition of Resolution
aiming for the recognition of a specific status for climate refugees
(Doc. 52-1478/001, 14 October 2008)**

DOC 52 **1478/001**

BELGISCHE KAMER VAN
VOLKSVERTEGENWOORDIGERS

14 oktober 2008

VOORSTEL VAN RESOLUTIE

**betreffende de erkenning van een specifieke
status voor de klimaatvluchtelingen**

(ingediend door mevrouw Juliette Boulet,
de heer Wouter De Vriendt en mevrouw
Zoé Genot)

DOC 52 **1478/001**

CHAMBRE DES REPRÉSENTANTS
DE BELGIQUE

14 octobre 2008

PROPOSITION DE RÉSOLUTION

**visant à la reconnaissance d'un statut
spécifique pour les réfugiés climatiques**

(déposée par Mme Juliette Boulet,
M. Wouter Devriendt et Mme Zoé Genot)

2325

cdH	:	centre démocrate Humaniste		
CD&V	:	Christen-Democratisch en Vlaams		
Ecolo-Groen!	:	Ecologistes Confédérés pour l'organisation de luttes originales – Groen		
FN	:	Front National		
LDD	:	Lijst Dedecker		
MR	:	Mouvement Réformateur		
N-VA	:	Nieuw-Vlaamse Alliantie		
Open Vld	:	Open Vlaamse Liberalen en democraten		
PS	:	Parti Socialiste		
sp.a+VI.Pro	:	Socialistische partij anders + VlaamsProgressieven		
VB	:	Vlaams Belang		
Afkortingen bij de nummering van de publicaties :			Abréviations dans la numérotation des publications :	
DOC 52 0000/000 :		Parlementair document van de 52 ^e zittingsperiode + basisnummer en volgnummer	DOC 52 0000/000 :	Document parlementaire de la 52 ^{ème} législature, suivi du n° de base et du n° consécutif
QRVA :		Schriftelijke Vragen en Antwoorden	QRVA :	Questions et Réponses écrites
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TOELICHTING

DAMES EN HEREN,

In 1953 verklaarde de Hoge Commissaris voor de vluchtelingen van de Verenigde Naties: «*The refugee who qualifies for the mandate of the United Nations remains a man who really deserves international protection and assistance.*».

Vandaag is er een nieuwe categorie «vluchtelingen», die ook bescherming en bijstand nodig hebben — de klimaatvluchtelingen — en die (nog) niet onder het mandaat van de Verenigde Naties vallen en die bijgevolg geen recht hebben op enige status of enige bijzondere bescherming.

Het academisch debat wordt thans in internationale kring gevoerd. Het gebrek aan een internationaal erkende definitie van klimaatvluchteling brengt de Kamer van volksvertegenwoordigers er nu toe:

- voor die categorie van vluchtelingen de erkenning van een specifieke status, met bijbehorende rechten, te eisen;
- te pleiten voor de oprichting van een gespecialiseerd agentschap bij de Verenigde Naties, en zelfs voor nationale klimaatasielinstanties.

België, dat in die aangelegenheden niet achterloopt, beschikt als niet-permanent lid van de Veiligheidsraad van de Verenigde Naties daartoe over een hefboom. Maar ook de Europese Unie moet terzake beleidsmaatregelen stimuleren.

De erkenning van de klimaatvluchtelingen is absoluut noodzakelijk, niet alleen om bij natuurrampen noodhulp te kunnen bieden, maar opdat derde landen die mensen zouden kunnen opvangen. Daarom moeten de klimaatvluchtelingen, evenals de vluchtelingen in de zin van het Verdrag van Genève (om politieke, maar ook om etnische, religieuze en andere redenen) een eigen juridische status krijgen.

Aan die eis moet worden voldaan, in weerwil van de algemene tendens bij de ontwikkelde landen om almaar beperkender asiemaatregelen te treffen. Hoewel geen enkel land aan het verschijnsel ontsnapt, komt het merendeel van de klimaatvluchtelingen uit de arme landen, die het eerst aan natuurrampen blootstaan en die er ook het meest kwetsbaar voor zijn. Dat zal ook in de toekomst zo blijven, zodat Europa in de komende jaren dus zeker geen massa's klimaatvluchtelingen op

DÉVELOPPEMENTS

MESDAMES, MESSIEURS,

Lors de son discours d'allocation en 1953, le Haut commissaire des Nations Unies pour les réfugiés a déclaré: «Le réfugié qui relève du mandat de l'Organisation des Nations Unies est un homme qui mérite réellement la protection et l'assistance internationales.»

Or aujourd'hui, une nouvelle catégorie de «réfugiés» ayant également besoin de protection et d'assistance, les réfugiés climatiques, ne relève pas —encore— du mandat des Nations unies et partant, ne bénéficie d'aucun statut, ni d'aucune protection particulière.

Le débat académique s'étend à présent au sein des cénacles internationaux. L'absence d'une définition internationale reconnue des réfugiés climatiques, même aujourd'hui la Chambre des représentants à:

- exiger la reconnaissance d'un statut spécifique à cette catégorie de réfugiés et des droits y afférents;
- promouvoir la mise en place d'une agence spécialisée au sein des Nations Unies, voire des instances d'asile nationales.

La Belgique, à la pointe de ces questions, dispose en tant que membre non permanent du Conseil de sécurité des Nations Unies, d'un levier pour ce faire. Quant à l'Union européenne, elle doit aussi impulser des politiques en la matière.

La reconnaissance des réfugiés climatiques est indispensable, non seulement pour l'aide d'urgence à apporter en cas de catastrophes naturelles, mais aussi pour l'accueil de ces personnes par un pays tiers. C'est pourquoi les réfugiés climatiques, au même titre que les réfugiés au sens de la Convention de Genève (pour motif politique, mais aussi ethnique, religieux, etc.) doivent se voir reconnaître un statut juridique propre.

Cette exigence doit être satisfaite malgré la tendance générale des pays développés à adopter des politiques d'asile de plus en plus restrictives. Car si aucun pays n'est épargné, la majeure partie des réfugiés climatiques sont et seront issus des pays pauvres, les premiers exposés et les plus vulnérables aux catastrophes naturelles. L'Europe ne verra donc certainement pas arriver des flots de réfugiés climatiques sur son sol dans les années à venir. Ces réfugiés seront en grande partie soit

zijn grondgebied zal zien toestromen. Die vluchtelingen zullen grotendeels ontheemden zijn in hun eigen land, of zullen asiel aanvragen in een buurland.

Het Verdrag van 1951 betreffende de status van vluchtelingen definieert de vluchteling in artikel 1A als elke persoon die «uit gegronde vrees voor vervolging wegens zijn ras, godsdienst, nationaliteit, het behoren tot een bepaalde sociale groep of zijn politieke overtuiging, zich bevindt buiten het land waarvan hij de nationaliteit bezit» of «buiten het land waar hij vroeger zijn gewone verblijfplaats had».

Personen die op de vlucht zijn voor conflicten of veralgemeend geweld, worden vaak als vluchtelingen beschouwd, hoewel op hen soms andere juridische regelingen dan het Verdrag van 1951 van toepassing zijn. Het artikel wordt momenteel niet geïnterpreteerd of toegepast om mensen te beschermen die om klimaatredenen zijn ontheemd. Geen enkele internationale rechtsbepaling kan dus in hun voordeel worden aangevoerd.

De weerslag van de klimaatverandering op de samenlevingen is al overal ter wereld merkbaar: zo wordt de Sahel volop getroffen door het verschijnsel van de woestijnvorming, doen zich in Bangladesh herhaalde overstromingen voor, zijn bepaalde Europese gebieden maar ook verscheidene eilanden in de Stille Oceaan gedoemd om door het water te worden verzwolgen, wat de toekomstige verdwijning van natiestaten tot gevolg zal hebben. Dergelijke situaties zullen zich almaar meer in alle uithoeken van de planeet voordoen, van de tsunami bij Sumatra tot de orkaan Katrina in New-Orleans, of nog recenter de natuurrampen in China of Birma. Volgens ramingen van deskundigen zal het aantal mensen die in 2050 als gevolg van klimaatveranderingen ontheemd zijn, variëren van 150 tot 200 miljoen.

De strategieën om zich aan de klimaatveranderingen aan te passen, worden momenteel onvoldoende gestimuleerd en zullen op termijn ook onvoldoende zijn. Ze zullen aanzienlijke bevolkingsmigraties niet kunnen voorkomen. In het licht van de urgentie van de situatie onderstreept de Kamer van volksvertegenwoordigers daarom zowel de noodzaak om de klimaatvluchtelingen te erkennen als het belang om het beleid inzake aanpassing aan en bestrijding van de klimaatopwarming uit te voeren.

des déplacés dans leur propre pays, soit réclameront l'asile dans un pays voisin.

La Convention de 1951 relative au statut des réfugiés définit en son article 1^{er}, A, les réfugiés «comme des personnes qui se trouvent hors de leur pays de nationalité ou de résidence habituelle, craignant avec raison d'être persécutées du fait de leur race, religion, nationalité, appartenance à un certain groupe social ou de leurs opinions politiques».

Les personnes qui fuient les conflits ou les violences généralisées sont souvent considérées comme des réfugiés, bien que cela s'inscrive parfois dans le cadre de mécanismes juridiques autres que la Convention de 1951. Cet article n'est ni interprété ni appliqué aujourd'hui en vue d'une protection des déplacés pour cause climatique. Aucune disposition juridique internationale ne peut donc être invoquée en leur faveur.

Les impacts du changement climatique sur les sociétés humaines se font déjà sentir dans de nombreux endroits comme le Sahel fortement touché par le phénomène de désertification, le Bangladesh sujet à des inondations répétées, certaines régions européennes mais aussi dans plusieurs îles du Pacifique, vouées à disparaître sous les eaux, entraînant la disparition future d'États-Nations. De telles situations s'observeront de plus en plus aux quatre coins de la planète, du tsunami à l'ouragan Katrina en Nouvelle-Orléans en passant, plus récemment par la Chine ou la Birmanie. Selon les estimations des experts, le nombre de personnes déplacées en 2050 suite au changement climatique varie de 150 à 200 millions.

Les stratégies d'adaptation au changement climatique ne sont à l'heure actuelle ni suffisamment encouragées, ni suffisantes à terme. Elles ne pourront éviter des déplacements de population importants. C'est pourquoi, face à l'urgence de la situation, la Chambre des représentants insiste tant sur le besoin de reconnaître les réfugiés climatiques que sur l'importance de mettre en place les politiques d'adaptation et de lutte contre le réchauffement climatique.

Juliette BOULET (Ecolo-Groen!)
Wouter DEVRIENDT(Ecolo-Groen!)
Zoé GENOT (Ecolo-Groen!)

VOORSTEL VAN RESOLUTIE

DE KAMER VAN VOLKSVERTEGENWOORDIGERS,

A) gelet op de definitie van milieuvluchtelingen in het Milieuprogramma van de Verenigde Naties (UNEP) als «*those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected their quality of life*», waarbij klimaatvluchtelingen een categorie van milieuvluchtelingen zijn;

B) gelet op de conclusies van het *Intergovernmental Panel on Climate Change* (IPCC) — Nobelprijs voor de vrede 2007 —, dat met zekerheid stelt dat de activiteiten van de mens verantwoordelijk zijn voor de onduidelijk vaststaande klimaatontregeling;

C) gelet op het Raamverdrag van de Verenigde Naties inzake klimaatverandering, in 1992 aangenomen te Rio de Janeiro door 154 Staten en door de Europese Gemeenschap, en geratificeerd door 189 landen;

D) gelet op de uitspraken van António Guterres, de Hoge Commissaris van de Verenigde Naties voor de vluchtelingen (UNHCR) over de uitdagingen voor de 21e eeuw op migratievlak: «*Climate change and natural disasters will make life increasingly unsustainable in many parts of the planet. [...] Greater efforts are therefore needed to prevent the emergence of situations in which people are forced to leave their homes [...]. If this [...] challenge is to be tackled in an effective manner, serious efforts must be made to promote environmentally sensitive forms of development in countries where the struggle for survival threatens to lead to violence.*»;

E) gelet op de gezamenlijke verklaring van Louis Michel, Europees Commissaris voor ontwikkeling en humanitaire hulp, en Josette Sheeran, directeur van het Wereldvoedselprogramma (WFP): «*But we must now confront the challenges presented by ever-more extreme climate events to see how the humanitarian community can best prepare itself since the most vulnerable people will be those that suffer the most. There is a real risk that, in the future, we'll have climatic refugees.*»;

F) gelet op artikel 1, § 2, van het verdrag van de Organisatie van Afrikaanse Eenheid en op de verklaring van Cartagena, alsook op de door Zweden en Australië

PROPOSITION DE RÉSOLUTION

LA CHAMBRE DES REPRÉSENTANTS,

A) considérant la définition par le Programme environnemental des Nations Unies (PNUE) des réfugiés environnementaux comme étant des «*personnes forcées de quitter leurs habitations traditionnelles d'une façon temporaire ou permanente, à cause (naturelle ou humaine) d'une dégradation nette de leur environnement qui bouleverse gravement leur cadre de vie et/ou qui déséquilibre sérieusement leur qualité de vie*»; les réfugiés climatiques étant une catégorie de réfugiés environnementaux;

B) considérant les conclusions du groupe d'experts intergouvernemental sur l'évolution du Climat (GIEC), prix Nobel de la paix en 2007, qui établissent avec certitude que les activités humaines sont responsables des dérèglements climatiques, ceux-ci étant sans équivoque;

C) considérant la Convention-cadre des Nations Unies sur le changement climatique adoptée à Rio de Janeiro en 1992 par 154 États et la Communauté européenne et ratifiée par 189 pays;

D) considérant les déclarations d'António Guterres, Haut Commissaire des Nations Unies pour les réfugiés (UNHCR) s'exprimant sur les défis migratoires du 21^e siècle, affirmant «*que les changements climatiques et les catastrophes naturelles rendront la vie dans de nombreux endroits sur terre de plus en plus difficile et que dès lors davantage d'attention doit être accordée à la prévention de ce genre de situation. Ce défi ne pourra être relevé de manière efficace que par le biais de sérieux efforts en faveur d'un développement respectueux de l'environnement dans les pays où la lutte quotidienne pour la survie et l'accès aux ressources naturelles peut conduire à la violence généralisée*»;

E) considérant les propos conjoints de Louis Michel, membre de la Commission européenne chargé du développement et de l'aide humanitaire, et de Josette Sheeran, directrice exécutive du Programme alimentaire mondial (PAM), insistant sur la «*nécessité de faire face aux phénomènes climatiques de plus en plus extrêmes en réfléchissant aux moyens pour la communauté humanitaire de se préparer au mieux sachant que ce sont les personnes les plus vulnérables qui auront le plus à pâtir de cette situation (et qu'il) existe un risque réel de voir, à l'avenir, des réfugiés climatiques*»;

F) considérant l'article 1^{er}, § 2, de la Convention de l'Organisation de l'Union africaine et la déclaration de Carthage ainsi que les dispositions législatives

aangenomen wetsbepalingen, die ertoe strekken mensen die als gevolg van de ingrijpende klimaatverandering zijn ontheemd, een bijzondere status te verlenen;

G) gelet op de cijfers van verscheidene deskundigen die het aantal mensen die in 2050 als gevolg van klimaatontregeling ontheemd zullen zijn, op 150 tot 200 miljoen ramen;

H) gelet op de «*Appel de Limoges sur les réfugiés écologiques*» van 23 juni 2005;

I) gelet op de wens van de heer Joseph Daul, voorzitter van de fractie van de Europese Volkspartij en de Europese Democraten (EVP-ED) in het Europees Parlement, in een persbericht van 21 mei 2008, vooruit te gaan op de weg naar een algemene oplossing voor de klimaatverandering en derhalve voor de klimaatvluchtelingen;

J) gelet op het antwoord van de minister van Migratie- en asielbeleid op vraag nr. 6382 over «de gevolgen die de klimaatveranderingen zullen hebben op het vlak van migratie», in de Kamercommissie voor de Binnenlandse Zaken, de Algemene Zaken en het Openbaar Ambt van 25 juni 2008 (CRIV 52 COM 273, blz. 39 tot 41), waarin de instanties die in België de status van vluchteling verlenen, en in het bijzonder het Commissariaat-generaal voor de vluchtelingen en de staatlozen, worden opgeroepen dat thema te volgen en terzake een aanpak en beleid te ontwikkelen;

K) gelet op de huidige zwakte van de Europese en internationale aanpassingsprogramma's die erop gericht zijn de aantasting van het milieu af te remmen;

L) gelet op de conclusies en aanbevelingen van de op 3 maart 2008 in Brussel gehouden conferentie «Klimaatverandering, een nieuwe uitdaging voor ontwikkelingssamenwerking?», waarin onder andere wordt verwezen naar de dringende noodzakelijkheid rekening te houden met de effecten van de klimaatveranderingen en doeltreffende aanpassings- en *mitigatie*-maatregelen te nemen;

M) gelet op de op 20 april 2006 door de Belgische Senaat aangenomen resolutie om de erkenning van het statuut van milieuvluchteling in de internationale verdragen te bevorderen (Stuk Senaat, 3-1556-3);

N) overwegende dat de gevolgen van de klimaatontregeling, in het bijzonder de stijging van het zeeniveau, de woestijnvorming, de droogte, de ontbossingen en de overstromingen of hittegolven, de levensomstandigheden van de bevolkingen beïnvloeden doordat zij kunnen leiden tot verschraling of verdwijning van

adoptées par la Suède et l'Australie, visant à octroyer un statut particulier aux personnes déplacées suite à des bouleversements climatiques;

G) considérant les chiffres avancés par plusieurs experts évaluant de 150 à 200 millions le nombre de personnes déplacées suite au dérèglement climatique en 2050;

H) considérant l'«*Appel de Limoges sur les réfugiés écologiques*» du 23 juin 2005;

I) considérant la volonté exprimée par Joseph Daul, Président du groupe Parti Populaire européen-Démocratie européenne (PPE-DE) au Parlement européen, dans un communiqué du 21 mai 2008, d'avancer vers la voie d'une solution globale au changement climatique et partant, des réfugiés climatiques;

J) considérant la réponse apportée à la question (n° 6382) sur «les conséquences des changements climatiques en matière de migration» en commission de l'intérieur, des affaires générales et de la fonction publique, le 25 juin 2008 (CRIV 52 COM 273, pp. 39 à 41) qui appelle les instances octroyant le statut de réfugié en Belgique, et particulièrement le «Commissariat général aux réfugiés et aux apatrides, de suivre ce sujet et de développer une approche et une politique en la matière»;

K) considérant la faiblesse actuelle des programmes européens et internationaux d'adaptation en vue de freiner la dégradation de l'environnement;

L) considérant les conclusions et les recommandations de la Conférence «Climat et coopération - Le changement climatique, un nouveau défi pour la coopération au développement?», qui se réfèrent entre autres à l'urgente nécessité de prendre en compte les effets du changement climatique et de mettre en place des politiques d'adaptation et de «mitigation» efficaces;

M) considérant la résolution adoptée par le Sénat belge le 20 avril 2006, visant à promouvoir la reconnaissance dans les conventions internationales du statut de réfugié environnemental (Doc.Sénat, n° 3-1556/1 à 3);

N) considérant que les effets des dérèglements climatiques, particulièrement la montée du niveau des mers, la désertification, la sécheresse, les déforestations, les inondations ou les canicules affectent les conditions de vie des populations en ce qu'ils peuvent générer dégradation, disparition de territoire, pression accrue sur les

grondgebied, grotere druk op de natuurlijke hulpbronnen, noodgedwongen verplaatsingen en aantasting van de fundamentele rechten, en dientengevolge bepaalde spanningen kunnen accentueren of conflicten veroorzaken;

O) overwegende dat de bevolkingen die het meest aan de gevolgen van de klimaatverandering worden blootgesteld, over het algemeen het armst, en dus het meest kwetsbaar zijn;

P) overwegende dat een van de gevolgen van de klimaatopwarming de noodgedwongen verplaatsing is van hele bevolkingen naar een minder vijandige leefomgeving;

Q) overwegende dat deze ontheemden kunnen worden gedefinieerd als zijnde mensen die zich gedwongen zien hun woning tijdelijk of permanent te verlaten, doordat hun bestaan en levensomstandigheden in gevaar komen, en dat hun aantal in de loop van de volgende jaren exponentieel dreigt toe te nemen;

R) overwegende dat de ontheemden die in hun land kunnen blijven, moeten worden opgevangen als ontheemden en zo nodig recht moeten hebben op internationale steun, en dat degenen die zich verplicht zien hun land onmiddellijk of op termijn te verlaten, recht moeten hebben op een aangepaste status, een passende opvangstructuur en bescherming in het buurland of in het land van opvang;

S) overwegende dat in de huidige stand van het op de vluchtelingen van toepassing zijnde internationaal recht – met inbegrip van het Verdrag van Genève, alsook van Richtlijn 2001/55/EG van de Raad van 20 juli 2001 betreffende minimumnormen voor het verlenen van tijdelijke bescherming in geval van massale toestroom van ontheemden en maatregelen ter bevordering van een evenwicht tussen de inspanning van de lidstaten voor de opvang en het dragen van de consequenties van de opvang van deze personen – geen enkel instrument met de situatie van de klimaatvluchtelingen rekening houdt en dus in hun voordeel kan worden aangevoerd;

T) overwegende dat die klimaatmigratie een diepgaande reflectie verantwoordt over de Noord-Zuidverantwoordelijkheden, met name over het deel verantwoordelijkheid van de geïndustrialiseerde landen in het verschijnen van klimaatopwarming en over de noodzaak te werken aan bescherming voor de getroffen personen, met inbegrip van de migranten die het slachtoffer zijn van klimaatonrecht en van een falend beleid inzake duurzame ontwikkeling;

ressources naturelles, déplacements forcés, atteinte aux droits fondamentaux et partant, accentuer certaines tensions ou provoquer des conflits;

O) considérant que les populations les plus exposées aux conséquences des bouleversements climatiques sont généralement les plus pauvres, et donc les plus vulnérables;

P) considérant qu'une des conséquences du réchauffement climatique est le déplacement forcé de populations entières vers un espace de vie moins hostile;

Q) considérant que ces personnes déplacées peuvent être définies comme étant des personnes forcées de quitter leur habitation, d'une façon temporaire ou permanente, leur existence et conditions de vie étant mise en péril, et que leur nombre risque de croître de façon exponentielle au cours des prochaines années;

R) considérant que les personnes déplacées qui peuvent rester à l'intérieur de leur pays doivent être prises en charge au titre de personnes déplacées et bénéficier d'une aide internationale en cas de nécessité, et que celles qui sont contraintes, immédiatement ou à terme, de le quitter, doivent bénéficier d'un statut adapté, d'une structure d'accueil et d'une protection appropriées au sein du pays voisin ou d'accueil;

S) considérant que dans l'état actuel du droit international applicable aux réfugiés – en ce compris la Convention de Genève ainsi que la directive 2001/55/CE du Conseil du 20 juillet 2001 relative à des normes minimales pour l'octroi d'une protection temporaire en cas d'afflux massif de personnes déplacées et à des mesures tendant à assurer un équilibre entre les efforts consentis par les États membres pour accueillir ces personnes et supporter les conséquences de cet accueil – aucun instrument ne prévoit la situation des réfugiés climatiques et ne peut donc être invoqué en leur faveur;

T) considérant que ces migrations climatiques justifie une réflexion approfondie sur les responsabilités Nord-Sud, notamment sur la part de responsabilité des pays industrialisés dans le phénomène du réchauffement climatique et la nécessité de mettre en œuvre une protection des personnes affectées, y compris des migrants victimes d'injustices climatiques et en termes de développement durable;

U) gelet op de urgentie van de situatie en het voorspelbare karakter van de toenemende weerslag van de klimaatverandering op de migratieprocessen in de komende jaren;

V) gelet op de urgentie van juridische erkenning van de klimaatvluchtelingen, wier aantal de komende jaren dreigt toe te nemen en van wie de situatie vandaag en in de toekomst het optreden van de internationale gemeenschap vergt;

VRAAGT DE REGERING:

1) samen met haar Europese partners het beleid inzake duurzame ontwikkeling en bestrijding van de klimaatopwarming voort toe te passen, teneinde met name niet alleen wat te doen aan de gevolgen, maar ook aan de oorzaken van de klimaatmigraties;

2) daadwerkelijk de *ad-hoc* werkgroep in te stellen waarin in het kader van het Voorontwerp van federaal plan inzake duurzame ontwikkeling 2009-2012 is voorzien voor 2009 (in het deel «Milieu en migraties»); die zal niet alleen tot doel hebben de programma's te bepalen die op nationaal en internationaal vlak moeten worden uitgevoerd, maar eveneens te komen tot de definitie van een specifieke status voor de klimaatvluchtelingen, alsook van de daarbij behorende rechten, en de werking en de bevoegdheden te bepalen van het coördinerend orgaan dat die status zal moeten verlenen, en dit in overleg met de internationale instanties, in het bijzonder de Verenigde Naties;

3) de asielinstanties te betrekken bij de uitwerking van een status voor de klimaatvluchtelingen;

4) samen met de landen die het meest aan de risico's van klimaatverandering zijn blootgesteld, de aanzet te geven tot preventieprogramma's, teneinde de gevolgen van rampen zo goed mogelijk voor te bereiden en de eruit volgende migraties zo goed mogelijk te ondersteunen en te begeleiden;

5) telkens als dat nodig zal blijken, haar financiële en/of logistieke steun aan de slachtoffers van natuurrampen te bieden, via een bijdrage aan een internationaal fonds, teneinde de wederinschakeling van deze ontheemden te bevorderen, de ontwikkeling van racistische houdingen of discriminatie te hunnen opzichte te voorkomen en hun de toekenning te verzekeren van compensaties die het mogelijk maken hun bestaansmiddelen te waarborgen met het oog op een duurzame oplossing voor hun situatie, rekening houdend met de verantwoordelijkheid van de landen;

U) considérant l'urgence de la situation et le caractère prévisible des incidences croissantes du changement climatique sur les processus migratoires des années à venir;

V) considérant l'urgence d'une reconnaissance juridique des réfugiés climatiques dont le nombre risque de s'accroître dans les années à venir et dont la situation requiert et exigera à l'avenir l'intervention de la communauté internationale;

DEMANDE AU GOUVERNEMENT:

1) de poursuivre, avec ses partenaires européens, la mise en œuvre de politiques de développement durable et de lutte contre le réchauffement climatique, et ce notamment afin d'agir non seulement sur les conséquences, mais également sur les causes des migrations climatiques;

2) d'effectivement mettre en place le groupe de travail *ad hoc* prévu pour 2009 dans le cadre de l'avant-projet du Plan fédéral de développement durable 2009-2012, dans sa partie «environnement et migrations» dont la finalité sera, non seulement de définir les programmes à mettre en œuvre sur la scène nationale et internationale mais également d'aboutir à la définition d'un statut spécifique pour les réfugiés climatiques, ainsi que les droits y afférents et de définir le fonctionnement et les compétences de la coordination chargée d'octroyer ce statut, et ce en concertation avec les instances internationales et particulièrement les Nations Unies;

3) d'associer les instances d'asile à la recherche de ce statut pour les réfugiés climatiques;

4) d'impulser, avec les pays les plus exposés aux risques du changement climatique, des programmes de prévention, afin de préparer au mieux les conséquences de catastrophes et d'assister et d'encadrer au mieux les migrations qui s'ensuivent;

5) d'apporter, chaque fois que cela s'avérera nécessaire, son soutien financier et/ou logistique aux victimes de catastrophes naturelles, au travers de la contribution à un fonds international, afin de favoriser la réinsertion de ces personnes déplacées, d'éviter le développement d'attitudes racistes ou de discriminations à leur égard et de leur assurer l'octroi de compensations qui permettent d'assurer leurs moyens de subsistance en vue d'une solution durable à leur situation, en tenant compte de la responsabilité des pays;

6) de bijeenroeping van een *ad-hoc* werkgroep te vragen, onder bescherming van de Verenigde Naties, die tot taak zal hebben een verslag op te stellen dat zowel een internationale definitie van «klimaatvluchteling» voorstelt als de bepaling van een specifieke status en specifieke bescherming op grond van het bestaand wetenschappelijk werk en vervolgens het verslag voor te leggen aan de VN-lidstaten;

7) te ijveren voor met name de oprichting van een inzake klimaatvluchtelingen gespecialiseerd VN-agentschap, dat actief met UNHCR, UNDP en UNEP zou samenwerken;

8) via haar eerste minister en haar minister van Buitenlandse Zaken de bepalingen van deze resolutie toe te passen en zich op die grond in de VN-Veilighedsraad in te spannen voor de totstandkoming van een gemeenschappelijke en internationaal erkende definitie van de status van vluchteling, alsook van een wettelijke status;

9) het Belgisch Parlement op de hoogte te houden van de stappen die zij ingevolge deze resolutie zal zetten.

8 augustus 2008

6) de demander la convocation d'un groupe de travail *ad hoc*, sous l'égide des Nations Unies, dont la mission sera d'établir un rapport proposant à la fois une définition internationale des «réfugiés climatiques», la définition d'un statut et d'une protection spécifiques sur la base des travaux scientifiques existants; puis de soumettre le rapport à l'approbation des États membres des Nations Unies;

7) d'œuvrer notamment pour la création d'une Agence spécialisée des Nations Unies relative aux réfugiés climatiques, qui collaborerait activement avec l'UNHCR, le PNUD et le PNUE;

8) d'appliquer, par la voie de son premier ministre et de son ministre des Affaires étrangères, les dispositions de la présente résolution, et partant, d'œuvrer, au sein du Conseil de Sécurité des Nations Unies, à la mise sur pied d'une définition commune et internationalement reconnue du statut de réfugié climatique, ainsi que d'un statut juridique;

9) de tenir informé le Parlement belge des démarches qu'il entamera dans le sens de cette résolution.

8 août 2008

Juliette BOULET (Ecolo-Groen!)
Wouter DE VRIENDT (Ecolo-Groen!)
Zoé GENOT (Ecolo-Groen!)

16. Belgian House of Representatives – Proposition of resolution related to the consideration and creation of a status of environmental refugee by the United Nations and the European Union (Doc. 52-1451/001, 3 October 2008)

DOC 52 **1451/001**

BELGISCHE KAMER VAN
VOLKSVERTEGENWOORDIGERS

3 oktober 2008

VOORSTEL VAN RESOLUTIE

over een door de Verenigde Naties en
de Europese Unie in aanmerking
te nemen en in te stellen status
van milieuvluchteling

(ingediend door de heer Jean Comil c.s.)

DOC 52 **1451/001**

CHAMBRE DES REPRÉSENTANTS
DE BELGIQUE

3 octobre 2008

PROPOSITION DE RÉSOLUTION

relative à la prise en considération et
à la création d'un statut de réfugié
environnemental par les Nations-Unies et
l'Union européenne

(déposée par M. Jean Comil et consorts)

2273

cdH	:	centre démocrate Humaniste		
CD&V – N-VA	:	Christen-Democratisch en Vlaams/Nieuw-Vlaamse Alliantie		
Ecolo-Groen!	:	Ecologistes Confédérés pour l'organisation de luttes originales – Groen		
FN	:	Front National		
LDD	:	Lijst Dedecker		
MR	:	Mouvement Réformateur		
Open Vld	:	Open Vlaamse liberalen en democraten		
PS	:	Parti Socialiste		
sp.a+VI.Pro	:	Socialistische partij anders + VlaamsProgressieven		
VB	:	Vlaams Belang		
Afkortingen bij de nummering van de publicaties :			Abréviations dans la numérotation des publications :	
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QRVA :	Schriftelijke Vragen en Antwoorden		QRVA :	Questions et Réponses écrites
CRIV :	Voorlopige versie van het Integraal Verslag (groene kaff)		CRIV :	Version Provisoire du Compte Rendu intégral (couverture verte)
CRABV :	Beknopt Verslag (blauwe kaff)		CRABV :	Compte Rendu Analytique (couverture bleue)
CRIV :	Integraal Verslag, met links het definitieve integraal verslag en rechts het vertaald beknopt verslag van de toespraken (met de bijlagen) (PLEN: witte kaff; COM: zalmkleurige kaff)		CRIV :	Compte Rendu Intégral, avec, à gauche, le compte rendu intégral et, à droite, le compte rendu analytique traduit des interventions (avec les annexes) (PLEN: couverture blanche; COM: couverture saumon)
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COM :	Commissievergadering		COM :	Réunion de commission
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TOELICHTING

DAMES EN HEREN,

1. Context

De hele internationale gemeenschap heeft het begrip «vluchteling» lang gekoppeld aan de sociale, economische en politieke problemen van bepaalde bevolkingsgroepen: voor de specialisten in asielaangelegenheden verwijst het begrip «vluchteling» thans doorgaans naar een ideologisch en juridisch ijkpunt dat berust op artikel 1, A, 2, van het Internationaal Verdrag van Genève van 1951 betreffende de status van vluchtelingen¹ en op de artikelen 13 en 14 van de Universele Verklaring van de Rechten van de Mens (Verenigde Naties 1948)². Die beide fundamentele teksten in het internationaal recht zijn tot stand gekomen na de Tweede Wereldoorlog en in de context van de Koude Oorlog, om mensen te beschermen die worden vervolgd door hun Staat en/of omdat die niet optreedt.

Sinds enkele jaren hebben de wetenschappers en recenter ook de nationale en internationale massamedia aandacht voor een nieuw begrip, met name dat van «milieuvluchteling». Die «nieuwe»³ categorie wordt almaar vaker gehanteerd voor mensen die het slachtoffer zijn

¹ «Voor de toepassing van dit Verdrag geldt als «vluchteling» elke persoon: (...) 2. Die, [...] uit gegronde vrees voor vervolging wegens zijn ras, godsdienst, nationaliteit, het behoren tot een bepaalde sociale groep of zijn politieke overtuiging, zich bevindt buiten het land waarvan hij de nationaliteit bezit, en die de bescherming van dat land niet kan of, uit hoofde van bovenbedoelde vrees, niet wil inroepen, of die, indien hij geen nationaliteit bezit en verblijft buiten het land waar hij vroeger zijn gewone verblijfplaats had, daarheen niet kan of, uit hoofde van bovenbedoelde vrees, niet wil terugkeren. Indien een persoon meer dan één nationaliteit bezit, betekent de term «het land waarvan hij de nationaliteit bezit» elk van de landen waarvan hij de nationaliteit bezit. Een persoon wordt niet geacht van de bescherming van het land waarvan hij de nationaliteit bezit, verstoken te zijn, indien hij, zonder geldige redenen ingegeven door gegronde vrees, de bescherming van één van de landen waarvan hij de nationaliteit bezit, niet inroept.» Zie Internationaal verdrag betreffende de status van vluchtelingen, en Bijlagen, ondertekend te Genève op 28 juli 1951.

² «Artikel 13: 1. Een ieder heeft het recht zich vrijelijk te verplaatsen en te vertoeven binnen de grenzen van elke Staat. 2. Een ieder heeft het recht welk land ook, met inbegrip van het zijne, te verlaten en naar zijn land terug te keren. Artikel 14: 1. Een ieder heeft het recht om in andere landen asiel te zoeken en te genieten tegen vervolging. 2. Op dit recht kan geen beroep worden gedaan ingeval van strafvervolgingen wegens misdrijven van niet-politieke aard of handelingen in strijd met de doeleinden en beginselen van de Verenigde Naties.» Zie de Universele Verklaring van de Rechten van de Mens.

³ Thans zouden tal van historische gebeurtenissen kunnen worden beschouwd als natuurrampen, zoals de landbouwcrisis in Ierland in de 19e eeuw, of de stofstorm die in de jaren na 1930 de Verenigde Staten heeft geteisterd.

DÉVELOPPEMENTS

MESDAMES, MESSIEURS,

1. Contextualisation

Longtemps, la communauté internationale, dans son ensemble, a lié la notion de réfugiés aux seuls problèmes socio-économico-politiques que les populations pouvaient rencontrer. En effet, aujourd'hui, le terme de réfugié fait référence le plus souvent, pour les spécialistes des questions liées à l'asile, à un repère idéologique et juridique de protection internationale construit à partir de l'article 1^{er}, A, 2 de la Convention de Genève de 1951 relative au statut des réfugiés ainsi qu'aux articles 13 et 14 de la Déclaration universelle des Droits de l'Homme (ONU 1948)². Ces deux textes fondamentaux en droit international ont été élaborés, dans un contexte d'après guerre et de guerre froide, afin de protéger les personnes persécutées, victimes de leur État et/ou de leur inaction.

Toutefois, depuis quelques années les scientifiques, et plus récemment les mass médias nationaux et internationaux, se sont penchés sur une nouvelle notion, celle de réfugiés environnementaux. Cette «nouvelle»³ catégorie est de plus en plus souvent usitée «pour désigner des

¹ Article 1^{er}. Aux fins de la présente Convention, le terme «réfugié» s'appliquera à toute personne: (...) (2) Qui, par suite d'événements survenus avant le 1er janvier 1951 et craignant avec raison d'être persécutée du fait de sa race, de sa religion, de sa nationalité, de son appartenance à un certain groupe social ou de ses opinions politiques, se trouve hors du pays dont elle a la nationalité et qui ne peut ou, du fait de cette crainte, ne veut se réclamer de la protection de ce pays; ou qui, si elle n'a pas de nationalité et se trouve hors du pays dans lequel elle avait sa résidence habituelle à la suite de tels événements, ne peut ou, en raison de ladite crainte, ne veut y retourner. Dans le cas d'une personne qui a plus d'une nationalité, l'expression «du pays dont elle a la nationalité» vise chacun des pays dont cette personne a la nationalité. Ne sera pas considérée comme privée de la protection du pays dont elle a la nationalité toute personne qui, sans raison valable fondée sur une crainte justifiée, ne s'est pas réclamée de la protection de l'un des pays dont elle a la nationalité. Voir Convention de Genève de 1951 et protocoles additionnels sur le statut des réfugiés.

² Article 13: (1) Toute personne a le droit de circuler librement et de choisir sa résidence à l'intérieur d'un État; (2). Toute personne a le droit de quitter tout pays, y compris le sien, et de revenir dans son pays. Article 14: (1). Devant la persécution, toute personne a le droit de chercher asile et de bénéficier de l'asile en d'autres pays. (2). Ce droit ne peut être invoqué dans le cas de poursuites réellement fondées sur un crime de droit commun ou sur des agissements contraires aux buts et aux principes des Nations Unies. Voir La Déclaration des Droits de l'Homme.

³ Dans l'Histoire de nombreux événements pourraient être considérés, à l'heure actuelle, comme des catastrophes naturelles comme la crise de la culture irlandaise au XIXe siècle ou encore la tempête de poussière qui a frappé les États-Unis dans les années 1930.

van een milieuramp en die, om te overleven, de streek waar ze normaliter verblijven, moeten verlaten. «*Le sinistre environnemental peut prendre la forme d'une dégradation progressive (montée des eaux liées au réchauffement climatique, désertification, déforestation, appauvrissement de la biodiversité, etc.) ou brutale (tsunami, tremblement de terre, inondation, irruption volcanique, etc.)*»⁴.

Het Milieuprogramma van de Verenigde Naties (UNEP) hanteert een andere omschrijving van het begrip «milieuvluchteling»: iemand die gedwongen werd om de traditionele woonomgeving tijdelijk of definitief te verlaten, vanwege een duidelijke achteruitgang van de omgeving (ingevolge een natuurlijke oorzaak of een menselijk ingrijpen) die zijn bestaan grondig verstoort en/of de kwaliteit van zijn bestaan fors uit balans bracht. Met achteruitgang van de omgeving wordt bedoeld elke natuurkundige, chemische en/of biologische verandering in het ecosysteem die het systeem tijdelijk of blijvend ongeschikt maakt voor menselijke bewoning⁵.

Diverse specialisten geven aan, op basis van cijfers van een onderzoek uit 2005 van het *Institute for Environment and Human Security* van de Universiteit van de Verenigde Naties in Bonn (UNU-EHS), dat er tegen 2010 wereldwijd 50 miljoen milieuvluchtelingen zullen zijn⁶. Sommige academici, zoals François Gemenne, een onderzoeker aan de Universiteit van Luik die thans de laatste hand legt aan een proefschrift over die thematiek, gaan ervan uit dat er tegen 2050 150 miljoen milieuvluchtelingen zullen zijn⁷. De cijfers van het in opdracht van de Britse regering opgestelde rapport-Stern van januari 2007 liggen nog hoger en zijn nog verontrustender: daarin is sprake van 200 miljoen klimaatvluchtelingen tegen 2050⁸. ... Die situatie zou, naast het essentiële, fundamentele en cruciale menselijke aspect, de internationale gemeenschap 5.500 miljard euro kosten⁹.

Die uiteenlopende cijfers tonen hoe dan ook overduidelijk aan dat de situatie heel dringend moet worden aangepakt. Alle Staten moeten zich onverwijld over dat vraagstuk buigen.

⁴ <http://terra.rezo.net/article657.html>.

⁵ http://www.actuenvironnement.com/ae/dictionnaire_environment/definition/refugies_environmentaux.php4.

⁶ Zie het onderzoek van het ISEH van de Universiteit van de Verenigde Naties van Bonn, dat wordt aangehaald op <http://www.actuenvironnement.com/ae/news/1300.php4>.

⁷ http://www.liberation.fr/actualite/economie_terre/275852.FR.php.

⁸ Samenvatting van de «Stern Review», blz. VI.

⁹ <http://www.lesechos.fr/info/energie/300131478.htm>.

personnes victimes d'un sinistre environnemental qui sont contraintes, afin d'assurer leur survie, de quitter leur région de résidence habituelle. «*Le sinistre environnemental peut prendre la forme d'une dégradation progressive (montée des eaux liées au réchauffement climatique, désertification, déforestation, appauvrissement de la biodiversité, etc.) ou brutale (tsunami, tremblement de terre, inondation, irruption volcanique, etc.)*»⁴.

Une autre définition de réfugiés environnementaux a été formulée par le Programme Environnemental des Nations Unies (PNUE). Celle-ci les définit, en substance, comme «des personnes forcées de quitter leurs habitations traditionnelles d'une façon temporaire ou permanente, à cause (naturelle ou humaine) d'une dégradation nette de leur environnement qui bouleverse gravement leur cadre de vie et/ou qui déséquilibre sérieusement leur qualité de vie. Chaque changement physique, chimique et/ou biologique dans l'écosystème qui le rend temporairement ou en permanence inapte pour une habitation humaine est considéré comme une dégradation de l'environnement»⁵.

Selon différents spécialistes, qui se réfèrent aux chiffres établis, en 2005, par une étude de l'Institut pour la sécurité environnementale et humaine (ISEH) de l'université des Nations unies (UNU) de Bonn, d'ici 2010 il y aurait près de 50 millions de réfugiés environnementaux à travers le monde⁶. Pour 2050, certains académiciens comme François Gemenne, chercheur à l'Université de Liège et terminant une thèse sur cette thématique, parlent de 150 millions de réfugiés environnementaux⁷. Chiffres plus conséquents et alarmants encore, si on se base sur le *Rapport Stern* de janvier 2007, commandé par le gouvernement britannique et qui annonce un chiffre de 200 millions de réfugiés⁸ à l'horizon 2050... Cette situation aurait pour conséquence, au-delà de l'aspect humain qui est essentiel, fondamental et crucial, un coût pour la communauté internationale de 5.500 milliards d'euros⁹.

Quoi qu'il en soit et quels que soient les nombres avancés, ces chiffres démontrent, clairement, l'urgence de la situation. Il est plus que temps pour l'ensemble des États de se pencher sur cette problématique.

⁴ <http://terra.rezo.net/article657.html>.

⁵ http://www.actuenvironnement.com/ae/dictionnaire_environment/definition/refugies_environmentaux.php4.

⁶ Voir l'étude de l'ISEH de l'UNU de Bonn citée dans <http://www.actu-environnement.com/ae/news/1300.php4>

⁷ http://www.liberation.fr/actualite/economie_terre/275852.FR.php.

⁸ Resume of «Stern review», p VI.

⁹ <http://www.lesechos.fr/info/energie/300131478.htm>.

2. De regio's of landen die het meest door de klimaatwijzigingen worden getroffen

Volgens het onderzoek van de Universiteit van de Verenigde Naties zijn onder andere de volgende regio's of landen echt bedreigd door de klimaatwijzigingen:

- China, waar de oprukkende Gobiwoestijn (met ruim 10.000 km² per jaar) tal van woonomgevingen bedreigt;
- Turkije, waar de versnelde erosie van landbouwgronden de landbouw bedreigt;
- Egypte, waar de verzilting van de helft van het irrigeerde akkerland ook de landbouw bedreigt;
- door de stijging van het waterpeil van de zeeën en de oceanen worden eilanden en kuststreken bedreigd: zo werd in 2005 in Bangladesh de helft van het eiland Bhola (Golf van Bengalen) overspoeld door het water en als gevolg van die ramp waren 500.000 mensen dakloos. Een ander voorbeeld is Tuvalu, een kleine eilandengroep in de Stille Oceaan die bestaat uit 9 eilanden met een totale oppervlakte van 26 km², een van de kleinste landen ter wereld; Tuvalu zal binnen 50 jaar als eerste land ter wereld door het water worden overspoeld. Dat wordt een nooit eerder gebeurd feit, aangezien 11.000 mensen staatloos zullen zijn ... Op termijn zal ook het hogere waterpeil van de Noordzee niet alleen Nederland maar ook Vlaanderen treffen.

3. Enkele voorbeelden in de «typologie» van de plotse en uitzonderlijke rampen

Tal van uitzonderlijke natuurrampen (die soms verband houden met de menselijke activiteiten) hebben bepaalde regio's en landen getroffen. Een aantal voorbeelden:

- aardbevingen, zoals die welke in 1999 het noordwesten van Turkije heeft getroffen; die aardbeving heeft aan duizenden mensen het leven gekost en heeft aanzienlijke schade veroorzaakt, waardoor duizenden mensen hun huis kwijt waren;
- cyclonen, zoals de beruchte cycloon Katrina, die het zuiden van de Verenigde Staten en meer bepaald Louisiana heeft geteisterd;
- tsunami's, zoals die welke bijna vier jaar geleden Thailand, Indonesië, Sri Lanka en India heeft getroffen.

2. Les régions ou les pays les plus concernés par les changements climatiques

Parmi les régions ou pays considérés comme très menacés par les changements climatiques, il est notamment évoqué par l'étude de l'université des Nations-Unies:

- l'avancée de plus de 10.000 km² par an du désert de Gobi en Chine qui menace une multitude d'habitations;
- l'érosion précipitée des terres arables en Turquie qui menace l'agriculture;
- la salinisation de la moitié des cultures irriguées en Egypte qui menace également l'agriculture;
- la hausse du niveau des mers et océans; pour exemple, en 2005, la moitié de l'île de Bhola, au Bangladesh dans le Golfe de Bengale, a été engloutie par les eaux, catastrophe suite à laquelle 500.000 personnes se sont retrouvées sans habitat. Autre exemple, Tuvalu, petit archipel du Pacifique constitué de 9 îles de 26 km² au total, l'une des plus petites nations du monde, sera le premier pays à disparaître sous les eaux avant 50 ans. Ce sera une situation inédite dans l'Histoire puisque, dès lors, 11.000 personnes se trouveraient sans «Patrie»... En Europe aussi, à terme, la hausse du niveau des eaux en mer du Nord touchera non seulement les Pays-Bas mais également la Flandre.

3. Quelques exemples dans la «typologie» des catastrophes soudaines et exceptionnelles

De nombreuses catastrophes naturelles (liées parfois aux activités humaines) exceptionnelles ont touché certaines régions ou pays. À titre d'exemple, mentionnons notamment:

- les tremblements de terre, comme par exemple celui qui secoua le nord-ouest de la Turquie en 1999; ce séisme allait causer la mort de milliers de personnes et provoquer des dégâts considérables privant des milliers de personnes de leurs habitations;
- les cyclones, comme par exemple le tristement célèbre cyclone *Katrina* qui trappa le sud des États-Unis et particulièrement la Louisiane;
- les tsunamis, dont celui qui vient juste d'ébranler la Thaïlande, l'Indonésie, le Sri Lanka et l'Inde.

Andere uitzonderlijke rampen zijn rechtstreeks aan menselijke activiteiten te wijten, zoals de chemische ramp in Bhopal (1984) en de kernramp in Tsjernobyl (1986).

Kortom, geen enkele regio en geen enkel land kan er prat op gaan dat het dergelijke rampen kan voorkomen, ongeacht of ze worden veroorzaakt door de natuur, door de mens of door mens en natuur.

4. De vigerende juridische teksten¹⁸ omvatten geen officiële erkenning van een status van milieuvluchteling

a) Het Verdrag van Genève (1951)

Het Verdrag van Genève heeft, toen het werd opgesteld, geen rekening gehouden met bevolkingen die slachtoffer konden worden van natuurrampen. In dat Verdrag wordt immers nooit verwezen naar mensen die hun land ontvluchten om redenen van «algemene aard», zoals burgeroorlogen, politieke of economische instabiliteit, hongersnood, natuurrampen enzovoort.

De juristen hanteren het containerbegrip «behoren tot een bepaalde sociale groep» dat in het Verdrag is opgenomen en dat zodanig kon worden uitgelegd dat het ook gold voor bevolkingen die te lijden hadden onder politieke en economische instabiliteit. Dat begrip kan juridisch echter niet gelden voor de milieuvluchtelingen, aangezien klimaatrampen niet kunnen worden beschouwd als een vervolging in de zin van het Verdrag van Genève. Zo kunnen de herders in de Sahel worden beschouwd als een volwaardige sociale groep; zij ondergaan de rampzalige gevolgen van de droogte, maar die wordt kennelijk echter niet beschouwd als een vervolging in de zin van het Verdrag.

Bovendien sluit het persoonlijk en individueel aspect van de erkenning van de status van vluchteling «wegens vervolging» de facto algemene bedreiging van vervolging uit.

Internationaalrechtelijk omvat het mandaat van het UNHCR nochtans ook incidentele en uitzonderlijke hulpverlening aan milieuvluchtelingen, aangezien de personen die internationale bescherming behoeven

¹⁸ Voor punt 2, zie Cournil C, Les réfugiés écologiques: Quelle(s) protection(s), quel(s) statut(s), in Revue du droit public, n°4, 2006, blz. 1035-1066 en GISTI, Quel statut pour les réfugiés environnementaux, Verslag van de studiedag van 14 december 2007, Uitg. GISTI, juli 2008, Parijs.

D'autres catastrophes exceptionnelles sont liées directement aux activités humaines:

- la catastrophe chimique de Bhopal de 1984.
- La catastrophe nucléaire de Tchernobyl de 1986.

En résumé, aucune région, aucun pays ne peut se targuer de pouvoir éviter de telles catastrophes, qu'elles soient de causes naturelles, humaines ou les deux.

4. Absence de reconnaissance officielle dans les textes juridiques actuels d'un statut de réfugié environnemental¹⁹

a) La Convention de Genève de 1951

Au moment de sa rédaction, la Convention de Genève n'a pas tenu compte des populations qui auraient pu être victimes de catastrophe naturelles, puisque cette dernière ne fait jamais référence aux personnes fuyant leur pays pour des raisons d'«ordre général», comme les guerres civiles, l'instabilité politique ou économique, les famines, les catastrophes naturelles, etc.

Les juristes font référence à l'expression «fourre-tout» d'«appartenance à un groupe social» contenue dans la Convention, qui a pu être interprétée de manière à ce que les populations connaissant des instabilités politique et économiques soient prises en compte. Cependant, cette expression ne peut être juridiquement appliquée aux réfugiés environnementaux, puisque les catastrophes climatiques ne peuvent être considérées comme une persécution au sens de la Convention de Genève.

Alors que les pasteurs du Sahel, par exemple, qui peuvent être considérés comme une catégorie sociale à part entière, subissent les conséquences catastrophiques de la sécheresse, celle-ci, ne semble toutefois pas constituer une persécution au sens de la Convention.

De plus, la caractéristique personnelle et individuelle de la reconnaissance du statut de réfugié «par la persécution» écarte de facto, les menaces générales de persécution.

Pourtant, au niveau international, le mandat du HCR prévoit une assistance casuelle et exceptionnelle «aux réfugiés écologiques» puisqu'il offre une protection «aux personnes ayant besoin d'une protection internationale»

¹⁹ Pour le point 2 voir Cournil C, «Les réfugiés écologiques: Quelle(s) protection(s), quel(s) statut(s)», in Revue du droit public, n°4, 2006, pp 1035-1066 et GISTI, Quel statut pour les réfugiés environnementaux, Acte de la journée d'Etude du 14 décembre 2007, Eds GISTI, juillet 2008, Paris.

(en de personen die zich in een gelijkaardige situatie bevinden als vluchtelingen) die bescherming ook krijgen. Bovendien heeft het UNHCR in 1985 hulp geboden aan mensen in Ethiopië die waren ontheemd ingevolge de grote droogte in dat land en de door de Ethiopische autoriteiten in de hand gewerkte voedselschaarste. Door de uitbreiding van dat nieuwe mandaat kan het UNHCR sindsdien dus optreden bij bepaalde milieumigratiedrama's. «Ontheemde persoon» is echter nog geen erkend begrip in het positief internationaal recht.

Kortom, het is duidelijk dat het Verdrag van Genève uit 1951 milieuvluchtelingen niet echt kan beschermen. Wat echter de Verenigde Naties en met name het mandaat van het UNHCR betreft, kan incidenteel wel hulp worden geboden aan milieuvluchtelingen.

b) De rechten van de mens

De rechten van de mens werden in de loop der jaren uitgebreid:

- eerst de individuele politieke en burgerlijke rechten;
- vervolgens de collectieve sociaaleconomische rechten, die door de Staten doorgaans als minder belangrijk werden beschouwd;

- ten slotte de derde generatie van (individuele en collectieve) rechten en vrijheden, met name in verband met de bescherming van het milieu.

In die internationale teksten wordt nooit uitdrukkelijk verwezen naar de bescherming van de bevolking tegen door mens of natuur veroorzaakte verstoringen. Niettemin kunnen de artikelen 13, 14¹¹ en zelfs 15¹² van de Universele Verklaring van de Rechten van de Mens in sommige gevallen uitkomst bieden, meer bepaald als landen volledig dreigen te verdwijnen als gevolg van wassend water en een stijgende zeespiegel. In dat opzicht zijn «nationaliteit» of «terugkeer naar het land van herkomst» geen loze begrippen. *Quid* bijvoorbeeld voor de inwoners van de eilandstaat Tuvalu in het licht van de hierboven vermelde artikelen, als hun land onder de zeespiegel zou verdwijnen en zij dus geen land meer zouden hebben om naar terug te keren?

Er zijn nog andere voorbeelden. Afgaande op artikel 3 van de Universele Verklaring van de Rechten van de Mens («*een ieder heeft het recht op leven, vrijheid en onschendbaarheid van zijn persoon*») is het niet

¹¹ Zie punt 1.

¹² Artikel 15 – «Aan niemand mag willekeurig zijn nationaliteit worden ontnomen».

et aux «personnes se trouvant dans une situation analogue à celles des réfugiés». De plus, en 1985, le HCR a accordé une assistance à des personnes déplacées en raison d'une sécheresse et d'une pénurie alimentaire orchestrée par les autorités éthiopiennes. Donc, par extension de ce nouveau mandat, le HCR peut, depuis cette date, apporter son concours dans «certains drames migratoires écologiques». Toutefois, à l'heure actuelle, le droit international positif ne reconnaît pas la notion de «personne déplacée».

En résumé, les limites de la Convention de Genève de 1951 en matière de protection de réfugiés environnementaux apparaissent clairement. Par contre, au niveau du mandat du HCR et donc de l'ONU, il est possible d'accorder une aide casuelle aux réfugiés environnementaux.

b) Les Droits de l'Homme

Les Droits de l'Homme ont connu plusieurs phases d'extension à travers l'Histoire:

- d'abord les droits individuels politiques et civils;

- ensuite des droits considérés souvent par les États comme des droits de second rang, liés aux droits collectifs socio-économiques;

- *in fine*, la troisième génération de droits et libertés (à la fois individuels et collectifs): ceux liés à la protection de l'environnement.

Ces textes internationaux ne font jamais explicitement référence à la protection des populations face aux atteintes écologiques et/ou anthropiques. Toutefois, les articles 13, 14¹¹ et même 15¹² de la Déclaration universelle des droits de l'homme du 10 décembre 1948 peuvent être utilisés dans certains cas et notamment dans les situations que connaissent les pays menacés de disparaître complètement à cause de la montée des eaux et des océans. Ici, le principe de nationalité ou le fait de «pouvoir rentrer dans son pays» peut aisément être d'«actualité». À titre d'exemple, si les îles de Tuvalu venaient à disparaître, que ferait sa population au vu des articles précités, car elle n'aurait plus d'État dans lequel «rentre»?

D'autres exemples peuvent encore être mis en exergue. Si l'on se base sur l'article 3 de la Déclaration précitée, qui mentionne que «*tout individu a le droit à la vie, à la liberté et à la sûreté de sa personne*», on pour-

¹¹ Voir point 1.

¹² Article 15 «Toute personne ne peut être privée arbitrairement de sa nationalité».

ondenkbaar dat mensen van wie de bestaansmiddelen wegvallen, eigenlijk onder het toepassingsgebied van dat artikel zouden vallen.

Ook hier geldt dus dat de beperkingen van de grondteksten duidelijk zijn, aangezien slechts enkele situaties zouden kunnen worden ingepast in het «keurslijf» van bepaalde artikelen in verband met de Rechten van de Mens.

c) De «Richtlijn tijdelijke bescherming» uit 2001: de aangewezen keuze op EU-vlak

De Europese grondtekst die voldoende ruimte biedt voor interpretatie en op basis waarvan milieuvluchtelingen hulp kan worden geboden, is de «Richtlijn tijdelijke bescherming» (Richtlijn 2001/55/EG¹³). Die richtlijn werd in het Belgisch recht omgezet in de artikelen 57/29 en volgende van de wet van 15 december 1980 betreffende de toegang tot het grondgebied, het verblijf, de vestiging en de verwijdering van vreemdelingen¹⁴, bij de hervorming van de procedure voor de toekenning van de status van vluchteling. Een dergelijke interpretatie van die richtlijn berust op diverse gronden, waarvan de belangrijkste is opgenomen in artikel 2 ervan; zo de Raad van Ministers van de Europese Unie daartoe beslist, voorziet het artikel in tijdelijke bescherming in geval van «massale toestroom van ontheemden»¹⁵, zoals «de aankomst (...) in de Gemeenschap van een aanzienlijk aantal ontheemden, uit een bepaald land of bepaalde geografische zone, ongeacht of zij op eigen initiatief of met hulp, bijvoorbeeld in het kader van een evacuatieprogramma, de Gemeenschap zijn binnengekomen»¹⁶.

In het licht van dat voldoende ruim geformuleerde artikel lijkt het dus zeker mogelijk de interpretatie ervan uit te breiden zodat ook de milieuvluchtelingen eronder ressorteren, dan wel het artikel aan te passen aan deze nieuwe vorm van migratie.

rait imaginer que des personnes qui seraient privées de moyens de subsistance tomberaient, *in extenso*, sous l'application de cet article.

Pour conclure, ici encore, les limites des textes fondamentaux apparaissent clairement, car seules certaines situations pourraient éventuellement rentrer dans le «carcan» de certains articles relatifs aux Droits de l'Homme.

c) La Directive temporaire de 2001: la piste à explorer au niveau européen

Le texte européen fondamental, qui pourrait faire l'objet d'une interprétation large, offrant une protection aux réfugiés environnementaux est la *Directive protection temporaire* 2001/55/CE¹³. Cette directive a été intégrée dans les articles 57/29 et suivants de la loi belge du 15 décembre 1980 sur l'accès au territoire, le séjour, l'établissement et l'éloignement¹⁴ des étrangers, en vue de réformer la procédure d'octroi du statut de réfugié. Une telle interprétation de cette directive repose sur plusieurs raisons, dont la principale réside dans son article 2, qui prévoit d'accorder une protection temporaire, sous réserve d'une décision du Conseil des ministres de l'Union européenne, dans les cas «*d'afflux massif de personnes déplacées*»¹⁵ tels que «*l'arrivée (...) d'un nombre important de personnes déplacées, en provenance d'un pays ou d'une zone géographique déterminée, que leur arrivée dans la communauté soit spontanée ou organisée par exemple dans le cadre d'un programme d'évacuation*»¹⁶.

Donc, il semble évident, à la lumière de cet article formulé d'une manière suffisamment large, qu'il puisse être possible soit d'en élargir son interprétation, pour englober les réfugiés environnementaux, soit de le modifier pour l'adapter à ce nouveau type de migration.

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¹³ Richtlijn 2001/55/EG van de Raad van 20 juli 2001 betreffende minimumnormen voor het verlenen van tijdelijke bescherming in geval van massale toestroom van ontheemden en maatregelen ter bevordering van een evenwicht tussen de inspanning van de lidstaten voor de opvang en het dragen van de consequenties van de opvang van deze personen

¹⁴ Opgenomen in hoofdstuk IIbis van titel II van de voormelde wet.

¹⁵ Punt a) van het voormelde artikel.

¹⁶ Punt d) van het voormelde artikel.

¹³ Directive 2001/55/CE du Conseil du 20 juillet 2001 relative à des normes minimales pour l'octroi d'une protection temporaire en cas d'afflux massif de personnes déplacées et à des mesures tendant à assurer un équilibre entre les efforts consentis par les États membres pour accueillir ces personnes et supporter les conséquences de cet accueil.

¹⁴ Compris dans le chapitre IIbis du titre II de cette loi.

¹⁵ Point a) dudit article.

¹⁶ Point d) dudit article.

H. overwegende dat milieuvluchtelingen alleen een toekomst kunnen hebben mits ze over een internationaal erkende juridische status beschikken en hun bestaan *de facto* door de Europese Unie en de lidstaten zelf wordt erkend, en dat alleen dan de betrokken organisaties en de Staten het nodige kunnen doen om hen te hulp te komen;

I. overwegende dat het begrip «milieuvluchteling» niet is opgenomen in het Verdrag van Genève uit 1951 en de bijbehorende aanvullende protocollen, enerzijds, en dat milieuvluchtelingen niet kunnen worden beschermd op basis van een interpretatie van de verdragsartikelen;

J. overwegende dat het UNHCR sinds 1985, nadat zijn mandaat werd verruimd tot de ontheemden in het land zelf, kan optreden bij bepaalde milieumigratiedrama's, maar dat «ontheemde persoon» geen erkend begrip is in het positief internationaal recht;

K. gelet op de rechtsleer van het positief internationaal recht waarin de slachtoffers van natuurrampen wel in aanmerking worden genomen en waarbij ontheemden worden omschreven als personen of groepen van personen die werden gedwongen of verplicht hun woning of gebruikelijke woonplaats te ontvluchten of te verlaten wegens een gewapend conflict, veralgemeend geweld, schendingen van de mensenrechten, dan wel door natuurkrachten of door de mens veroorzaakte catastrofes, teneinde de gevolgen daarvan te ontlopen en zonder dat zij daarbij de internationaal erkende grenzen van een Staat hebben overschreden;

L. overwegende dat het begrip «milieuvluchteling» niet is opgenomen in de teksten aangaande de rechten van de mens, en dat die nieuwe categorie van vluchtelingen slechts in bepaalde gevallen en omstandigheden hulp en bescherming kan worden geboden op grond van een interpretatie van de artikelen van die teksten;

M. overwegende dat het begrip «milieuvluchteling» niet uitdrukkelijk is opgenomen in de Europese wetgeving, maar dat Richtlijn 2001/55/EG van de Raad van 20 juli 2001 betreffende minimumnormen voor het verlenen van tijdelijke bescherming in geval van massale toestroom van ontheemden en maatregelen ter bevordering van een evenwicht tussen de inspanning van de lidstaten voor de opvang en het dragen van de consequenties van de opvang van deze personen, ook de «Richtlijn tijdelijke bescherming» genoemd, en met name een ruime interpretatie van artikel 2 ervan, het mogelijk maakt milieuvluchtelingen te beschermen in het raam van het door de richtlijn georganiseerde stelsel;

H. considérant que l'avenir des réfugiés environnementaux doit passer par une reconnaissance juridique internationale et, *de facto*, de l'Union européenne ainsi que par les États eux-mêmes de leur existence pour permettre aux différentes organisations et aux États d'accomplir leurs missions afin de leur venir en aide;

I. considérant, d'une part, la non prise en considération des «*réfugiés environnementaux*» dans la Convention de Genève et ses protocoles additionnels de 1951, et d'autre part le fait que l'interprétation de ses articles ne permet pas d'assurer une protection pour les réfugiés environnementaux;

J. considérant que, depuis 1985, le HCR par extension de son mandat sur les «*personnes déplacées à l'intérieur d'un pays*» peut intervenir dans «*certaines drames migratoires écologiques*» mais que toutefois la définition de «*personnes déplacées*» n'est pas reconnue dans le droit international positif;

K. considérant, toutefois, les propositions doctrinales émises en droit international positif qui incluent les victimes de catastrophes naturelles: «les personnes déplacées sont des personnes ou des groupes de personnes qui ont été forcées ou contraints à fuir ou à quitter leur foyer ou leur lieu de résidence habituel, notamment en raison d'un conflit armé, de situations de violence généralisée, de violations des Droits de l'Homme ou de catastrophes naturelles ou provoquées par l'homme ou pour en éviter les effets, et qui n'ont pas franchi les frontières internationalement reconnues d'un État»;

L. considérant la non prise en considération des «*réfugiés environnementaux*» dans les textes relatifs aux Droits de l'Homme et vu que l'interprétation de ses articles ne permet que, dans certains cas et dans certaines situations, d'assurer une assistance et une protection pour ces nouveaux réfugiés;

M. considérant la non prise en considération explicite des «*réfugiés environnementaux*» dans la législation européenne, mais sachant que la Directive 2001/55/CE du Conseil du 20 juillet 2001 relative à des normes minimales pour l'octroi d'une protection temporaire en cas d'afflux massif de personnes déplacées et à des mesures tendant à assurer un équilibre entre les efforts consentis par les États membres pour accueillir ces personnes et supporter les conséquences de cet accueil, également appelée «*Directive sur la protection temporaire*», dans son article 2, permet, avec une interprétation large, d'inclure les réfugiés environnementaux dans ce système de protection;

N. overwegende dat het eenvoudiger en makkelijker zou zijn het begrip «milieuvluchteling» op te nemen in dat artikel, zodat de draagwijdte ervan kan worden bepaald en aldus de aanzet kan worden gegeven voor een eigen juridische status voor de milieuvluchtelingen;

O. gelet op de door de Belgische Senaat aangenomen resolutie van 3 februari 2006 (Senaat 3-1556/3) om het statuut van milieuvluchteling in de internationale verdragen te erkennen;

VRAAGT DE REGERING:

1. binnen de Algemene Vergadering van de Verenigde Naties de redactie aan te vatten van een resolutie die aandringt op een snelle bijeenkomst van de door de VN erkende lidstaten, om tot een consensus te komen over een internationale juridische status voor milieuvluchtelingen, door middel van een aanvullend protocol bij het Verdrag van Genève uit 1951, dan wel enig ander document uitgaande van de landen die zitting hebben in de Algemene Vergadering van de Verenigde Naties;

2. er bij de Raad van Ministers van de Europese Unie op aan te dringen besprekingen aan te vatten om eindelijk een status voor de milieuvluchteling in te stellen, minstens via artikel 2 van de «Richtlijn tijdelijke bescherming», dan wel op enig andere manier, waardoor de milieuvluchtelingen in de Europese Unie over een status zouden beschikken.

18 augustus 2008

N. considérant qu'il serait plus simple et plus facile d'intégrer dans cet article la notion de «réfugiés environnementaux» afin de préciser la portée de celui-ci et de donner, ainsi, un début de statut juridique propre aux réfugiés environnementaux;

O. considérant la résolution adoptée par le Sénat de Belgique le 3 février 2006 (Document Sénat 3-1556) visant à la reconnaissance dans les conventions internationales du statut de réfugié environnemental;

DEMANDE AU GOUVERNEMENT:

1. d'initier, au sein de l'Assemblée générale des Nations Unies, la rédaction d'une résolution visant à demander la tenue d'une réunion rapide entre les différents États reconnus par l'ONU, afin de dégager un consensus pour donner un statut juridique international aux réfugiés environnementaux via un protocole additionnel à la Convention de Genève de 1951 ou via tout nouveau document émanant des pays siégeant au sein de l'Assemblée générale des Nations Unies;

2. de plaider auprès du Conseil des ministres de l'Union européenne afin d'entamer des discussions pour, *in fine*, créer un statut de «réfugié environnemental» par le biais, au moins, de l'article 2 de la Directive protection temporaire ou par tout autre biais qui donnerait un statut aux réfugiés environnementaux au sein de l'Union européenne.

18 août 2008

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17. Draft Convention on the International Status of Environmentally-Displaced Persons (presented in Limoges on 12 March 2009)

DRAFT CONVENTION ON THE INTERNATIONAL STATUS OF ENVIRONMENTALLY- DISPLACED PERSONS*

Preamble

The Contracting Parties

Considering the alarming condition of the global environment and the increasing rate of its deterioration,

Considering the causes of this degradation, in particular climate change and/or the loss of biological diversity, drought, desertification, deforestation, soil erosion, epidemics, armed conflict and more generally, natural and technological hazards,

Considering that these negative environmental phenomena produce victims who encounter injury to their health and their dignity, and even impairment of the essence their fundamental right to life,

Considering that the gravity of environmental harm necessitates the displacement of individuals, families and populations,

Considering that the exponential growth and clear foreseeability of such movements constitute a threat to the stability of human societies, the preservation of cultures, and world peace,

Considering the many appeals from non-governmental organizations to recognize a status for environmentally-displaced persons, and insisting on the urgent necessity of responding to their plight,

Considering that several international declarations underline the existence of this category of displaced persons (Principle 18 of the Rio Declaration on Environment and Development, concerning ecological assistance; Agenda 21, Chapter 12, 12.47 ; and the Directive principles relating to internally-displaced persons),

Considering the numerous international conferences that also refer to such situations, including the Kyoto Conference (1997) and that of The Hague (2000) which set forth the risks of large migrations linked to climate change, and the World Conference on the Prevention of Natural Disasters (Hyogo, January 2005) which insisted on prevention linked in particular to ecological refugees,

* Draft Convention elaborated by the CRIDEAU (Interdisciplinary Center of Research on Environmental, Planning and Urban Law) and the CRDP (Center of Research on persons rights), thematic teams of the OMIJ (Institutional and Judicial Mutations Observatory), from the Faculty of Law and Economic Science, University of Limoges, with the support of the CIDCE (International Center of Comparative Environmental Law).

Considering that certain organs of the United Nations have spoken of this matter:

- The General Assembly of the United Nations in resolutions 2956 (1972) and 3455 (1975) on displaced persons, resolution 36/255 of 17 December 1981 on strengthening the capacity of the United Nations system in the face of natural disasters and other catastrophes, resolution 43/131 of 8 December 1988 on humanitarian assistance to victims of natural disasters and emergency situations of the same type, resolutions 45/100 of 14 December relative to humanitarian assistance to victims of natural disasters and emergency situations of the same type, resolution 49/22 of 13 December 1994 concerning the international decade for the prevention of natural disasters,

- The Security Council (5663rd session of 17 April 2007) making the link between the impact of climate change and international security, in particular in respect to persons who risk displacement by 2050;

- The Secretary General of the United Nations in his message of 5 June 2006 exhorted governments and societies through the world to think of those who cannot subsist in arid zones and will become ecological refugees,

Considering that the specialized institutions of the United Nations such as the World Health Organization, UNESCO, the World Bank, and other institutions in the United Nations system, such as the High Commissioner for Refugees, the United Nations Environment Programme, and the United Nations Development Programme, regional organizations such as the Council of Europe, the European Union, and the African Union have drawn attention to the challenges of environmental migrations,

Considering the international agreements that already take into consideration environmental displacements, including International Labour Organization Convention N°. 169 concerning Indigenous and Tribal Peoples in Independent Countries of 27 June 1989 and the Convention to Combat Desertification of 12 September 1994,

Recognizing the duty of the international community to assist a State that suffers ecological disaster,

Considering that, despite numerous international agreements aimed at protecting the environment, international refugee law lacks an instrument specifically foreseeing the situation of environmentally-displaced persons which can be invoked in their favor,

Reaffirming the principle of common but different responsibilities of States as recognized in article 3 of the Framework Convention on Climate Change,

Considering that in these circumstances it is the duty of the international community of States to organize their solidarity and that of other actors by elaborating an agreement on the international status of environmentally-displaced persons,

Considering that this status should encompass individuals, families and populations forced to move either within or away from their State of residence,

Considering that the status of environmentally-displaced persons should be based on respect for the international legal instruments and protective principles relating to human rights and the environment,

Have agreed to the following :

Chapter 1 – Objective, definitions, scope of application, principles

Article 1 - Objective

The objective of this Convention is to contribute to guaranteeing the rights of environmentally-displaced persons and to organize their reception as well as their eventual return, in application of the principle of solidarity.

Each Contracting Party undertakes to accept environmentally-displaced persons with strict respect for the human rights guaranteed by international conventions to which the State is a party and to confer additionally those rights specifically set forth by the present text.

Article 2 - Definitions

1. The term “State Party” refers, unless otherwise indicated, to a Contracting Party to the present Convention.

2. “Environmentally-displaced persons” are individuals, families and populations confronted with a sudden or gradual environmental disaster that inexorably impacts their living conditions and results in their forced displacement, at the outset or throughout, from their habitual residence and requires their relocation and resettlement.

2.1. The terms “persons” and “families” refers to the individual dimension of displacement necessitated by environmental disaster and the term “populations” refers to the collective dimension of phenomena which can affect rural or urban communities, cities, countries, or continents...

2.2. “Sudden environmental disaster” is a rapidly-occurring catastrophe of natural and/or human origin.

2.3. “Gradual environmental disaster” is a degradation of natural and/or human origin that is slow, progressive or planned.

2.4. “Habitual residence” means that area which defines the identity of individuals, families and populations.

3. “Forced displacement” is any temporary or permanent displacement made inevitable by environmental disaster, either within a State or from the State of residence to one or more receiving States, of individuals, families or populations.

3.1. “Temporary displacement” is any displacement made necessary by an environmental disaster leaving open the possibility of return in a short or medium term.

3.2. “Permanent displacement” is any displacement made necessary by an

environmental disaster eliminating any perspective of return in a long or very long term.

4. "Relocation" means that environmentally-displaced persons obtain, within a State Party, temporary places to live in conditions equivalent to those which prevailed before their displacement.

5. "Resettlement" means the integration of environmentally-displaced persons in healthy conditions that permit them a life of dignity where they can enjoy their rights and exercise their obligations without discrimination.

Article 3 - Scope of Application

The present Convention has a universal aim. It applies to inter-State environmental displacements as well as to internal displacements.

Article 4 - Principles

1. Principle of common but differentiated responsibilities

In the interests of present and future generations and on the basis of equity, the obligations set forth in the present Convention shall be implemented with respect to the principle of common but differentiated responsibilities.

The States Parties, within one year of its opening for signature, undertake to adopt an additional protocol, on the liability of public and private actors with the aim of prevention and reparation.

Such liability derives from breach of positive or negative obligations of a nature to make inevitable, directly or indirectly, environmental displacements.

2. Principle of proximity

The present Convention shall be implemented, as much as possible and respecting the principle of common but differentiated responsibilities, in the framework of the principle of proximity, which requires the least separation of persons from their cultural area.

3. Principle of proportionality

The present Convention shall be implemented according to the principle of proportionality in the framework of an international system of financial aid.

4. Principle of effectiveness

In order to render concrete and effective the rights conferred by the present Convention, the World Agency for Environmentally-Displaced Persons (WAEP) and the States Parties shall, as soon as environmentally-displaced persons are welcomed in temporary residences, develop and implement policies permitting environmentally-displaced persons to leave these temporary residences in order to establish normal conditions of life. Such policies shall be elaborated with the participation of the environmentally-displaced persons, organizations which represent them, and the concerned States.

Chapter 2 – Rights Guaranteed by the Convention

Article 5 - Rights guaranteed to all environmentally-displaced persons

1. Rights to information and participation

Each person, each family and each population has the right of access, as early as possible, to information relating to environmental threats and critical situations implied by these threats.

Each person, each family and each population has the right to participate in the determination of policies to prevent environmental disasters and to take charge, at the outset or throughout, of the consequences.

The States Parties undertake to implement the rights to information and participation in a manner that will enable their exercise to have a real influence on decisions relating to environmental threats.

2. Right to assistance

Each person, each family and each population victim of an environmental disaster has the right to assistance in all locations. This right exists from the moment when the situation becomes critical, during and after the environmental disaster.

The States Parties undertake to place no obstacle in the way of concrete and effective implementation of this right. They undertake also to elaborate and implement a permanent and regularly updated program of assistance to environmentally-displaced persons.

3. Right to water and to food aid

Each environmentally-displaced person has the right to water and the right to receive a subsistence food supply.

4. Right to housing

Each environmentally-displaced person has the right to salubrious and secure housing.

5. Right to health care

Each environmentally-displaced person has the right to receive necessary health care.

6. Right to juridical personality

Each environmentally-displaced person has the right everywhere to recognition of his or her juridical personality.

Each environmentally-displaced person has the right to replacement of the documentation necessary to fully enjoy the rights derived from having legal personality.

7. Each person environmentally-displaced to a State that is not his or her own retains the civil and political rights in his or her State of origin.

8. Right to respect for the family

Each environmentally-displaced person has the right:

- a) not to be separated from family members,
- b) to the reunification of the family when the members are dispersed by an environmental disaster.

9. Right to education and training

Each environmentally-displaced person has the right to receive education and training with respect to his or her cultural identity.

10. Right to work

Each environmentally-displaced person has the right to gain his living by work.

Article 6 - Rights of Temporarily Displaced Persons

1. Right to safe shelter

Each temporarily displaced person has the right to be sheltered, if necessary, in provisional housing that the States Parties undertake to establish and maintain with full respect for human dignity.

Each temporarily displaced person housed in a temporary shelter has the right to circulate freely and to choose freely to establish a residence elsewhere.

2. Right to reintegration

Each temporarily displaced person sheltered in his or her own State of residence has the right to resettlement. It imply positive obligation for States Parties to ensure the reinstallation of its residents in their normal place of residence.

3. Right to return

Each temporarily displaced person sheltered in a receiving State has the right to return to his or her normal residence when that become habitable. It imply positive obligation for State of origin to ensure the return of its nationals to their normal place of residence.

4. Right to prolonged shelter

Each temporarily displaced person has the right to prolong his or her stay when his or her normal place of residence becomes habitable. In such instance, the person loses the status of a temporarily displaced person but, if the person is not a national of the receiving State, may have the rights conferred on a lawful alien.

Article 7 - Rights of Permanently Displaced Persons

1. Right to resettlement

After a temporary shelter, as brief as possible, each permanently displaced person has the right to resettlement.

2. Right to nationality

Each permanently displaced person has the right to conserve the nationality of his or her State of origin affected by the environmental disaster and to acquire the nationality of the receiving State.

Article 8 - Rights of families and of populations

1. Families displaced by environmental disasters have the right to preserve their unity.
2. Displaced populations benefit, in the receiving State, of rights equivalent to those recognized for minorities by international agreements, notably the right to constitute themselves collectively and maintain their collective identity.

Article 9 - Grant of the status of environmentally-displaced person

The States Parties shall elaborate within two years from the entry into force of the Convention transparent and open legal procedures for the demand and grant or refusal of the status of environmentally-displaced person based on the rights set forth in the present chapter.

The elaboration of the procedures shall be accomplished in cooperation with the High Authority, which shall propose guidelines following signature of the Convention.

Article 10 - Principle of non-discrimination

The enjoyment of the rights recognized in the present Convention shall be ensured without distinction based, inter alia, on sex, sexual orientation, race, color, language, religion, political or other opinions, national or social origin, ethnicity, wealth, birth, disability or age.

Chapter 3 – Institutions

Article 11 - World Agency for Environmentally-Displaced Persons (WAEP)

Due to the foreseeable growth and permanence of environmental displacements, a World Agency for Environmentally-Displaced Persons (WAEP) shall oversee the application of the present Convention. A High Authority, a World Fund for the environmentally-displaced (WFED), a Scientific Council and a Secretariat assist WAEP. These institutions shall exercise their functions in accordance with the requirements of the Aarhus Convention on Rights of Information, Public Participation and Access to Justice.

WAEP is constituted a specialized agency of the United Nations.

1. Functions of WAEP

WAEP has as functions:

- to conduct prospective studies on the evolution of environmental displacements;

- to evaluate policies susceptible of creating environmental displacements;
- to mobilize the means that can reduce vulnerabilities which are at the origin of environmental displacements;
- to contribute to the general organization of assistance aiming at preventing and limiting displacements and promoting the most rapid possible return of environmentally-displaced persons;
- to evaluate programs to prevent environmental displacements and to aid the displaced;
- to support actively the organization of receipt and return, when it is possible, of the environmentally-displaced.

2. Organization of the WAEP

The organization of the administrative council, bureau, scientific council, secretariat, and the High Authority shall be set forth in an additional protocol, elaborated within one year following the opening for signature of the present Convention.

3. The High Authority

a) The High Authority is composed of 21 persons recognized in the fields of human rights, environmental protection and peace. The selection shall be based on equitable geographic distribution.

The members are elected by a majority vote of those present and voting, by secret ballot of the Conference of the Parties. Each State Party can present two candidates. NGOs can present a total of 5 candidates.

The members of the High Authority serve in their personal capacity.

b) The High Authority has the power to:

- define the criteria and the procedures for acquiring the status of environmentally-displaced person;
- provide an appeal from decisions to grant or refuse the status of environmentally displaced person, at the request of individuals, families, populations, or interested non-governmental organizations;
- to decide directly and definitively requests for status from nationals of States not Party to the Convention or in case of failure by a State Party;
- reply to questions concerning the interpretation and application of the Convention at the request of national commissions or any interested physical or moral person;
- assess the compliance of national provisions with the Convention at the request of any interested physical or moral person and make a synthesis of national implementation reports. This synthesis shall indicate deficiencies as well as good practices;
- propose recommendations to the Conference of the Parties;
- propose amendments to the present Convention.

c) The decisions of the High Authority are definitive. The Contracting Parties undertake to comply with the decisions of the High Authority that concern them. The High Authority can request the Conference of the Parties to suspend the right to vote of States Parties which manifest consistent non-compliance with these decisions.

4. World Fund for the Environmentally-Displaced (WFED)

a) Functions

The WFED shall ensure the functioning of the WAEP and provide financial and material assistance for the receipt and return of the environmentally-displaced. This assistance shall be granted to the States of residence and to the receiving States. It can also be given to non-governmental organizations, international and regional organizations, and to local governments.

b) Resources

The WFED is notably supported by:

- voluntary contributions from States and private actors;
- mandatory contributions funded by a tax based principally on the causes of sudden or gradual environmental disasters susceptible of creating environmental displacements.

An additional protocol to the present Convention is adopted in the year following the opening for signature of the Convention in order to set for the base, the taking and the allocation of the tax.

Article 12 - National Commissions on Environmental Displacements

Each State Party, following entry into force of the Convention, shall create a national Commission to attribute the status of environmentally-displaced person. Each Commission shall consist of 9 independent members, experts in the fields of human rights, environmental law, and peace. The members shall be named by the highest judicial authorities of the country.

Chapter 4 – Measures of Implementation

Article 13 - Cooperation

The implementation of the present Convention rests in the first place on the institutions which it creates with the active cooperation of international and regional organizations as well as the secretariats of international agreements for the protection of the environment and protection of human rights.

Article 14 - Conference of the Parties

The first meeting of the Conference of the Parties shall take place one year at the latest after the date of the entry into force of the present Convention. The Convention depository will convoke the meeting. Thereafter, the Parties shall meet

regularly at least one time each two years. The proceedings shall be open to the public.

An extraordinary meeting can be called at the request of at least one-quarter of the States Parties.

The Conference of the Parties designates the members of the Executive Council of the WFED and the High Authority.

Article 15 - National implementation reports

1. The Parties shall permanently review the application of the present Convention on the basis of reports communicated by the States Parties, and having this aim in spirit shall:

a) Associate civil society through the process of elaborating reports. The methodology of the report shall be fixed by a tripartite committee made up of the State Party, universities and representatives of the present Convention;

b) Draw lessons from the conclusion and application of bilateral and multilateral agreements or other arrangements relevant to the object of the present Convention, to which one or several among them are Parties.

2. The meeting of the Parties examine and evaluate the policies that the Parties apply, notably the programs aimed at article 5.2 of the present Convention and the legal measures and methodologies that they follow to assure aid, assistance and receipt of the environmentally-displaced in order to improve again the situation in this regard;

Chapter 5 – Final dispositions

Article 16 - Relations with non-Parties

1. The Parties may invite, if appropriate, States that are not a party to the present Convention to cooperate to the implementation of the present Convention.

2. The Parties shall take appropriate measures, in accordance with international law, to ensure that no one undertakes any activities that are contrary to the purpose, the object and the principles of the present Convention.

Article 17 - Dispute Settlement

In case of a dispute between two or more Parties about the interpretation or the application of the Convention, the concerned Parties shall attempt to settle it through negotiation or other peaceful means of their choice.

If the concerned Parties cannot settle the dispute through the ways mentioned in the paragraph above, the dispute is submitted to the High Authority.

Article 18 - Amendments to the Convention and Protocols

Each Party can propose an amendment to the present Convention. Each Party to a Protocol can propose an amendment to this Protocol.

19. Essentials Facts About the Victims of Hurricane Katrina



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September 19, 2005

ESSENTIAL FACTS ABOUT THE VICTIMS OF HURRICANE KATRINA

by Arloc Sherman and Isaac Shapiro

Many Hurricane Katrina victims faced difficult living conditions even before the storm arrived. Mississippi, Louisiana, and Alabama are, respectively, the first, second, and eighth poorest states in the nation. And of the 5.8 million individuals in these states who lived in the areas struck hardest by the hurricane, more than one million lived in poverty prior to the hurricane's onset.

The information provided below helps explain why relief efforts are so important to Katrina victims. Many of the storm's victims have little or no resources on which to rely in these difficult times.

Poverty and Income in the Affected States and Counties

Table 1 shows the poverty rate and median household income in Alabama, Louisiana, and Mississippi. The table compares the data for these states to the data for other states and the nation.¹

- In 2004, more than 19 percent of Louisianans were poor in 2004, far above the national poverty rate of about 13 percent, and higher than the poverty rate in all states except one.
- Mississippi had the highest state poverty rate in the nation — 21.6 percent.
- Alabama had the eighth highest rate, at 16.1 percent.

	Poverty Rate	Rank	Median Household Income	Rank
Alabama	16.1%	8 th Worst	\$36,709	9 th Lowest
Louisiana	19.4%	2 nd Worst	\$35,110	5 th Lowest
Mississippi	21.6%	Worst	\$31,642	2 nd Lowest
U.S.	13%*		\$44,684	

Source: U.S. Census Bureau, American Community Survey (ACS) for 2004.

According to the ACS (which the government uses for ranking states by poverty), the national poverty rate was 13.1 percent in 2004. According to another government survey, the Current Population Survey, it was 12.7 percent.

¹ These comparisons are based on the latest available survey data (for 2004). Much of the rest of this analysis relies on earlier 2000 census data, which are available with greater geographic detail. In the 2000 census data, Alabama is ranked the fifth poorest state, while the ranks for Mississippi and Louisiana do not change. These state ranks exclude the District of Columbia.

- The table also shows that the incomes of the typical (or median) household in these three states are well below the national average and are among the lowest in the nation.

Using data from the 2000 decennial census, we also calculated the poverty rates for individuals who lived in the areas hit hardest by the hurricane. These areas —the counties and parishes that have been declared eligible for federal disaster assistance for individuals — include about two-thirds of the population of Louisiana and Mississippi and one-sixth of the population of Alabama.²

- The census data indicate that 5.8 million people (in 2.1 million households) lived in these counties and parishes in 2000.
- More than 1 million of these people — or nearly one-fifth of the population affected by the hurricane — lived in poverty.

New Orleans — Poverty and Lack of a Vehicle

Of the 5.8 million people living in the areas hit hardest by Katrina, some 1.3 million lived in the New Orleans metropolitan area, with close to one-half million people living in the city of New Orleans itself. The poverty rate in the city is exceptionally high. The Census data indicate that more than one in four — 28 percent — of the city’s residents were living in poverty before the hurricane descended upon the city. Of the 245 large cities in the nation (those with populations of 100,000 or more), New Orleans tied for the sixth poorest in the 2000 census.

Those who were poor in New Orleans commonly lacked their own means of transportation. Our calculations, based on the Census data, show that more half of the poor households in New Orleans — 54 percent — did not have a car, truck, or van in 2000. Among the elderly, the proportion was higher. Sixty-five percent of poor elderly households in New Orleans did not have a vehicle, making it more difficult for them to escape the storm and its effects.

African Americans

The Census data also confirm that African Americans made up a disproportionate share of the hurricane’s victims. About one of every three people who lived in the areas hit hardest by the hurricane were African American. By contrast, one of every eight people in the nation is African American.

African Americans living in New Orleans were especially likely to be without a vehicle before the hurricane struck. More than one in three black households in New Orleans (35 percent) — and nearly three in five *poor* black households (59 percent) — lacked a vehicle. Among white non-Hispanic households in New Orleans, 15 percent lacked a vehicle.

² In addition to these hardest-hit counties, the table also shows data for a broader list of counties. The broader list includes counties that are part of the federal disaster area, and are eligible for FEMA assistance to public agencies, but may not be eligible for FEMA assistance to individuals. In this broader list of counties, the combined population was 14.2 million and 2.4 million people were poor.

On the other hand, it should also be noted that the number of housing units that are irreparably damaged or need substantial rehabilitation is fewer than the number living in counties eligible for individual assistance.

**POPULATION AND POVERTY DATA FOR AREAS AFFECTED BY
HURRICANE KATRINA, FROM THE 2000 CENSUS**

Source: 2000 census; FEMA designations as of 9-14-05

"Black or African American" includes some individuals who specified more than one race.

Numbers in thousands

	<u>ALL RACES</u>				<u>BLACK OR AFRICAN-AMERICAN</u>			
	All Persons	Number Poor	Pct Poor*	Number below 50% of poverty line	All Persons	Number Poor	Pct Poor*	Number below 50% of poverty line
U.S.	281,422	33,900	12.4%	15,337	36,213	8,535	24.7%	4,279
Hardest-hit states: AL,LA,MS	11,761	2,097	18.4%	973	3,671	1,208	34.4%	589
Alabama	4,447	698	16.1%	315	1,167	350	31.2%	168
Louisiana	4,469	851	19.6%	408	1,462	511	36.6%	256
Mississippi	2,845	548	19.9%	250	1,042	348	34.9%	165
Federal disaster areas:								
Counties eligible for								
Any FEMA assistance**	14,194	2,417	17.5%	1,124	4,065	1,278	32.7%	624
Alabama	1,877	307	16.7%	142	588	179	31.2%	86
Florida	5,003	711	14.5%	324	973	241	25.6%	117
Louisiana	4,469	851	19.6%	408	1,462	511	36.6%	256
Mississippi	2,845	548	19.9%	250	1,042	348	34.9%	165
Hardest hit-counties: eligible								
for aid to individuals	5,780	1,043	18.6%	493	1,909	625	34.0%	305
Alabama	771	130	17.2%	60	231	75	33.5%	35
Florida	0	0	0.0%	0	0	0	0.0%	0
Louisiana	3,110	559	18.4%	272	998	331	34.5%	167
Mississippi	1,899	355	19.3%	161	680	219	33.6%	103
New Orleans metropolitan area	1,317	237	18.3%	120	496	159	32.9%	83
New Orleans city	485	131	27.9%	70	328	111	34.9%	59

* Percentage poor equals column 2 divided by the population for whom poverty status is determined.

This may not equal column 2 divided by column 1.

** Includes counties eligible for assistance to individuals as well as a broader group of counties eligible only for assistance to public agencies. For Louisiana and Mississippi, this includes all counties in the state. For Alabama and Florida, only selected counties are included.

KATRINA: THE STORM WE'VE ALWAYS FEARED

The Times-Picayune



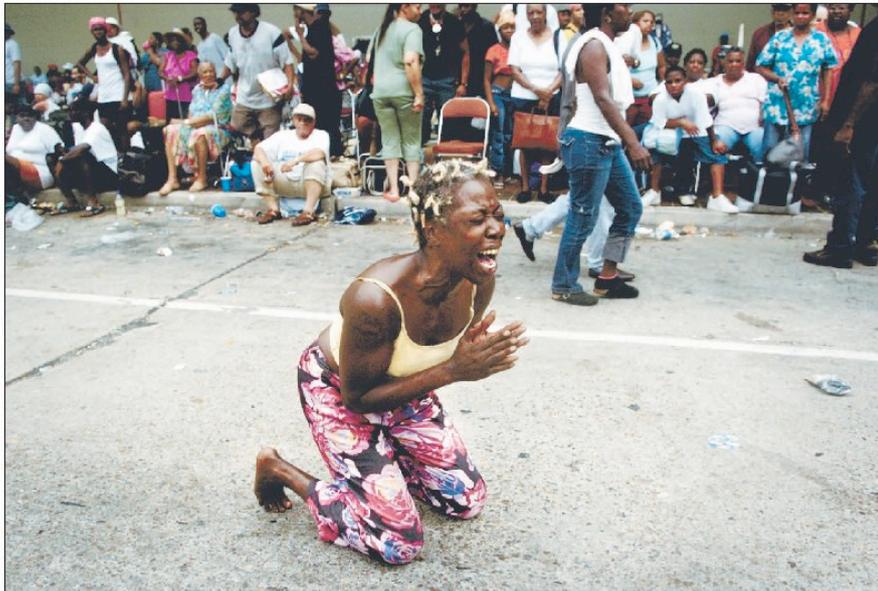
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FRIDAY, SEPTEMBER 2, 2005

HURRICANE EDITION

'HELP US, PLEASE'

AFTER THE DISASTER, CHAOS AND LAWLESSNESS RULE THE STREETS



NEW ORLEANS: A distraught Angela Perkins screams "Help us, please!" outside the Ernest N. Morial Convention Center on Thursday. A cloud of desperation settled over the hundreds of hungry, homeless people at the Convention Center, creating an atmosphere of fear and hopelessness.

Local leaders call relief efforts too little, too late

By Jed Horne
Staff writer

New Orleans on Thursday pulled back from an almost complete collapse of public order, a near anarchy that had supplanted receding floodwaters as the gravest threat to the city's still tenuous recovery.

Evidence that authorities were beginning to get a grip on gargantuan problems varied from the successful and orderly evacuation of Baptist Mercy Hospital to a sharp reduction in the menacing bands of idle refugees, many of them intent on looting that had haunted Uptown neighborhoods in the immediate aftermath of Hurricane Katrina.

With thousands of National Guard troops being mustered to join the Louisiana guardsmen already deployed to the hurricane-stricken city, one of the early signs of the beefed-up military presence was a Blackhawk helicopter

touching down near the Riverwalk to deliver water to some 1,000 refugees still sheltered in the Ernest N. Morial Convention Center.

The mounting relief effort did not allay concerns from local officials that it remained too little and mighty late. And Thursday offered continuing evidence that the city's flirtation with these chaos was not yet over: a medivac helicopter scolded off by gunfire as it attempted to airlift patients from a downtown hospital, the Oakwood Mall reduced to charred rubble after looters broke in and set fires throughout the sprawling complex, corpses floating in flooded streets, scores of police officers simply abandoning their posts to flee a city gone at least temporarily mad.

State Police Cmdr. Henry Whitehorn said some troopers had resigned rather than accept an assignment to go into New Orleans.

He was uncertain how many. "Our 1

See EFFORTS, page 4



NEW ORLEANS: Renowned singer Charmaine Neville weeps Thursday after telling New Orleans police Capt. Jeff Winn how she and others were attacked in her home after the hurricane.

Blanco demands thousands of troops

By Paul Purpura
and Ed Anderson
Staff writers

BATON ROUGE: Thousands of National Guard troops are converging on southeastern Louisiana, and Gov. Kathleen Blanco on Thursday called for no less than 40,000 troops to be on the ground. But it remained unclear how many soldiers will be assigned to quell the violence that is sweeping the New Orleans area.

"If we need more, I will ask for it," Blanco said Thursday in Baton Rouge. "Looting and lawlessness will not be tolerated."

See BLANCO, page 5